M01_01 (M042182): Number / Applying Type: MC Key: C
Label: How far did john jump

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	72.4	9.1	9.5	72.4	7.7	1.1	0.2	65.9	78.7
	2015	1489	72.1	9.5	10.2	72.1	7.2	0.8	0.1	68.4	75.9
Bahrain	2011	658	50.5	13.3	17.8	50.5	13.5	4.8	0.2	48.8	52.2
	2015	701	57.0	14.3	13.0	57.0	13.8	1.8	0.0	55.8	58.3
Botswana	2011	766	34.1	23.9	15.8	34.1	19.3	6.8	0.0	33.2	35.1
	2015	846	44.8	19.8	13.1	44.8	18.5	3.8	0.0	46.6	43.0
Chile	2011	823	47.5	19.4	18.5	47.5	8.8	5.8	0.0	43.5	52.6
	2015	697	51.7	18.1	18.6	51.7	7.8	3.8	0.0	42.6	60.2
Chinese Taipei	2011	718	86.1	3.7	5.6	86.1	4.2	0.5	0.0	84.2	87.8
	2015	814	88.4	5.0	3.8	88.4	2.5	0.3	0.0	86.4	90.3
England	2011	538	72.5	14.0	7.9	72.5	4.5	0.9	0.1	71.2	73.6
	2015	685	71.2	10.4	10.9	71.2	6.4	1.2	0.0	67.0	75.4
Georgia	2011	649	51.0	16.1	14.9	51.0	14.4	3.5	0.1	47.1	55.2
	2015	569	54.6	15.3	14.1	54.6	11.1	4.5	0.4	53.5	55.7
Hong Kong SAR	2011	576	87.0	2.5	5.1	87.0	4.8	0.3	0.2	89.8	84.1
	2015	598	89.8	3.2	2.9	89.8	4.2	0.0	0.0	89.3	90.2
Hungary	2011	741	67.9	8.7	12.3	67.9	10.0	1.0	0.0	63.7	72.0
	2015	692	70.1	8.7	14.4	70.1	6.2	0.6	0.0	62.3	77.0
Iran, Islamic Rep. of	2011	857	45.5	18.6	17.0	45.5	14.9	3.9	0.0	39.2	50.9
	2015	878	49.6	16.4	14.5	49.6	14.3	5.2	0.0	45.4	53.4
Israel	2011	689	68.9	6.1	10.3	68.9	11.0	3.4	0.3	65.3	72.7
	2015	782	67.3	9.2	10.4	67.3	9.9	3.0	0.2	64.1	70.2
Italy	2011	559	80.3	5.4	6.0	80.3	6.6	1.6	0.0	73.6	86.6
	2015	642	78.6	6.0	6.8	78.6	6.8	1.8	0.0	76.6	80.4
Japan	2011	625	84.2	6.8	7.0	84.2	1.7	0.3	0.0	79.7	88.3
	2015	678	83.9	5.7	6.6	83.9	3.6	0.1	0.1	80.8	87.1
Jordan	2011	1094	43.2	18.5	14.9	43.2	19.1	3.9	0.4	39.1	47.2
	2015	1128	37.1	16.3	14.2	37.1	27.0	5.5	0.0	36.9	37.3
Kazakhstan	2011	629	55.6	12.6	10.5	55.6	17.1	4.0	0.1	52.9	58.2
	2015	705	69.0	10.6	11.6	69.0	8.3	0.6	0.0	65.2	72.6
Korea, Rep. of	2011	740	90.0	3.0	4.4	90.0	2.2	0.5	0.0	87.2	93.0
	2015	761	88.4	3.6	3.3	88.4	3.9	0.5	0.2	88.9	88.0
Lebanon	2011	565	50.4	10.1	10.6	50.4	22.7	6.2	0.0	52.1	48.4
	2015	547	48.7	9.6	11.3	48.7	19.6	9.2	1.7	48.4	49.0
Lithuania	2011	685	64.8	9.2	10.6	64.8	13.4	1.9	0.1	56.4	72.7
	2015	617	71.8	10.5	8.5	71.8	8.0	1.2	0.0	70.7	72.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_01 (M042182): Number / Applying Type: MC Key: C
Label: How far did john jump

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	76.7	7.0	7.4	76.7	7.9	0.7	0.2	79.2	74.1
	2015	1377	78.6	6.2	3.6	78.6	9.9	1.7	0.0	82.4	74.3
Morocco	2011	1140	44.9	18.9	14.4	44.9	16.2	5.1	0.5	47.5	42.6
	2015	1894	45.6	16.6	17.5	45.6	16.5	3.7	0.0	45.2	46.0
New Zealand	2011	753	68.5	13.2	9.5	68.5	6.8	1.6	0.3	60.9	75.5
	2015	1180	65.8	13.7	12.6	65.8	6.5	1.2	0.1	65.9	65.8
Oman	2011	1380	39.7	17.8	16.3	39.7	20.5	5.5	0.2	41.5	37.8
	2015	1285	42.9	13.8	16.2	42.9	21.7	5.4	0.0	47.4	38.6
Qatar	2011	634	45.6	14.3	18.6	45.6	17.6	3.9	0.1	43.3	48.0
	2015	764	50.8	13.3	17.8	50.8	13.4	4.7	0.0	49.0	52.6
Russian Federation	2011	703	72.0	8.1	8.9	72.0	8.0	2.9	0.1	68.7	74.9
	2015	683	69.4	9.1	11.6	69.4	7.3	2.4	0.2	65.0	73.9
Saudi Arabia	2011	691	53.6	11.2	12.9	53.6	20.8	1.5	0.0	56.8	50.6
	2015	545	38.0	12.2	22.1	38.0	25.2	2.5	0.0	37.7	38.3
Singapore	2011	839	92.9	0.4	2.8	92.9	3.2	0.6	0.0	93.6	92.4
	2015	877	94.4	1.3	1.8	94.4	2.2	0.3	0.1	96.0	92.9
Slovenia	2011	625	70.8	7.8	9.0	70.8	8.3	4.1	0.0	65.5	75.6
	2015	606	73.1	9.0	8.6	73.1	7.4	1.7	0.1	65.5	81.2
South Africa	2011	1700	39.7	21.0	16.1	39.7	20.5	2.5	0.1	39.3	40.1
	2015	1755	39.2	22.3	14.0	39.2	21.5	3.0	0.0	42.5	35.6
Sweden	2011	804	73.0	12.5	10.1	73.0	3.2	1.1	0.1	70.9	75.0
	2015	581	72.5	12.4	8.3	72.5	2.7	3.9	0.2	72.4	72.8
Thailand	2011	876	51.0	17.9	18.2	51.0	9.1	3.7	0.1	48.0	54.3
	2015	926	53.4	17.9	17.9	53.4	8.2	2.6	0.0	54.0	52.8
Turkey	2011	990	50.8	17.2	13.4	50.8	15.1	3.5	0.0	46.0	55.0
	2015	865	55.2	16.1	11.6	55.2	15.5	1.4	0.0	49.8	60.1
United Arab Emirates	2011	2015	53.8	13.6	11.2	53.8	18.4	3.0	0.0	51.9	55.7
	2015	2555	61.2	11.5	10.3	61.2	14.7	2.2	0.0	62.7	59.7
United States	2011	1499	62.6	11.4	9.9	62.6	14.8	1.3	0.1	57.6	68.2
	2015	1438	63.5	9.5	10.2	63.5	14.7	1.7	0.4	59.0	68.1
International Avg (n=33)	2011	28460	62.0	11.9	11.4	62.0	11.7	2.8	0.1	59.5	64.5
	2015	31160	63.6	11.4	11.3	63.6	11.1	2.5	0.1	61.9	65.1
Ontario, Canada	2011	671	70.0	10.0	10.5	70.0	7.8	1.8	0.0	62.7	77.0
	2015	650	72.2	9.7	9.3	72.2	6.7	1.6	0.4	68.4	76.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_01 (M042182): Number / Applying Type: MC Key: C
Label: How far did john jump

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	77.0	6.4	5.6	77.0	8.2	2.4	0.4	71.7	82.7
	2015	569	81.1	5.3	4.2	81.1	7.2	1.5	0.8	78.1	84.6
Norway (8)	2011	568	76.3	9.4	9.6	76.3	2.6	2.1	0.0	71.0	80.5
	2015	686	75.7	10.2	8.5	75.7	3.7	1.9	0.0	74.3	77.1
Abu Dhabi, UAE	2011	638	51.3	14.8	11.0	51.3	19.9	2.9	0.0	50.5	52.1
	2015	685	56.4	12.1	11.4	56.4	16.8	3.3	0.0	60.7	51.9
Dubai, UAE	2011	787	61.5	12.7	9.9	61.5	13.1	2.8	0.0	57.6	65.1
	2015	869	72.6	8.4	7.7	72.6	9.5	1.7	0.0	71.4	74.0
Florida, US	2011	240	68.7	8.5	10.4	68.7	11.9	0.5	0.0	59.5	77.3
	2015	290	58.6	8.1	16.2	58.6	15.6	1.4	0.0	52.9	63.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_02 (M042081): Number / Knowing Type: CR 1 Point
Label: Write as decimal number

COUNTRY	Year	N	10 %	70 %	71 %	72 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	43.4	0.8	2.3	0.8	42.4	10.0	0.2	43.4	46.9	40.0
	2015	1489	46.0	1.1	1.2	0.9	42.2	8.4	0.1	46.0	46.6	45.5
Bahrain	2011	658	14.5	0.3	0.2	0.5	65.9	18.4	0.2	14.5	14.9	14.2
	2015	701	18.3	1.1	0.4	0.5	68.8	10.9	0.0	18.3	20.6	16.0
Botswana	2011	766	13.0	0.3	0.6	0.0	79.8	6.3	0.0	13.0	13.7	12.3
	2015	846	24.5	2.3	0.4	0.0	67.9	4.8	0.0	24.5	31.1	17.3
Chile	2011	823	6.2	0.1	0.4	0.2	50.7	42.1	0.2	6.2	5.3	7.4
	2015	697	9.3	0.0	0.7	0.2	44.5	45.1	0.2	9.3	7.0	11.4
Chinese Taipei	2011	718	60.7	2.4	0.4	0.2	30.0	6.3	0.0	60.7	62.8	58.6
	2015	814	54.0	2.0	0.5	0.0	37.9	5.6	0.0	54.0	52.2	55.8
England	2011	538	33.3	0.7	0.7	0.5	48.7	16.1	0.1	33.3	35.6	31.1
	2015	685	42.1	0.8	1.1	0.0	42.5	13.5	0.0	42.1	46.3	37.8
Georgia	2011	649	23.5	2.5	0.1	0.0	43.7	30.0	0.1	23.5	26.3	20.5
	2015	569	24.7	4.2	0.0	0.0	44.5	25.9	0.7	24.7	27.3	22.1
Hong Kong SAR	2011	576	62.5	11.1	0.3	0.1	19.4	6.4	0.2	62.5	66.7	58.0
	2015	598	68.9	8.4	0.0	0.0	19.6	3.1	0.0	68.9	70.0	67.9
Hungary	2011	741	27.9	5.0	0.2	0.0	43.6	23.2	0.1	27.9	27.0	28.7
	2015	692	31.1	3.8	0.0	0.1	42.4	22.6	0.0	31.1	29.4	32.6
Iran, Islamic Rep. of	2011	857	11.9	0.2	0.1	0.0	65.6	22.3	0.0	11.9	12.7	11.2
	2015	878	18.2	0.3	0.5	0.0	63.4	17.3	0.3	18.2	20.2	16.4
Israel	2011	689	31.0	2.6	0.1	0.0	45.9	20.2	0.3	31.0	27.9	34.2
	2015	782	29.8	5.1	0.2	0.0	47.1	17.5	0.2	29.8	27.2	32.1
Italy	2011	559	16.9	0.0	0.0	0.0	55.5	27.6	0.0	16.9	15.4	18.2
	2015	642	15.7	0.1	0.0	0.0	57.6	26.6	0.0	15.7	16.9	14.6
Japan	2011	625	44.3	1.2	0.0	0.1	46.7	7.6	0.0	44.3	47.4	41.5
	2015	678	48.4	0.9	0.0	0.0	40.8	9.8	0.1	48.4	49.2	47.5
Jordan	2011	1094	9.6	0.4	0.0	0.0	79.3	10.4	0.4	9.6	11.9	7.3
	2015	1128	7.1	1.2	0.4	0.0	76.7	14.7	0.0	7.1	9.3	5.1
Kazakhstan	2011	629	38.8	2.9	0.1	0.6	42.3	15.2	0.1	38.8	37.3	40.2
	2015	705	48.4	2.9	0.3	0.0	42.7	5.7	0.0	48.4	47.8	49.0
Korea, Rep. of	2011	740	64.9	0.1	0.4	0.0	33.4	1.2	0.0	64.9	64.3	65.6
	2015	761	61.3	0.7	0.0	0.1	34.1	3.6	0.2	61.3	60.2	62.3
Lebanon	2011	566	36.7	1.0	0.4	0.5	49.1	12.3	0.0	36.7	34.1	39.8
	2015	548	41.5	1.7	0.1	0.8	42.3	12.0	1.6	41.5	41.9	41.0
Lithuania	2011	685	19.3	5.9	0.0	0.0	56.7	18.0	0.1	19.3	22.3	16.5
	2015	617	23.0	3.4	0.0	0.0	51.2	22.3	0.0	23.0	22.3	23.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_02 (M042081): Number / Knowing Type: CR 1 Point
Label: Write as decimal number

COUNTRY	Year	N	10 %	70 %	71 %	72 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	42.1	6.6	0.0	0.2	43.7	7.0	0.4	42.1	47.6	36.5
	2015	1377	43.7	3.3	0.2	0.4	43.1	9.2	0.0	43.7	48.5	38.5
Morocco	2011	1140	10.1	1.5	0.0	0.3	56.8	30.8	0.5	10.1	11.7	8.7
	2015	1894	14.7	2.7	0.1	0.0	62.8	19.7	0.0	14.7	16.7	12.8
New Zealand	2011	753	30.5	0.9	1.8	0.9	50.4	15.2	0.3	30.5	24.3	36.2
	2015	1180	34.8	0.8	2.2	0.8	47.5	13.8	0.1	34.8	36.3	33.0
Oman	2011	1380	14.6	0.3	0.3	0.2	71.0	13.3	0.2	14.6	16.9	12.4
	2015	1283	24.2	1.0	0.2	0.3	66.9	7.3	0.0	24.2	30.0	18.7
Qatar	2011	634	21.1	0.1	0.1	0.0	66.8	11.8	0.1	21.1	19.5	22.8
	2015	764	24.4	0.7	1.6	0.5	61.0	11.8	0.0	24.4	24.1	24.7
Russian Federation	2011	703	47.9	2.8	0.7	0.0	32.2	16.3	0.1	47.9	47.1	48.5
	2015	683	40.6	1.3	0.0	0.0	41.8	16.0	0.3	40.6	39.0	42.2
Saudi Arabia	2011	691	19.5	0.5	0.0	0.4	70.3	9.4	0.0	19.5	26.3	13.0
	2015	545	15.6	0.2	0.2	0.2	70.7	13.1	0.0	15.6	16.0	15.1
Singapore	2011	839	79.8	3.4	0.1	0.0	15.8	1.0	0.0	79.8	83.7	76.1
	2015	877	85.7	2.6	0.0	0.0	10.5	1.1	0.1	85.7	87.6	84.0
Slovenia	2011	625	34.2	4.0	0.6	0.0	48.9	12.4	0.0	34.2	37.5	31.2
	2015	606	50.6	2.4	0.0	0.0	36.6	10.3	0.1	50.6	56.0	45.0
South Africa	2011	1700	25.1	2.0	0.3	1.0	65.0	6.4	0.1	25.1	27.7	22.5
	2015	1755	26.1	1.4	0.5	0.0	65.8	6.3	0.0	26.1	30.2	21.6
Sweden	2011	804	31.9	0.1	0.5	0.0	48.8	18.7	0.1	31.9	33.5	30.4
	2015	581	38.4	0.0	1.0	0.0	44.8	15.4	0.5	38.4	40.0	36.8
Thailand	2011	876	14.0	0.0	0.5	0.2	69.0	16.3	0.1	14.0	14.6	13.3
	2015	926	15.3	0.3	0.9	0.3	68.3	14.8	0.0	15.3	17.2	13.3
Turkey	2011	990	12.8	0.4	0.2	0.0	55.9	30.6	0.0	12.8	14.9	11.1
	2015	865	15.7	5.5	0.5	0.3	58.4	19.5	0.0	15.7	17.8	13.8
United Arab Emirates	2011	2015	32.1	5.8	0.6	0.8	51.2	9.5	0.0	32.1	33.1	31.1
	2015	2555	43.9	1.9	0.3	0.9	46.4	6.5	0.1	43.9	45.1	42.6
United States	2011	1499	38.8	2.0	0.8	0.1	53.6	4.6	0.1	38.8	38.2	39.5
	2015	1438	52.1	1.7	0.6	0.3	41.9	3.1	0.4	52.1	53.7	50.4
International Avg (n=33)	2011	28461	30.7	2.1	0.4	0.2	51.5	15.0	0.1	30.7	31.8	29.7
	2015	31159	34.5	2.0	0.4	0.2	49.5	13.3	0.2	34.5	35.9	33.1
Ontario, Canada	2011	671	30.5	0.4	0.5	0.3	57.8	10.5	0.0	30.5	30.0	31.0
	2015	650	38.3	0.7	1.1	0.3	49.9	8.9	0.7	38.3	36.4	40.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_02 (M042081): Number / Knowing Type: CR 1 Point
Label: Write as decimal number

COUNTRY	Year	N	10 %	70 %	71 %	72 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	31.9	2.3	0.5	0.1	50.1	14.6	0.4	31.9	30.2	33.8
	2015	569	35.7	1.9	1.8	0.1	49.2	10.3	0.9	35.7	32.9	39.2
Norway (8)	2011	568	22.5	0.2	1.2	0.3	57.1	18.8	0.0	22.5	25.4	20.1
	2015	686	24.8	0.8	1.3	0.4	54.6	18.1	0.0	24.8	27.9	21.8
Abu Dhabi, UAE	2011	638	32.5	4.3	0.8	0.5	52.9	8.9	0.0	32.5	33.2	31.9
	2015	685	43.6	0.9	0.3	0.1	49.5	5.7	0.0	43.6	46.5	40.5
Dubai, UAE	2011	787	34.2	4.4	0.5	0.2	50.8	9.9	0.0	34.2	35.2	33.2
	2015	869	49.9	1.6	0.2	1.7	42.7	3.9	0.0	49.9	45.5	54.6
Florida, US	2011	240	41.6	0.9	0.4	0.0	52.9	4.3	0.0	41.6	38.4	44.5
	2015	290	43.6	0.7	0.3	0.0	49.3	6.2	0.0	43.6	46.0	41.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_03 (M042049): Algebra / Knowing Type: MC Key: C
Label: What is value of 3x+3y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	69.5	9.9	10.8	69.5	6.8	2.8	0.2	72.1	66.9
	2015	1489	64.8	9.3	13.1	64.8	9.4	3.2	0.1	66.0	63.6
Bahrain	2011	658	47.1	21.5	15.8	47.1	8.4	6.8	0.4	47.4	46.8
	2015	701	64.6	10.9	12.8	64.6	9.3	2.4	0.0	67.0	62.2
Botswana	2011	766	50.5	14.8	15.4	50.5	14.9	4.5	0.0	51.9	49.0
	2015	846	51.4	16.9	14.2	51.4	13.2	4.3	0.0	53.0	49.7
Chile	2011	823	49.2	18.2	17.9	49.2	6.0	8.3	0.3	47.6	51.3
	2015	697	52.9	17.4	16.5	52.9	6.2	6.8	0.2	50.8	54.8
Chinese Taipei	2011	718	88.0	2.0	4.8	88.0	4.8	0.4	0.0	88.1	87.8
	2015	814	87.2	1.6	5.1	87.2	5.9	0.2	0.0	86.1	88.3
England	2011	538	74.3	4.1	10.8	74.3	7.4	3.2	0.1	77.1	71.7
	2015	685	73.6	4.9	8.3	73.6	9.3	4.0	0.0	77.1	70.2
Georgia	2011	649	60.1	9.3	18.4	60.1	8.8	3.3	0.1	55.2	65.4
	2015	569	58.5	7.3	17.2	58.5	10.4	5.8	0.7	58.9	58.1
Hong Kong SAR	2011	576	80.6	3.2	4.1	80.6	11.4	0.5	0.2	83.0	78.1
	2015	598	84.9	2.8	3.7	84.9	7.9	0.7	0.0	84.3	85.4
Hungary	2011	741	72.8	4.8	10.6	72.8	9.2	2.1	0.6	73.2	72.4
	2015	692	73.8	6.4	9.8	73.8	7.8	2.2	0.0	71.3	76.0
Iran, Islamic Rep. of	2011	856	56.2	9.0	16.5	56.2	14.2	4.0	0.2	57.1	55.4
	2015	878	56.2	9.5	16.5	56.2	10.6	6.8	0.4	55.4	57.0
Israel	2011	689	70.5	8.8	7.2	70.5	5.9	7.3	0.3	68.1	73.1
	2015	782	65.3	12.1	9.6	65.3	7.2	5.3	0.5	65.3	65.3
Italy	2011	559	61.7	6.1	13.6	61.7	10.8	7.9	0.0	57.4	65.7
	2015	642	61.8	9.0	15.8	61.8	8.7	4.6	0.0	58.5	65.0
Japan	2011	625	76.6	4.3	8.0	76.6	8.4	2.6	0.0	76.6	76.6
	2015	678	78.9	4.9	8.0	78.9	7.6	0.4	0.1	82.2	75.5
Jordan	2011	1094	54.2	17.3	15.9	54.2	9.5	2.7	0.4	56.4	52.1
	2015	1128	45.3	21.0	19.5	45.3	8.6	5.6	0.0	49.6	41.2
Kazakhstan	2011	629	60.6	10.9	13.1	60.6	10.8	4.5	0.1	59.6	61.6
	2015	706	72.8	10.5	9.2	72.8	6.6	0.9	0.0	77.0	68.8
Korea, Rep. of	2011	740	88.3	1.3	4.2	88.3	5.5	0.7	0.0	86.9	89.8
	2015	761	86.4	2.0	3.3	86.4	7.8	0.2	0.2	88.4	84.7
Lebanon	2011	566	61.8	14.3	9.0	61.8	11.4	3.2	0.2	59.5	64.5
	2015	547	52.8	14.4	8.6	52.8	13.2	9.3	1.7	51.2	55.0
Lithuania	2011	685	63.2	10.3	16.0	63.2	7.0	3.4	0.1	63.9	62.6
	2015	617	64.0	11.2	14.9	64.0	6.8	3.1	0.0	64.7	63.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_03 (M042049): Algebra / Knowing Type: MC Key: C
Label: What is value of 3x+3y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	53.6	14.5	21.0	53.6	7.2	3.4	0.4	54.1	53.1
	2015	1377	54.7	13.6	18.7	54.7	7.3	5.6	0.0	59.7	49.2
Morocco	2011	1138	42.9	19.9	20.3	42.9	10.6	5.8	0.5	40.8	44.7
	2015	1894	45.5	19.2	22.2	45.5	9.3	3.7	0.0	45.5	45.5
New Zealand	2011	753	66.7	8.2	12.9	66.7	6.8	5.1	0.3	63.3	69.9
	2015	1180	64.6	12.3	14.5	64.6	5.6	3.0	0.2	67.1	61.5
Oman	2011	1380	44.0	19.5	23.0	44.0	8.6	4.7	0.3	50.8	37.1
	2015	1283	51.7	15.6	20.9	51.7	8.3	3.4	0.0	59.9	43.8
Qatar	2011	633	49.9	14.8	19.3	49.9	12.6	3.3	0.1	49.1	50.6
	2015	764	59.4	11.8	14.0	59.4	11.2	3.6	0.0	58.3	60.5
Russian Federation	2011	703	77.0	3.9	8.1	77.0	7.4	3.4	0.1	78.6	75.5
	2015	683	73.7	4.9	9.7	73.7	7.8	3.6	0.3	72.1	75.2
Saudi Arabia	2011	691	46.3	16.3	25.0	46.3	10.2	2.2	0.0	47.9	44.7
	2015	544	41.1	22.1	27.3	41.1	7.1	2.4	0.0	42.1	40.0
Singapore	2011	839	88.6	1.2	3.3	88.6	6.5	0.4	0.0	88.5	88.7
	2015	877	89.8	1.7	3.3	89.8	4.5	0.6	0.1	92.7	87.1
Slovenia	2011	625	70.1	7.3	10.0	70.1	6.8	5.7	0.0	71.1	69.2
	2015	606	70.8	6.0	9.5	70.8	8.9	4.6	0.1	73.9	67.5
South Africa	2011	1700	44.2	23.8	22.5	44.2	7.1	2.2	0.2	47.2	41.2
	2015	1755	45.1	25.9	18.4	45.1	8.1	2.4	0.0	47.1	43.0
Sweden	2011	804	77.4	2.1	10.4	77.4	7.1	2.8	0.1	79.5	75.5
	2015	582	77.3	2.6	8.6	77.3	8.0	3.0	0.5	73.1	81.6
Thailand	2011	876	51.9	11.0	22.2	51.9	10.3	4.5	0.1	51.6	52.2
	2015	926	52.1	13.5	20.4	52.1	11.0	3.0	0.0	51.3	53.0
Turkey	2011	990	60.9	10.5	16.0	60.9	8.4	4.1	0.0	58.8	62.7
	2015	865	61.1	11.9	14.9	61.1	10.7	1.4	0.0	60.7	61.4
United Arab Emirates	2011	2015	60.4	13.2	12.9	60.4	8.7	4.6	0.1	61.1	59.8
	2015	2555	57.9	14.8	15.1	57.9	8.6	3.5	0.1	59.8	56.0
United States	2011	1499	65.0	10.1	12.9	65.0	8.8	2.9	0.1	65.5	64.5
	2015	1438	61.0	15.0	10.8	61.0	9.9	2.7	0.5	62.0	60.1
International Avg (n=33)	2011	28457	63.2	10.5	13.7	63.2	8.7	3.7	0.2	63.3	63.0
	2015	31159	63.7	11.0	13.2	63.7	8.6	3.4	0.2	64.6	62.7
Ontario, Canada	2011	671	71.6	8.4	11.0	71.6	5.9	3.1	0.0	73.5	69.8
	2015	650	65.6	10.5	13.1	65.6	6.2	3.6	1.0	65.8	65.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_03 (M042049): Algebra / Knowing Type: MC Key: C
Label: What is value of 3x+3y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	72.4	6.8	7.1	72.4	7.2	6.0	0.4	73.2	71.6
	2015	569	71.0	8.3	8.6	71.0	8.4	3.0	0.9	68.7	73.7
Norway (8)	2011	568	59.3	9.4	18.8	59.3	7.5	5.0	0.0	61.4	57.5
	2015	686	56.7	14.2	14.4	56.7	7.5	7.1	0.0	53.4	60.1
Abu Dhabi, UAE	2011	638	62.6	12.1	13.9	62.6	7.3	4.0	0.0	59.0	66.0
	2015	685	54.2	18.4	15.9	54.2	7.9	3.5	0.0	56.3	52.0
Dubai, UAE	2011	787	62.6	11.5	11.1	62.6	11.1	3.7	0.0	63.5	61.8
	2015	869	69.5	8.3	9.9	69.5	9.2	3.0	0.0	68.9	70.3
Florida, US	2011	240	68.6	7.7	11.9	68.6	8.9	2.9	0.0	68.0	69.3
	2015	290	64.7	16.0	10.3	64.7	7.5	1.4	0.0	66.1	63.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_04 (M042052): Number / Knowing Type: MC Key: A
Label: Ratio equivalent to 1:4

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	65.5	65.5	4.6	2.7	25.1	1.6	0.4	63.2	67.8
	2015	1489	67.8	67.8	4.4	3.3	22.5	1.8	0.2	66.5	69.2
Bahrain	2011	658	39.4	39.4	3.0	10.0	43.6	3.4	0.6	40.3	38.5
	2015	701	58.1	58.1	4.5	7.3	27.8	2.3	0.0	59.5	56.7
Botswana	2011	765	45.4	45.4	2.5	6.5	44.2	1.4	0.0	49.1	41.2
	2015	846	44.3	44.3	4.4	6.0	43.4	1.9	0.0	52.1	36.0
Chile	2011	823	31.9	31.9	3.3	4.4	56.3	3.7	0.5	29.5	35.0
	2015	697	36.6	36.6	8.2	6.7	45.6	2.7	0.2	33.6	39.3
Chinese Taipei	2011	718	90.5	90.5	0.9	1.5	6.7	0.4	0.0	91.8	89.2
	2015	814	90.0	90.0	2.0	0.6	7.3	0.1	0.0	89.8	90.1
England	2011	538	66.2	66.2	5.0	3.9	23.0	1.7	0.1	68.8	63.9
	2015	685	73.4	73.4	4.4	3.2	17.2	1.8	0.0	74.1	72.7
Georgia	2011	647	53.4	53.4	3.8	4.2	36.2	2.2	0.1	57.2	49.3
	2015	569	52.6	52.6	4.6	6.1	33.3	2.6	0.7	50.5	54.7
Hong Kong SAR	2011	576	87.2	87.2	1.5	2.3	8.7	0.2	0.2	88.5	85.9
	2015	598	90.7	90.7	0.7	2.1	6.5	0.0	0.0	89.5	91.8
Hungary	2011	741	61.0	61.0	6.6	2.8	28.1	1.0	0.6	58.2	63.6
	2015	692	65.6	65.6	5.2	2.6	26.6	0.0	0.0	62.2	68.6
Iran, Islamic Rep. of	2011	857	49.3	49.3	9.6	6.7	33.7	0.6	0.2	48.0	50.4
	2015	878	53.8	53.8	10.0	5.1	29.9	0.9	0.4	54.1	53.4
Israel	2011	689	75.9	75.9	3.0	2.7	16.9	1.2	0.3	77.2	74.6
	2015	782	75.2	75.2	2.8	2.1	18.2	1.1	0.5	77.8	73.0
Italy	2011	559	64.3	64.3	3.9	4.0	24.9	2.9	0.0	61.6	66.8
	2015	642	64.8	64.8	4.8	3.3	25.6	1.4	0.0	61.2	68.2
Japan	2011	625	88.9	88.9	1.3	0.3	9.5	0.0	0.0	88.2	89.6
	2015	678	90.0	90.0	1.8	0.8	7.1	0.2	0.1	90.1	90.0
Jordan	2011	1094	37.4	37.4	4.6	9.8	46.7	1.1	0.4	38.4	36.5
	2015	1128	30.7	30.7	5.5	8.9	53.8	1.2	0.0	30.3	31.1
Kazakhstan	2011	629	57.9	57.9	3.1	1.7	36.1	1.1	0.1	52.3	63.1
	2015	706	71.8	71.8	1.0	2.4	23.9	0.9	0.0	69.1	74.3
Korea, Rep. of	2011	740	92.3	92.3	1.3	0.5	5.8	0.1	0.0	93.0	91.6
	2015	761	91.3	91.3	0.6	0.3	7.0	0.5	0.2	93.9	89.0
Lebanon	2011	564	38.0	38.0	2.9	4.7	48.2	5.9	0.2	33.7	43.1
	2015	548	39.1	39.1	2.4	5.0	44.7	7.2	1.6	38.6	39.9
Lithuania	2011	685	53.5	53.5	1.6	1.3	43.2	0.3	0.1	52.1	54.8
	2015	617	62.0	62.0	0.5	2.7	33.5	1.3	0.0	59.4	64.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_04 (M042052): Number / Knowing Type: MC Key: A
Label: Ratio equivalent to 1:4

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	51.4	51.4	5.2	5.4	36.6	1.1	0.4	59.2	43.5
	2015	1377	60.6	60.6	5.1	3.1	29.5	1.7	0.0	65.6	55.1
Morocco	2011	1140	30.1	30.1	6.3	7.2	52.5	3.4	0.5	29.5	30.6
	2015	1894	29.0	29.0	5.3	8.5	53.4	3.7	0.0	29.1	28.9
New Zealand	2011	753	53.8	53.8	4.6	5.1	33.1	3.1	0.3	46.7	60.3
	2015	1180	57.9	57.9	5.2	4.2	30.6	1.8	0.2	56.1	60.1
Oman	2011	1380	31.2	31.2	6.9	12.6	46.4	2.7	0.3	36.7	25.5
	2015	1285	38.1	38.1	5.2	11.5	42.1	2.9	0.1	44.6	32.0
Qatar	2011	634	43.3	43.3	6.1	10.5	38.3	1.6	0.1	44.5	42.1
	2015	764	52.5	52.5	5.2	7.1	32.7	2.4	0.0	54.9	49.9
Russian Federation	2011	703	76.8	76.8	1.9	1.4	17.2	2.6	0.1	75.8	77.7
	2015	683	75.0	75.0	1.9	1.8	19.3	1.7	0.3	72.6	77.3
Saudi Arabia	2011	690	33.7	33.7	7.6	13.4	44.2	1.1	0.0	32.3	35.0
	2015	545	30.1	30.1	6.4	18.7	42.0	2.8	0.0	31.5	28.7
Singapore	2011	839	94.5	94.5	0.4	0.7	4.3	0.1	0.0	95.4	93.7
	2015	877	95.2	95.2	0.6	0.8	3.1	0.2	0.1	97.9	92.7
Slovenia	2011	625	69.3	69.3	4.0	1.8	23.2	1.7	0.0	64.0	74.1
	2015	605	73.3	73.3	3.1	1.5	21.6	0.4	0.1	72.4	74.3
South Africa	2011	1700	20.8	20.8	4.9	10.3	62.5	1.3	0.2	20.8	20.9
	2015	1755	27.4	27.4	3.6	5.7	62.7	0.5	0.0	29.4	25.4
Sweden	2011	804	51.0	51.0	18.0	3.6	24.6	2.6	0.1	45.6	56.0
	2015	581	50.1	50.1	18.3	3.2	24.2	3.8	0.5	41.5	58.7
Thailand	2011	876	42.6	42.6	7.0	6.6	41.3	2.2	0.3	44.3	40.6
	2015	926	43.6	43.6	9.2	6.0	39.6	1.6	0.0	47.2	39.7
Turkey	2011	990	46.7	46.7	4.7	4.5	42.3	1.7	0.0	46.3	47.1
	2015	865	53.6	53.6	3.8	5.8	36.1	0.8	0.0	53.7	53.5
United Arab Emirates	2011	2015	50.8	50.8	3.4	4.8	39.5	1.4	0.1	52.4	49.2
	2015	2555	50.8	50.8	4.4	4.2	39.0	1.5	0.1	51.9	49.6
United States	2011	1499	64.7	64.7	3.4	3.0	28.1	0.6	0.1	65.1	64.3
	2015	1438	71.3	71.3	2.7	2.8	21.9	0.8	0.5	68.4	74.2
International Avg (n=33)	2011	28455	56.3	56.3	4.4	4.9	32.5	1.7	0.2	56.1	56.5
	2015	31161	59.6	59.6	4.5	4.7	29.4	1.7	0.2	59.7	59.5
Ontario, Canada	2011	671	71.4	71.4	3.6	1.9	22.3	0.8	0.0	68.3	74.3
	2015	649	70.5	70.5	4.2	1.6	21.3	1.5	1.0	69.9	71.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_04 (M042052): Number / Knowing Type: MC Key: A
Label: Ratio equivalent to 1:4

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	77.5	77.5	0.5	1.2	18.3	2.0	0.5	76.2	78.8
	2015	569	89.5	89.5	1.7	0.4	7.3	0.1	0.9	88.9	90.3
Norway (8)	2011	568	71.0	71.0	2.1	1.5	23.6	1.8	0.0	70.0	71.7
	2015	686	75.9	75.9	4.3	1.7	16.2	1.9	0.0	74.3	77.5
Abu Dhabi, UAE	2011	638	44.5	44.5	4.3	5.1	43.5	2.5	0.0	42.4	46.4
	2015	685	44.0	44.0	6.8	5.7	42.4	1.1	0.0	48.5	39.3
Dubai, UAE	2011	787	60.8	60.8	2.1	4.8	31.2	1.1	0.0	64.0	58.0
	2015	869	68.0	68.0	2.4	2.4	25.6	1.7	0.0	65.1	71.1
Florida, US	2011	240	61.1	61.1	7.4	0.4	31.1	0.0	0.0	58.8	63.3
	2015	290	67.6	67.6	4.8	5.1	21.9	0.6	0.0	63.2	71.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_05 (M042076): Algebra / Knowing Type: MC Key: D
Label: Expression for one-fifth of x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	48.8	18.5	18.0	12.1	48.8	2.2	0.4	48.5	49.2
	2015	1489	47.8	17.9	18.5	14.8	47.8	0.9	0.2	47.5	48.0
Bahrain	2011	658	31.0	17.6	44.1	5.7	31.0	0.8	0.7	30.6	31.4
	2015	701	46.2	11.1	37.2	4.7	46.2	0.9	0.0	44.3	48.0
Botswana	2011	765	31.0	31.8	18.7	15.2	31.0	3.3	0.0	28.8	33.4
	2015	846	27.7	38.5	17.4	13.4	27.7	3.0	0.0	28.8	26.5
Chile	2011	823	29.8	26.1	31.7	9.3	29.8	2.6	0.6	25.6	35.2
	2015	697	32.6	25.7	29.0	8.7	32.6	3.7	0.2	32.8	32.5
Chinese Taipei	2011	718	81.6	7.6	8.2	2.4	81.6	0.3	0.0	82.6	80.7
	2015	814	77.2	10.0	9.8	2.8	77.2	0.1	0.0	76.6	77.8
England	2011	538	48.8	17.4	18.2	12.7	48.8	2.9	0.1	48.8	48.7
	2015	685	53.0	15.7	16.3	13.8	53.0	1.3	0.0	55.0	50.9
Georgia	2011	647	74.4	7.0	11.4	4.9	74.4	2.3	0.1	78.7	69.8
	2015	569	68.2	9.8	14.9	4.7	68.2	1.7	0.7	72.8	63.5
Hong Kong SAR	2011	576	71.6	9.9	14.2	4.0	71.6	0.2	0.2	76.6	66.4
	2015	598	77.0	10.2	9.5	3.4	77.0	0.0	0.0	77.9	76.2
Hungary	2011	741	62.6	20.7	6.0	9.0	62.6	1.1	0.6	68.2	57.3
	2015	692	65.1	20.9	5.0	8.2	65.1	0.8	0.0	66.2	64.0
Iran, Islamic Rep. of	2011	857	31.5	38.2	9.4	19.3	31.5	1.4	0.2	29.1	33.6
	2015	878	28.9	35.9	9.6	23.3	28.9	1.7	0.5	26.1	31.4
Israel	2011	689	57.6	12.2	24.9	3.3	57.6	1.8	0.3	55.8	59.5
	2015	782	54.2	14.2	24.0	4.0	54.2	3.2	0.5	56.8	51.8
Italy	2011	559	45.2	30.4	8.4	11.6	45.2	4.4	0.0	42.5	47.8
	2015	642	45.3	30.4	8.9	10.7	45.3	4.7	0.0	48.8	41.9
Japan	2011	625	71.1	7.0	15.9	5.8	71.1	0.3	0.0	69.2	72.8
	2015	678	72.5	7.5	14.3	5.1	72.5	0.3	0.3	74.0	70.8
Jordan	2011	1094	28.3	14.7	50.8	4.8	28.3	0.9	0.4	28.7	27.8
	2015	1128	27.3	14.1	52.7	4.3	27.3	1.6	0.0	29.0	25.6
Kazakhstan	2011	629	37.3	39.7	9.8	10.8	37.3	2.3	0.1	37.6	37.0
	2015	706	57.0	27.8	7.1	7.3	57.0	0.8	0.0	55.4	58.5
Korea, Rep. of	2011	740	77.9	13.2	4.9	3.7	77.9	0.3	0.0	79.9	75.9
	2015	761	78.7	12.0	5.2	3.5	78.7	0.3	0.2	82.1	75.7
Lebanon	2011	563	40.1	17.6	34.6	5.3	40.1	2.1	0.3	38.2	42.3
	2015	544	45.6	20.8	21.1	5.5	45.6	5.1	1.9	45.5	45.7
Lithuania	2011	685	48.4	33.2	10.7	6.1	48.4	1.5	0.1	47.4	49.3
	2015	617	47.2	36.0	7.1	7.8	47.2	1.9	0.0	50.6	43.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_05 (M042076): Algebra / Knowing Type: MC Key: D
Label: Expression for one-fifth of x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	40.5	28.5	11.6	17.6	40.5	1.5	0.4	43.3	37.6
	2015	1377	43.5	25.9	11.0	16.9	43.5	2.6	0.1	45.5	41.2
Morocco	2011	1140	39.0	16.2	34.7	6.8	39.0	2.9	0.5	41.3	36.9
	2015	1894	37.6	24.8	26.9	8.2	37.6	2.5	0.0	38.3	37.0
New Zealand	2011	753	45.1	20.1	18.0	13.9	45.1	2.6	0.3	42.3	47.7
	2015	1180	47.1	20.5	15.8	14.9	47.1	1.6	0.2	49.9	43.7
Oman	2011	1380	26.2	17.5	49.0	5.6	26.2	1.5	0.3	27.5	24.8
	2015	1285	30.3	18.9	43.2	5.1	30.3	2.4	0.1	33.6	27.2
Qatar	2011	634	35.9	18.0	35.7	9.1	35.9	1.1	0.2	35.6	36.3
	2015	764	45.2	20.6	25.5	6.4	45.2	2.3	0.0	47.6	42.8
Russian Federation	2011	703	60.9	20.5	6.3	8.1	60.9	4.1	0.1	59.2	62.5
	2015	683	62.3	17.3	8.5	8.1	62.3	3.3	0.4	60.8	63.7
Saudi Arabia	2011	691	31.2	14.5	49.0	4.6	31.2	0.6	0.0	28.2	34.0
	2015	544	21.0	16.2	54.6	6.3	21.0	1.9	0.0	16.5	25.8
Singapore	2011	839	77.4	8.9	9.4	3.6	77.4	0.7	0.0	78.7	76.1
	2015	877	78.3	9.1	8.3	3.8	78.3	0.4	0.1	83.6	73.3
Slovenia	2011	625	59.7	4.4	31.5	2.9	59.7	1.6	0.0	56.9	62.2
	2015	605	49.1	15.2	13.2	18.5	49.1	3.9	0.1	48.4	49.9
South Africa	2011	1700	29.8	27.9	26.8	13.0	29.8	2.2	0.3	28.7	30.9
	2015	1755	28.8	33.3	22.8	13.4	28.8	1.6	0.1	29.4	28.1
Sweden	2011	804	52.0	10.6	24.4	10.9	52.0	2.1	0.1	50.5	53.4
	2015	581	52.8	12.5	23.6	7.7	52.8	3.0	0.5	51.8	53.9
Thailand	2011	876	41.3	28.0	14.5	10.9	41.3	5.0	0.3	42.2	40.3
	2015	926	37.7	30.3	16.5	13.4	37.7	1.7	0.4	43.3	31.6
Turkey	2011	990	39.8	34.4	12.8	11.7	39.8	1.2	0.0	41.9	38.0
	2015	865	40.6	33.0	14.1	11.4	40.6	0.9	0.0	41.3	39.9
United Arab Emirates	2011	2015	44.1	17.1	29.4	7.2	44.1	2.2	0.1	42.3	46.0
	2015	2555	47.5	18.9	24.9	7.4	47.5	1.2	0.1	49.6	45.3
United States	2011	1499	49.7	20.5	11.1	17.6	49.7	0.9	0.1	45.1	55.0
	2015	1438	54.4	20.2	11.6	12.2	54.4	1.0	0.6	51.8	56.9
International Avg (n=33)	2011	28455	48.2	19.7	21.3	8.8	48.2	1.8	0.2	47.9	48.5
	2015	31156	49.3	20.5	19.0	9.1	49.3	1.9	0.2	50.3	48.3
Ontario, Canada	2011	671	42.0	21.0	19.3	15.5	42.0	2.3	0.0	41.3	42.6
	2015	649	47.0	18.4	17.1	13.7	47.0	2.8	1.0	49.3	44.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_05 (M042076): Algebra / Knowing Type: MC Key: D
Label: Expression for one-fifth of x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	63.6	11.1	17.4	6.0	63.6	1.3	0.5	65.8	61.2
	2015	569	62.2	11.8	16.3	7.1	62.2	1.6	0.9	67.4	56.1
Norway (8)	2011	568	32.9	16.7	35.6	10.1	32.9	4.7	0.0	32.5	33.2
	2015	685	31.7	16.9	35.1	10.9	31.7	5.4	0.0	27.3	36.1
Abu Dhabi, UAE	2011	638	43.0	14.4	32.4	8.1	43.0	2.1	0.0	35.1	50.2
	2015	685	40.1	22.1	29.1	7.3	40.1	1.4	0.0	42.2	37.9
Dubai, UAE	2011	787	52.7	17.3	19.3	7.7	52.7	3.0	0.0	52.2	53.2
	2015	869	62.3	16.6	12.3	7.7	62.3	1.0	0.0	62.6	62.0
Florida, US	2011	240	42.3	20.6	16.5	20.2	42.3	0.5	0.0	40.4	44.2
	2015	290	45.1	23.0	12.5	18.3	45.1	1.1	0.0	43.6	46.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_06A (M042302A): Number / Applying Type: CR 2 Points
Label: Cost of phone for 1 year

COUNTRY	Year	N	20 %	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	47.4	17.8	2.1	25.4	6.9	0.4	67.3	47.4	45.2	49.5
	2015	1489	48.8	18.1	2.0	26.0	4.9	0.2	68.9	48.8	47.9	49.7
Bahrain	2011	658	8.1	12.4	0.5	60.9	17.3	0.7	21.1	8.1	7.3	9.0
	2015	701	11.0	11.9	1.0	65.3	10.8	0.0	23.9	11.0	11.3	10.6
Botswana	2011	765	2.0	9.4	0.1	81.6	6.9	0.0	11.5	2.0	2.4	1.6
	2015	846	4.4	12.6	0.4	76.5	5.9	0.2	17.4	4.4	4.9	3.8
Chile	2011	823	13.4	11.7	1.5	48.1	24.7	0.6	26.7	13.4	11.7	15.7
	2015	697	14.7	12.7	2.4	40.7	29.2	0.2	29.8	14.7	8.1	20.9
Chinese Taipei	2011	718	62.1	14.3	2.1	18.6	2.9	0.0	78.5	62.1	59.9	64.3
	2015	814	59.4	14.7	2.5	20.8	2.7	0.0	76.6	59.4	53.5	65.2
England	2011	538	45.7	16.9	2.1	28.4	6.7	0.1	64.8	45.7	40.9	50.1
	2015	685	51.4	18.0	1.1	22.7	6.9	0.0	70.4	51.4	50.4	52.4
Georgia	2011	649	20.3	14.9	0.8	32.4	31.5	0.1	36.0	20.3	20.1	20.6
	2015	569	15.2	22.4	1.1	36.6	24.0	0.7	38.7	15.2	13.9	16.4
Hong Kong SAR	2011	576	54.8	15.7	0.8	22.4	6.1	0.2	71.3	54.8	55.0	54.6
	2015	598	65.6	14.6	0.8	16.7	2.3	0.0	81.0	65.6	61.8	69.0
Hungary	2011	741	46.3	19.3	1.4	25.0	7.5	0.6	66.9	46.3	41.4	50.9
	2015	692	49.6	22.1	1.7	21.9	4.7	0.0	73.4	49.6	45.8	53.0
Iran, Islamic Rep. of	2011	854	4.1	4.0	0.6	61.6	29.6	0.2	8.7	4.1	1.5	6.3
	2015	878	5.5	5.8	0.5	59.1	28.7	0.5	11.8	5.5	3.3	7.5
Israel	2011	689	47.8	11.3	0.8	26.6	13.3	0.3	59.9	47.8	44.0	51.9
	2015	782	48.1	12.3	1.2	28.2	9.8	0.5	61.5	48.1	47.0	49.1
Italy	2011	559	36.3	19.3	0.9	26.0	17.4	0.0	56.5	36.3	30.4	41.9
	2015	642	36.0	20.0	0.5	29.2	14.4	0.0	56.5	36.0	31.7	40.1
Japan	2011	625	49.0	14.7	3.0	29.2	4.1	0.0	66.7	49.0	45.2	52.5
	2015	678	49.1	17.5	3.7	24.7	4.7	0.3	70.3	49.1	46.7	51.5
Jordan	2011	1094	5.9	7.4	0.9	75.9	9.5	0.4	14.2	5.9	3.7	8.1
	2015	1128	2.5	5.5	1.2	78.5	12.2	0.1	9.2	2.5	1.8	3.1
Kazakhstan	2011	628	17.7	16.0	0.3	43.3	22.5	0.1	34.1	17.7	16.3	19.0
	2015	706	20.8	24.9	0.5	41.9	12.0	0.0	46.1	20.8	18.5	23.0
Korea, Rep. of	2011	740	61.3	12.2	2.7	22.6	1.2	0.0	76.2	61.3	59.3	63.4
	2015	761	56.4	12.4	2.5	24.0	4.4	0.2	71.3	56.4	51.6	60.7
Lebanon	2011	566	6.6	7.5	0.2	50.1	35.3	0.3	14.3	6.6	4.9	8.5
	2015	548	5.4	8.2	0.1	45.9	38.2	2.2	13.7	5.4	4.8	6.1
Lithuania	2011	685	40.9	25.6	0.9	25.9	6.5	0.1	67.4	40.9	36.9	44.7
	2015	617	46.6	23.5	1.3	21.0	7.6	0.0	71.4	46.6	37.6	55.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_06A (M042302A): Number / Applying Type: CR 2 Points
Label: Cost of phone for 1 year

COUNTRY	Year	N	20 %	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	15.2	20.5	0.4	51.9	11.6	0.4	36.1	15.2	13.8	16.6
	2015	1377	16.6	27.2	0.9	44.3	11.0	0.1	44.6	16.6	16.2	16.9
Morocco	2011	1140	4.5	7.8	0.5	60.0	26.7	0.5	12.7	4.5	4.6	4.4
	2015	1894	3.1	8.4	0.0	62.8	25.5	0.2	11.5	3.1	2.6	3.6
New Zealand	2011	753	45.0	14.3	2.3	31.0	7.1	0.3	61.6	45.0	43.5	46.4
	2015	1180	42.2	17.8	2.3	28.9	8.6	0.2	62.3	42.2	42.9	41.4
Oman	2011	1380	3.9	6.4	0.2	72.5	16.7	0.3	10.6	3.9	4.0	3.8
	2015	1279	5.3	8.2	0.4	77.4	8.6	0.1	13.9	5.3	6.6	4.0
Qatar	2011	634	13.4	10.4	0.8	57.3	17.9	0.2	24.5	13.4	11.2	15.6
	2015	764	16.6	11.0	0.4	57.8	14.1	0.1	28.0	16.6	13.8	19.6
Russian Federation	2011	703	46.4	19.5	0.8	22.9	10.2	0.1	66.7	46.4	43.2	49.4
	2015	683	50.6	18.2	1.3	16.8	12.7	0.4	70.2	50.6	45.3	55.9
Saudi Arabia	2011	691	7.3	7.3	0.3	74.8	10.3	0.0	14.9	7.3	5.1	9.4
	2015	545	1.5	6.4	0.2	80.3	11.6	0.0	8.1	1.5	1.3	1.7
Singapore	2011	839	62.6	17.6	1.6	15.7	2.4	0.0	81.9	62.6	58.3	66.7
	2015	877	67.2	15.9	0.7	14.0	2.0	0.1	83.9	67.2	69.2	65.3
Slovenia	2011	625	46.4	16.4	2.8	26.2	8.1	0.0	65.7	46.4	40.6	51.7
	2015	605	41.2	24.6	1.7	26.4	5.9	0.1	67.5	41.2	34.5	48.3
South Africa	2011	1700	4.9	11.7	0.1	75.4	7.5	0.3	16.8	4.9	4.8	5.1
	2015	1755	4.8	16.0	0.1	73.5	5.6	0.1	20.8	4.8	4.2	5.4
Sweden	2011	804	59.0	15.4	1.4	14.9	9.1	0.1	75.9	59.0	62.2	56.2
	2015	579	56.8	20.1	0.7	16.7	5.3	0.5	77.6	56.8	51.8	61.7
Thailand	2011	876	11.5	15.2	0.6	54.3	17.8	0.6	27.3	11.5	12.3	10.6
	2015	926	13.9	15.7	1.3	56.1	12.6	0.4	30.9	13.9	11.6	16.4
Turkey	2011	989	13.6	20.3	1.5	48.4	16.2	0.0	35.4	13.6	11.8	15.2
	2015	865	15.8	17.4	1.1	56.4	9.4	0.0	34.3	15.8	11.5	19.6
United Arab Emirates	2011	2015	17.9	12.8	0.4	59.3	9.5	0.1	31.1	17.9	14.9	21.0
	2015	2555	20.7	14.8	1.0	54.2	9.2	0.1	36.5	20.7	17.7	23.8
United States	2011	1499	44.9	17.0	1.5	31.5	5.0	0.1	63.4	44.9	40.4	50.0
	2015	1438	48.8	13.0	2.2	32.0	3.3	0.6	64.1	48.8	46.2	51.5
International Avg (n=33)	2011	28455	29.3	14.0	1.1	42.4	12.9	0.2	44.4	29.3	27.2	31.3
	2015	31153	30.2	15.5	1.2	41.7	11.2	0.2	46.8	30.2	27.8	32.5
Ontario, Canada	2011	671	52.6	15.1	2.0	23.7	6.5	0.0	69.8	52.6	48.8	56.4
	2015	650	57.3	13.5	2.3	23.0	2.8	1.0	73.1	57.3	53.1	61.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_06A (M042302A): Number / Applying Type: CR 2 Points
Label: Cost of phone for 1 year

COUNTRY	Year	N	20 %	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	58.9	7.0	1.0	24.6	7.9	0.5	66.9	58.9	61.3	56.2
	2015	569	62.7	7.4	1.4	22.0	5.4	1.1	71.5	62.7	59.4	66.5
Norway (8)	2011	568	53.0	16.9	1.2	22.5	6.4	0.0	71.1	53.0	51.0	54.7
	2015	686	48.5	25.0	1.8	18.0	6.4	0.2	75.3	48.5	44.6	52.4
Abu Dhabi, UAE	2011	638	17.5	11.3	0.3	62.5	8.4	0.0	29.1	17.5	13.3	21.5
	2015	685	14.2	13.3	0.7	63.0	8.7	0.0	28.3	14.2	13.2	15.3
Dubai, UAE	2011	787	24.9	15.4	0.6	48.5	10.5	0.0	41.0	24.9	20.4	29.1
	2015	869	34.5	14.9	2.3	40.5	7.6	0.1	51.7	34.5	28.9	40.6
Florida, US	2011	240	43.1	17.3	0.0	31.4	8.2	0.0	60.4	43.1	37.1	48.6
	2015	290	41.0	7.2	1.5	41.7	8.6	0.0	49.7	41.0	40.7	41.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_06B (M042302B): Number / Applying Type: CR 2 Points
Label: Pay after first year

COUNTRY	Year	N	20 %	21 %	10 %	11 %	12 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	38.2	6.8	7.8	2.2	2.7	31.4	10.5	0.4	57.7	45.0	43.7	46.4
	2015	1489	37.7	0.0	9.8	4.6	0.0	38.8	8.9	0.2	52.1	37.7	40.9	34.3
Bahrain	2011	658	7.1	2.6	2.7	0.9	0.9	58.3	26.3	1.1	14.2	9.7	10.0	9.5
	2015	701	9.0	2.5	2.5	0.9	1.4	67.7	16.0	0.1	16.3	11.5	11.6	11.4
Botswana	2011	765	1.7	0.8	1.8	0.6	0.3	81.4	13.5	0.0	5.1	2.5	2.9	2.1
	2015	846	4.0	1.5	3.0	0.2	0.3	80.5	10.3	0.2	9.0	5.5	6.1	4.8
Chile	2011	823	10.4	3.6	3.1	1.7	3.0	37.0	40.3	0.8	21.9	14.0	12.2	16.2
	2015	697	11.2	3.0	6.3	2.7	1.1	35.9	39.6	0.2	24.3	14.2	10.5	17.5
Chinese Taipei	2011	718	54.3	9.2	7.8	2.5	2.9	18.5	4.9	0.0	76.7	63.6	61.8	65.3
	2015	814	53.0	13.2	6.6	3.4	3.4	16.6	3.9	0.0	79.6	66.2	64.8	67.5
England	2011	538	35.3	7.8	6.2	3.1	2.5	32.1	12.9	0.1	54.9	43.1	39.8	46.0
	2015	685	41.4	7.0	6.3	1.5	1.8	29.5	12.5	0.0	58.0	48.4	50.1	46.8
Georgia	2011	649	11.1	2.5	5.6	2.2	0.9	33.5	43.6	0.7	22.2	13.6	12.9	14.4
	2015	569	10.9	7.0	6.5	1.5	0.8	36.9	35.3	1.1	26.7	18.0	16.9	19.0
Hong Kong SAR	2011	576	48.7	6.7	7.5	2.2	1.3	25.7	7.8	0.2	66.3	55.4	55.7	55.0
	2015	598	56.4	6.6	7.2	2.0	1.6	22.5	3.7	0.0	73.9	63.0	62.6	63.4
Hungary	2011	741	37.1	10.5	5.4	3.7	2.6	27.0	13.2	0.6	59.3	47.6	47.2	48.1
	2015	692	40.3	8.1	7.1	2.8	2.6	29.7	9.4	0.0	60.8	48.4	43.7	52.6
Iran, Islamic Rep. of	2011	856	3.1	4.9	2.0	0.4	1.3	48.6	39.1	0.6	11.7	8.0	5.1	10.4
	2015	878	4.8	0.8	3.0	0.3	0.4	51.3	38.9	0.5	9.3	5.6	5.1	6.0
Israel	2011	689	41.9	6.0	7.6	2.0	2.1	22.6	17.2	0.5	59.6	47.9	47.3	48.6
	2015	782	42.9	8.0	5.5	2.7	1.3	25.7	13.0	0.9	60.4	50.8	50.4	51.2
Italy	2011	559	30.7	5.0	6.9	2.0	1.5	29.3	24.6	0.0	46.1	35.7	28.0	43.0
	2015	641	33.1	6.7	6.1	1.4	1.9	27.1	23.6	0.0	49.2	39.8	35.6	43.7
Japan	2011	625	49.5	9.5	7.2	3.6	2.6	20.0	7.6	0.0	72.5	59.1	55.8	62.1
	2015	678	50.6	11.6	6.6	4.0	1.7	17.3	7.8	0.3	74.6	62.2	63.7	60.7
Jordan	2011	1094	4.2	1.6	2.2	0.6	1.0	71.4	18.5	0.5	9.7	5.9	3.8	7.9
	2015	1128	2.1	0.8	0.4	0.0	0.5	72.1	23.9	0.1	3.9	2.9	3.1	2.8
Kazakhstan	2011	628	12.3	2.3	7.2	0.1	0.1	44.5	32.5	1.1	22.0	14.6	12.4	16.7
	2015	706	14.8	5.2	14.2	1.2	1.3	44.5	18.8	0.0	36.7	20.0	19.1	20.9
Korea, Rep. of	2011	740	57.9	3.1	8.2	3.7	0.1	22.6	4.3	0.0	73.1	61.0	59.3	62.8
	2015	761	55.2	7.8	5.4	2.7	2.4	20.7	5.5	0.2	73.6	63.1	61.1	64.9
Lebanon	2011	566	6.2	1.3	2.9	0.5	0.3	39.1	49.2	0.4	11.3	7.6	5.9	9.5
	2015	547	4.3	0.0	2.9	0.2	0.3	38.3	51.1	2.9	7.6	4.3	3.4	5.5
Lithuania	2011	685	30.3	18.3	7.9	1.6	3.9	26.5	11.4	0.1	62.0	48.6	47.6	49.5
	2015	617	39.8	12.4	6.1	1.6	3.1	24.8	12.3	0.0	63.0	52.2	51.3	53.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_06B (M042302B): Number / Applying Type: CR 2 Points
Label: Pay after first year

COUNTRY	Year	N	20 %	21 %	10 %	11 %	12 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	11.6	2.2	7.8	0.8	0.3	57.2	19.2	0.9	22.7	13.8	13.3	14.3
	2015	1377	15.9	5.4	6.9	0.7	1.0	50.0	19.9	0.2	29.9	21.3	20.4	22.4
Morocco	2011	1140	2.8	2.0	3.2	0.7	0.0	48.5	41.8	0.9	8.7	4.8	4.1	5.5
	2015	1894	1.9	1.7	2.4	0.0	0.2	56.5	37.1	0.2	6.2	3.5	3.2	3.8
New Zealand	2011	753	32.7	6.5	7.2	3.4	2.8	33.7	13.2	0.5	52.6	39.2	38.4	40.0
	2015	1180	33.7	6.6	4.7	3.1	2.6	36.1	13.0	0.2	50.7	40.3	44.4	35.5
Oman	2011	1380	3.5	0.7	1.5	0.5	0.5	69.5	23.3	0.5	6.8	4.2	5.2	3.3
	2015	1269	5.9	2.4	4.2	0.5	0.8	73.6	12.2	0.3	13.8	8.3	8.6	8.1
Qatar	2011	634	11.0	1.7	3.0	1.3	0.4	61.8	20.4	0.6	17.3	12.7	10.9	14.5
	2015	764	14.2	2.9	6.1	1.1	1.2	56.5	17.3	0.5	25.6	17.2	15.9	18.6
Russian Federation	2011	703	35.3	10.4	8.6	0.7	2.8	27.1	14.9	0.3	57.8	45.7	44.7	46.6
	2015	683	39.4	8.3	7.5	1.1	1.8	25.4	15.8	0.7	58.1	47.6	42.8	52.4
Saudi Arabia	2011	691	6.7	0.2	1.9	0.8	0.1	74.5	15.9	0.0	9.7	6.9	5.2	8.6
	2015	545	0.9	0.9	2.9	0.0	1.1	77.7	16.2	0.2	5.9	1.8	2.0	1.7
Singapore	2011	839	57.3	7.0	6.6	2.8	1.3	21.1	3.8	0.0	75.0	64.3	65.1	63.5
	2015	877	62.3	7.6	6.9	2.2	0.9	17.1	2.7	0.3	79.8	69.9	72.3	67.5
Slovenia	2011	625	37.2	8.1	8.2	3.9	1.9	27.2	13.5	0.0	59.3	45.3	42.4	47.9
	2015	606	29.8	9.5	8.9	2.2	1.8	35.2	12.4	0.1	52.2	39.3	37.6	41.2
South Africa	2011	1700	3.8	1.0	1.6	0.1	0.0	80.3	12.6	0.6	6.6	4.8	4.7	5.0
	2015	1755	4.2	0.0	4.5	0.1	0.0	79.4	11.3	0.4	8.9	4.2	5.0	3.4
Sweden	2011	804	47.4	3.5	7.7	3.3	2.4	22.6	12.8	0.2	64.3	50.9	55.3	46.8
	2015	580	43.1	5.3	9.3	2.7	1.5	26.6	10.7	0.7	62.0	48.5	47.5	49.3
Thailand	2011	876	8.3	5.0	4.6	0.6	1.5	53.8	25.5	0.7	20.1	13.3	15.2	11.1
	2015	926	11.1	3.2	6.4	1.8	1.7	58.0	17.4	0.4	24.2	14.3	16.5	11.8
Turkey	2011	989	12.1	2.8	7.6	0.9	2.4	52.4	21.7	0.1	25.8	14.9	13.7	15.9
	2015	865	12.0	9.0	4.8	0.4	2.0	56.8	15.0	0.1	28.1	21.0	15.3	26.1
United Arab Emirates	2011	2015	14.0	3.0	5.2	1.1	1.1	60.6	14.9	0.2	24.4	17.0	15.6	18.5
	2015	2555	17.3	2.6	6.4	1.9	0.7	57.2	13.8	0.2	28.9	19.9	19.2	20.5
United States	2011	1499	38.6	4.9	8.2	2.7	2.5	35.6	7.4	0.1	56.8	43.5	41.0	46.3
	2015	1438	42.1	5.1	6.3	2.9	1.2	37.3	4.2	0.9	57.6	47.2	45.7	48.7
International Avg (n=33)	2011	28457	24.3	4.9	5.5	1.7	1.5	42.3	19.3	0.4	38.0	29.2	28.1	30.3
	2015	31143	25.6	5.2	5.9	1.7	1.3	43.1	16.8	0.4	39.7	30.9	30.2	31.4
Ontario, Canada	2011	671	45.3	3.3	8.8	4.2	0.5	28.8	9.1	0.0	62.1	48.6	45.4	51.7
	2015	650	47.6	5.5	8.5	3.0	1.0	28.8	4.6	1.0	65.6	53.1	50.3	55.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_06B (M042302B): Number / Applying Type: CR 2 Points
Label: Pay after first year

COUNTRY	Year	N	20 %	21 %	10 %	11 %	12 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	51.7	5.9	4.3	3.6	1.7	21.5	10.6	0.6	67.3	57.6	59.9	55.1
	2015	569	52.0	11.8	7.2	2.8	1.8	14.8	8.4	1.1	75.7	63.8	60.7	67.5
Norway (8)	2011	568	41.0	3.9	10.7	3.9	1.2	27.9	11.4	0.0	60.7	44.9	44.1	45.6
	2015	686	36.1	4.3	8.6	2.7	1.1	35.8	11.2	0.2	52.8	40.3	40.0	40.7
Abu Dhabi, UAE	2011	638	13.0	2.7	5.6	0.9	0.9	63.9	13.0	0.0	23.1	15.7	13.1	18.1
	2015	685	13.2	2.5	5.5	1.3	0.6	64.3	12.5	0.0	23.2	15.7	18.4	13.0
Dubai, UAE	2011	787	23.1	4.9	5.6	0.8	1.3	49.4	14.9	0.1	35.7	28.0	24.8	30.8
	2015	869	29.8	4.0	6.4	3.0	0.8	44.2	11.6	0.3	43.9	33.8	30.1	37.8
Florida, US	2011	240	35.1	4.9	9.4	2.7	2.5	33.0	11.9	0.5	54.5	40.0	33.5	46.1
	2015	290	33.7	3.6	5.5	2.9	0.6	42.8	10.3	0.4	46.4	37.3	34.6	39.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_06C (M042302C): Number / Reasoning Type: CR 2 Points
Label: Which plan is less expensive

COUNTRY	Year	N	20 %	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	8.1	11.8	50.2	1.4	19.9	8.2	0.4	19.9	8.1	8.1	8.1
	2015	1489	9.3	10.1	52.1	0.1	20.0	7.9	0.4	19.5	9.3	11.2	7.5
Bahrain	2011	658	9.4	3.3	23.6	10.7	28.5	23.5	1.1	12.6	9.4	11.6	7.1
	2015	701	5.4	6.1	26.2	7.0	42.0	13.2	0.1	11.5	5.4	7.2	3.6
Botswana	2011	765	2.3	2.0	14.6	6.9	58.6	15.8	0.0	4.2	2.3	2.4	2.0
	2015	846	2.4	5.7	16.3	2.7	60.7	11.9	0.3	8.1	2.4	1.9	2.9
Chile	2011	823	3.8	3.8	26.9	0.6	31.8	32.1	1.0	7.6	3.8	3.5	4.1
	2015	697	5.5	6.1	23.0	4.0	27.0	34.1	0.3	11.6	5.5	6.4	4.6
Chinese Taipei	2011	718	28.7	10.0	42.2	2.8	12.7	3.6	0.0	38.7	28.7	31.6	25.8
	2015	814	9.7	7.3	61.5	0.9	17.8	2.8	0.0	17.0	9.7	12.5	6.9
England	2011	538	12.9	13.8	38.6	1.0	19.1	14.5	0.1	26.7	12.9	15.4	10.6
	2015	685	12.6	17.2	39.9	2.3	18.4	9.6	0.0	29.7	12.6	15.3	9.8
Georgia	2011	649	4.2	3.7	30.9	0.6	24.4	35.6	0.7	7.9	4.2	4.6	3.7
	2015	569	4.4	7.2	31.9	1.5	26.2	27.4	1.4	11.6	4.4	5.1	3.8
Hong Kong SAR	2011	576	22.1	12.1	40.8	2.5	15.2	6.7	0.4	34.3	22.1	23.5	20.7
	2015	598	15.7	11.5	50.8	0.9	18.9	2.2	0.0	27.2	15.7	16.6	14.8
Hungary	2011	741	12.4	16.0	40.1	2.4	18.8	9.8	0.6	28.3	12.4	14.1	10.8
	2015	692	10.7	16.5	45.3	1.5	18.9	7.2	0.0	27.1	10.7	14.0	7.6
Iran, Islamic Rep. of	2011	856	0.9	3.1	29.8	0.3	40.2	25.1	0.6	4.0	0.9	0.6	1.2
	2015	878	2.1	3.6	29.1	1.7	31.8	31.2	0.5	5.8	2.1	2.8	1.5
Israel	2011	689	9.6	11.4	43.4	1.4	17.7	15.5	1.0	21.0	9.6	10.0	9.1
	2015	782	11.5	11.0	42.8	1.3	18.9	13.6	0.9	22.5	11.5	14.4	8.9
Italy	2011	559	11.7	3.6	41.0	1.0	22.1	20.7	0.0	15.3	11.7	12.8	10.6
	2015	641	3.8	3.7	51.9	1.2	21.1	18.2	0.0	7.6	3.8	4.4	3.3
Japan	2011	625	37.5	11.3	30.2	2.7	14.3	4.0	0.0	48.9	37.5	41.2	34.1
	2015	678	23.6	12.1	45.2	0.9	13.1	4.7	0.3	35.7	23.6	26.9	20.2
Jordan	2011	1094	4.6	1.8	15.8	3.5	59.0	14.8	0.5	6.5	4.6	4.7	4.6
	2015	1128	1.5	1.6	25.6	2.8	49.2	19.2	0.1	3.1	1.5	1.7	1.2
Kazakhstan	2011	628	10.6	7.2	17.4	2.8	30.8	30.2	1.2	17.7	10.6	11.7	9.6
	2015	706	6.4	19.1	23.3	8.7	20.1	22.4	0.0	25.5	6.4	7.6	5.4
Korea, Rep. of	2011	740	47.2	7.6	25.8	3.4	13.1	2.9	0.0	54.8	47.2	51.6	42.5
	2015	761	19.0	9.4	47.9	1.7	18.3	3.6	0.2	28.3	19.0	19.4	18.6
Lebanon	2011	566	2.7	2.1	12.0	1.0	29.7	52.1	0.6	4.7	2.7	2.7	2.6
	2015	548	3.0	1.5	14.2	1.0	23.2	54.0	3.1	4.5	3.0	3.2	2.7
Lithuania	2011	685	6.0	13.6	51.8	0.5	20.6	7.4	0.1	19.6	6.0	7.2	4.8
	2015	617	4.9	17.9	47.6	0.2	20.6	8.8	0.0	22.8	4.9	5.6	4.2

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M01_06C (M042302C): Number / Reasoning Type: CR 2 Points
Label: Which plan is less expensive

COUNTRY	Year	N	20 %	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	10.1	6.1	20.2	3.3	40.3	18.9	1.1	16.2	10.1	11.7	8.5
	2015	1377	5.3	6.3	35.4	3.5	27.5	21.6	0.4	11.6	5.3	6.6	3.9
Morocco	2011	1140	1.4	0.7	14.1	0.9	46.7	35.2	1.1	2.1	1.4	1.6	1.2
	2015	1894	1.0	3.9	3.0	3.3	54.8	33.9	0.2	4.9	1.0	0.8	1.2
New Zealand	2011	753	10.5	12.5	45.3	1.0	19.5	10.6	0.7	23.0	10.5	10.8	10.2
	2015	1180	10.6	12.9	41.7	0.7	23.4	10.3	0.3	23.5	10.6	13.1	7.7
Oman	2011	1380	4.3	0.6	17.6	5.7	48.7	22.7	0.5	4.8	4.3	6.0	2.5
	2015	1268	10.2	4.8	17.5	15.6	40.1	11.4	0.3	15.0	10.2	11.9	8.6
Qatar	2011	634	7.9	4.1	20.3	5.3	39.5	21.9	1.0	11.9	7.9	8.3	7.4
	2015	764	8.8	6.1	22.0	5.1	40.5	16.7	0.8	15.0	8.8	11.3	6.2
Russian Federation	2011	703	15.3	19.4	36.3	2.5	11.9	14.3	0.3	34.7	15.3	14.5	16.0
	2015	683	6.2	14.5	46.8	1.6	14.0	16.2	0.8	20.6	6.2	6.5	5.9
Saudi Arabia	2011	691	7.8	3.8	21.6	7.5	45.5	13.8	0.0	11.6	7.8	9.0	6.7
	2015	545	0.2	1.7	28.5	1.4	56.7	11.5	0.2	1.8	0.2	0.0	0.4
Singapore	2011	839	27.7	18.9	34.4	1.3	13.9	3.5	0.3	46.6	27.7	32.1	23.6
	2015	877	27.2	21.4	35.8	2.1	10.7	2.6	0.3	48.6	27.2	34.3	20.5
Slovenia	2011	625	12.2	10.8	25.3	3.7	37.4	10.7	0.0	22.9	12.2	16.0	8.7
	2015	606	11.4	17.5	37.0	2.7	19.9	11.5	0.1	28.9	11.4	14.8	7.7
South Africa	2011	1700	4.6	2.7	16.3	3.3	58.8	13.4	0.8	7.4	4.6	4.8	4.5
	2015	1755	3.0	4.7	13.9	3.6	64.2	10.0	0.5	7.8	3.0	3.8	2.2
Sweden	2011	804	9.5	4.9	60.5	1.1	13.6	10.1	0.3	14.4	9.5	13.2	6.0
	2015	581	7.1	5.2	62.1	0.3	15.5	8.6	1.1	12.3	7.1	8.0	6.2
Thailand	2011	876	7.3	3.9	21.1	3.5	34.9	28.5	0.9	11.1	7.3	8.8	5.5
	2015	926	5.8	6.4	26.2	1.5	37.7	22.0	0.4	12.1	5.8	7.1	4.4
Turkey	2011	989	7.7	7.6	27.3	2.5	40.2	14.7	0.1	15.3	7.7	9.3	6.3
	2015	865	5.0	8.1	30.1	6.8	39.8	10.1	0.1	13.1	5.0	4.2	5.7
United Arab Emirates	2011	2015	8.8	5.7	29.6	20.3	21.5	13.9	0.2	14.5	8.8	9.0	8.5
	2015	2555	10.4	7.9	23.8	5.8	38.4	13.4	0.2	18.3	10.4	11.4	9.5
United States	2011	1499	14.4	10.3	45.0	1.7	22.9	5.5	0.1	24.7	14.4	17.2	11.1
	2015	1438	11.7	11.3	46.5	1.0	24.3	4.2	1.0	23.0	11.7	12.6	10.9
International Avg (n=33)	2011	28457	11.6	7.6	30.6	3.3	29.4	17.0	0.5	19.2	11.6	13.0	10.3
	2015	31144	8.3	9.1	34.7	2.9	29.5	15.0	0.4	17.5	8.3	9.8	6.9
Ontario, Canada	2011	671	18.0	11.5	41.5	1.9	17.6	9.3	0.2	29.4	18.0	20.7	15.4
	2015	650	19.5	17.5	36.6	2.6	17.1	5.6	1.0	37.0	19.5	22.4	16.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_06C (M042302C): Number / Reasoning Type: CR 2 Points
Label: Which plan is less expensive

COUNTRY	Year	N	20 %	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	15.4	14.4	37.1	4.5	17.5	10.3	0.8	29.8	15.4	20.6	9.7
	2015	569	13.3	11.4	46.7	1.2	18.3	8.0	1.1	24.7	13.3	13.7	12.7
Norway (8)	2011	568	7.1	14.3	54.0	0.7	15.4	8.3	0.2	21.4	7.1	10.4	4.5
	2015	686	10.7	14.1	49.7	0.4	14.7	10.1	0.3	24.8	10.7	14.4	6.9
Abu Dhabi, UAE	2011	638	10.6	5.5	29.7	23.5	18.7	11.9	0.0	16.1	10.6	9.9	11.3
	2015	685	7.3	6.7	24.8	4.8	44.1	12.3	0.0	14.1	7.3	9.7	4.8
Dubai, UAE	2011	787	10.7	8.5	31.9	9.5	24.8	14.5	0.1	19.2	10.7	12.3	9.3
	2015	869	17.8	12.3	22.5	7.9	28.0	11.2	0.3	30.1	17.8	19.1	16.4
Florida, US	2011	240	8.8	9.5	45.1	2.5	24.5	9.0	0.5	18.4	8.8	8.6	9.0
	2015	290	11.4	8.2	40.5	1.2	27.8	10.3	0.4	19.7	11.4	12.6	10.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_07 (M042100): Algebra / Knowing Type: MC Key: C
Label: Pair of numbers that satisfy eqn

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	64.7	5.8	21.6	64.7	5.4	2.2	0.4	66.9	62.6
	2015	1489	72.6	4.4	17.0	72.6	3.8	1.9	0.4	75.1	70.0
Bahrain	2011	658	38.8	8.8	40.0	38.8	6.9	4.4	1.2	38.3	39.3
	2015	701	65.7	7.7	20.8	65.7	4.8	0.9	0.1	70.1	61.4
Botswana	2011	766	37.2	11.7	38.0	37.2	10.0	3.0	0.1	38.8	35.4
	2015	846	39.4	7.6	37.5	39.4	11.0	4.0	0.4	41.0	37.6
Chile	2011	823	35.2	8.2	38.1	35.2	9.8	7.7	1.0	32.9	38.1
	2015	697	45.6	7.8	34.0	45.6	6.5	5.6	0.5	43.8	47.3
Chinese Taipei	2011	718	84.5	2.6	10.3	84.5	2.4	0.2	0.0	87.2	81.8
	2015	814	85.4	4.5	8.0	85.4	1.7	0.5	0.0	86.0	84.7
England	2011	538	64.9	4.2	23.9	64.9	2.2	4.4	0.2	69.2	61.1
	2015	685	62.9	4.0	25.0	62.9	4.2	3.8	0.1	66.7	59.0
Georgia	2011	649	55.3	6.6	27.4	55.3	6.9	3.2	0.7	58.5	51.8
	2015	569	53.5	9.1	28.9	53.5	4.3	2.8	1.4	52.3	54.7
Hong Kong SAR	2011	576	75.8	3.3	15.2	75.8	4.2	1.1	0.4	79.1	72.3
	2015	598	81.4	4.2	10.8	81.4	3.2	0.4	0.0	81.3	81.5
Hungary	2011	741	64.8	4.1	23.3	64.8	5.0	2.2	0.6	63.2	66.3
	2015	692	66.8	3.8	23.8	66.8	4.0	1.6	0.0	68.5	65.2
Iran, Islamic Rep. of	2011	857	42.2	13.0	26.1	42.2	13.3	4.7	0.6	44.7	40.2
	2015	878	54.3	8.8	24.5	54.3	7.2	4.5	0.6	56.5	52.4
Israel	2011	689	72.2	3.9	17.7	72.2	2.7	2.2	1.2	76.1	68.1
	2015	782	63.0	4.7	23.6	63.0	4.3	3.3	1.1	64.5	61.7
Italy	2011	559	59.8	5.7	22.7	59.8	5.1	6.8	0.0	59.5	60.1
	2015	642	62.9	4.2	21.7	62.9	6.0	5.3	0.0	65.9	60.0
Japan	2011	625	76.3	2.8	17.9	76.3	1.5	1.5	0.0	77.2	75.5
	2015	678	79.6	3.3	13.6	79.6	2.7	0.5	0.3	81.2	77.8
Jordan	2011	1094	58.3	10.2	24.5	58.3	5.2	1.3	0.5	62.0	54.7
	2015	1128	52.5	11.6	26.8	52.5	7.4	1.7	0.1	56.5	48.7
Kazakhstan	2011	629	56.3	5.8	27.8	56.3	5.4	3.5	1.2	55.2	57.4
	2015	706	70.9	4.9	18.3	70.9	4.1	1.8	0.0	70.0	71.8
Korea, Rep. of	2011	740	88.2	1.1	9.0	88.2	1.6	0.0	0.1	88.5	87.8
	2015	761	90.1	2.2	4.6	90.1	2.4	0.5	0.2	91.7	88.7
Lebanon	2011	562	46.2	7.0	33.6	46.2	6.5	6.1	0.6	43.8	49.1
	2015	545	45.7	4.8	29.9	45.7	6.8	9.4	3.3	44.2	47.7
Lithuania	2011	685	59.7	5.0	28.0	59.7	4.1	3.0	0.1	61.0	58.6
	2015	617	67.8	5.8	21.0	67.8	3.2	2.2	0.0	71.8	63.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_07 (M042100): Algebra / Knowing Type: MC Key: C
Label: Pair of numbers that satisfy eqn

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	44.9	8.5	35.2	44.9	8.3	1.9	1.2	48.8	40.9
	2015	1377	53.3	6.0	32.4	53.3	4.8	2.9	0.6	58.0	48.1
Morocco	2011	1139	27.1	8.3	42.1	27.1	13.6	7.6	1.2	27.2	27.0
	2015	1894	35.6	7.1	43.3	35.6	10.1	3.7	0.3	37.0	34.2
New Zealand	2011	753	60.1	6.2	24.2	60.1	4.6	4.3	0.7	54.7	65.1
	2015	1180	66.3	5.4	22.3	66.3	3.6	2.2	0.3	68.5	63.6
Oman	2011	1380	45.0	11.5	32.1	45.0	7.5	3.4	0.5	53.1	36.8
	2015	1286	50.4	12.1	28.1	50.4	6.4	2.6	0.3	60.5	40.7
Qatar	2011	634	50.2	9.2	29.2	50.2	7.4	3.0	1.0	49.8	50.6
	2015	764	53.9	9.3	24.6	53.9	8.0	3.4	0.8	53.6	54.2
Russian Federation	2011	703	77.4	3.4	14.0	77.4	2.6	2.2	0.4	78.7	76.2
	2015	683	75.7	4.6	14.6	75.7	1.8	2.3	0.9	76.3	75.0
Saudi Arabia	2011	688	52.3	9.9	29.9	52.3	6.6	1.2	0.0	54.2	50.6
	2015	545	44.5	13.4	29.0	44.5	11.1	1.8	0.2	43.6	45.5
Singapore	2011	839	85.5	2.8	8.8	85.5	1.9	0.8	0.3	88.9	82.3
	2015	877	87.0	1.8	9.5	87.0	1.1	0.3	0.3	89.1	85.0
Slovenia	2011	625	67.9	5.0	18.0	67.9	4.7	4.4	0.0	69.5	66.5
	2015	606	72.7	4.9	16.2	72.7	3.1	2.9	0.1	73.2	72.1
South Africa	2011	1700	30.9	8.6	50.8	30.9	6.9	2.1	0.8	31.2	30.6
	2015	1755	40.4	5.0	46.2	40.4	6.1	1.9	0.5	43.0	37.5
Sweden	2011	804	53.7	4.7	28.5	53.7	5.6	7.2	0.4	55.2	52.2
	2015	582	52.6	3.8	26.0	52.6	8.0	8.3	1.3	53.4	51.8
Thailand	2011	876	44.5	6.0	36.2	44.5	8.6	3.8	0.9	43.4	45.7
	2015	926	49.3	7.6	32.7	49.3	6.0	3.9	0.4	49.3	49.4
Turkey	2011	989	51.2	8.7	25.9	51.2	10.2	3.9	0.1	49.6	52.6
	2015	865	52.1	10.1	26.9	52.1	9.6	1.1	0.1	52.2	52.0
United Arab Emirates	2011	2015	61.4	6.4	23.6	61.4	5.3	2.9	0.3	65.6	57.2
	2015	2555	64.4	6.6	22.4	64.4	5.2	1.3	0.2	67.1	61.6
United States	2011	1499	74.3	6.5	12.5	74.3	5.0	1.5	0.2	74.0	74.5
	2015	1438	76.7	4.4	12.6	76.7	4.1	1.3	1.0	77.5	75.9
International Avg (n=33)	2011	28452	57.8	6.5	26.0	57.8	6.0	3.3	0.5	59.0	56.6
	2015	31161	61.7	6.2	23.5	61.7	5.4	2.7	0.5	63.3	60.0
Ontario, Canada	2011	671	73.4	3.3	17.0	73.4	3.6	2.3	0.4	75.6	71.2
	2015	649	74.4	3.8	13.3	74.4	3.8	3.4	1.3	77.2	71.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_07 (M042100): Algebra / Knowing Type: MC Key: C
Label: Pair of numbers that satisfy eqn

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	65.0	3.5	20.6	65.0	5.8	4.2	1.0	68.4	61.4
	2015	569	70.9	4.3	15.2	70.9	5.7	2.6	1.3	75.3	65.8
Norway (8)	2011	568	42.6	7.3	31.1	42.6	10.4	8.4	0.2	41.5	43.5
	2015	686	41.1	5.4	35.5	41.1	7.2	10.4	0.4	41.4	40.7
Abu Dhabi, UAE	2011	638	61.0	8.4	23.7	61.0	4.2	2.6	0.1	63.7	58.4
	2015	685	60.4	8.3	24.1	60.4	6.2	1.1	0.0	66.7	53.8
Dubai, UAE	2011	787	64.2	5.4	21.7	64.2	5.5	3.2	0.1	64.7	63.7
	2015	869	70.6	5.6	17.2	70.6	5.2	1.2	0.3	69.5	71.7
Florida, US	2011	240	73.0	6.4	11.4	73.0	8.7	0.0	0.5	78.0	68.3
	2015	290	70.3	5.5	17.8	70.3	5.2	0.9	0.4	72.9	68.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_08 (M042202): Algebra / Applying Type: MC Key: B
Label: Formula for K the cost of trip

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	59.5	4.6	59.5	7.8	26.3	1.4	0.4	59.3	59.7
	2015	1489	58.0	5.5	58.0	7.5	24.6	3.8	0.6	60.1	55.8
Bahrain	2011	658	44.0	11.9	44.0	6.9	32.6	3.2	1.4	52.2	35.5
	2015	701	49.1	12.0	49.1	8.7	28.5	1.2	0.4	52.0	46.3
Botswana	2011	766	33.2	6.5	33.2	8.6	48.9	2.6	0.2	34.0	32.4
	2015	846	32.5	8.0	32.5	7.6	48.8	2.3	0.8	33.0	31.9
Chile	2011	823	38.5	8.0	38.5	6.3	42.7	3.1	1.4	38.0	39.2
	2015	697	37.9	9.6	37.9	7.3	40.4	4.2	0.7	34.1	41.4
Chinese Taipei	2011	718	85.5	2.6	85.5	2.4	9.3	0.2	0.0	87.4	83.6
	2015	814	82.0	1.7	82.0	1.4	14.5	0.4	0.0	84.0	80.1
England	2011	538	55.0	4.4	55.0	6.9	29.2	4.3	0.2	55.6	54.5
	2015	685	58.6	4.0	58.6	7.9	26.0	3.2	0.2	61.8	55.4
Georgia	2011	649	55.2	6.5	55.2	7.4	27.0	3.1	0.7	61.9	48.0
	2015	569	49.7	6.2	49.7	8.5	32.2	1.5	1.8	52.0	47.4
Hong Kong SAR	2011	575	71.4	7.6	71.4	3.1	16.6	0.8	0.4	75.0	67.7
	2015	598	77.1	3.2	77.1	3.6	15.5	0.5	0.1	76.5	77.6
Hungary	2011	741	50.2	3.3	50.2	7.2	37.8	0.8	0.8	48.9	51.4
	2015	692	55.7	3.4	55.7	5.1	35.2	0.5	0.0	53.8	57.5
Iran, Islamic Rep. of	2011	857	39.5	6.2	39.5	9.2	41.0	3.1	1.1	40.1	38.9
	2015	878	38.1	5.9	38.1	8.8	42.8	3.3	1.1	37.7	38.5
Israel	2011	689	56.7	4.4	56.7	3.7	31.4	2.5	1.4	56.6	56.7
	2015	782	57.4	5.1	57.4	4.5	29.7	1.9	1.5	60.3	54.8
Italy	2011	559	51.4	3.7	51.4	4.3	36.6	3.5	0.5	53.0	49.9
	2015	642	57.0	3.2	57.0	4.7	32.6	2.4	0.0	57.5	56.6
Japan	2011	625	71.1	3.1	71.1	4.0	21.2	0.3	0.4	73.4	68.9
	2015	678	74.3	2.2	74.3	3.7	19.0	0.4	0.3	76.3	72.2
Jordan	2011	1094	40.8	13.2	40.8	8.3	35.1	2.2	0.5	41.7	39.9
	2015	1128	37.6	13.5	37.6	10.2	36.1	2.3	0.3	40.6	34.7
Kazakhstan	2011	629	54.8	6.0	54.8	3.2	32.7	2.1	1.2	53.4	56.0
	2015	706	62.4	5.6	62.4	6.5	23.4	1.5	0.6	62.8	62.0
Korea, Rep. of	2011	740	79.7	1.7	79.7	3.4	15.1	0.0	0.1	80.5	78.9
	2015	761	75.0	2.1	75.0	3.5	18.9	0.3	0.2	80.4	70.0
Lebanon	2011	564	42.0	12.4	42.0	10.0	29.5	5.4	0.6	46.0	37.3
	2015	547	35.5	10.6	35.5	9.0	33.0	8.5	3.3	38.9	31.0
Lithuania	2011	685	53.3	4.4	53.3	2.9	38.0	1.3	0.1	56.9	49.8
	2015	617	63.6	3.1	63.6	4.1	27.5	1.7	0.0	65.6	61.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_08 (M042202): Algebra / Applying Type: MC Key: B
Label: Formula for K the cost of trip

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	38.0	6.8	38.0	8.9	43.2	1.5	1.6	38.0	38.1
	2015	1377	49.9	5.0	49.9	6.3	36.0	1.6	1.1	53.0	46.5
Morocco	2011	1140	28.4	7.8	28.4	8.6	49.9	3.8	1.4	29.5	27.5
	2015	1894	26.7	12.8	26.7	10.5	46.9	2.7	0.4	26.2	27.2
New Zealand	2011	753	56.5	4.6	56.5	9.0	25.8	3.4	0.7	55.0	57.8
	2015	1180	61.5	5.2	61.5	8.7	22.7	1.6	0.3	64.9	57.5
Oman	2011	1380	34.8	16.9	34.8	11.8	32.9	3.0	0.6	39.6	29.9
	2015	1285	36.2	13.6	36.2	9.7	37.6	2.4	0.5	39.5	33.1
Qatar	2011	634	42.7	10.6	42.7	12.9	30.5	2.0	1.2	45.4	40.0
	2015	764	51.4	8.9	51.4	5.7	29.9	3.0	1.1	55.1	47.6
Russian Federation	2011	702	71.5	2.5	71.5	2.0	21.5	2.0	0.5	72.8	70.3
	2015	683	69.6	2.2	69.6	1.3	23.5	2.1	1.3	65.6	73.6
Saudi Arabia	2011	689	39.5	15.3	39.5	10.5	34.2	0.5	0.0	40.2	39.0
	2015	545	35.7	14.1	35.7	15.3	33.6	1.2	0.2	39.2	32.0
Singapore	2011	839	83.6	2.0	83.6	1.8	11.6	0.8	0.3	85.1	82.2
	2015	877	85.4	1.7	85.4	2.5	9.6	0.4	0.4	88.8	82.2
Slovenia	2011	625	51.5	5.7	51.5	6.1	34.0	2.6	0.1	49.7	53.1
	2015	606	58.5	3.7	58.5	5.3	31.5	0.9	0.1	59.6	57.3
South Africa	2011	1700	28.2	14.7	28.2	13.4	41.2	1.7	0.8	30.5	25.8
	2015	1755	32.3	11.3	32.3	8.0	46.7	1.1	0.5	33.2	31.4
Sweden	2011	804	45.5	7.7	45.5	9.1	32.9	3.8	0.9	48.5	42.8
	2015	582	50.1	5.8	50.1	10.0	28.3	4.3	1.5	53.4	46.7
Thailand	2011	876	36.1	5.7	36.1	6.9	46.2	4.0	1.1	36.8	35.3
	2015	926	41.0	6.6	41.0	9.4	39.5	3.0	0.5	45.6	36.1
Turkey	2011	989	46.2	10.8	46.2	7.8	33.2	1.7	0.3	46.9	45.5
	2015	865	42.9	11.8	42.9	8.5	36.0	0.7	0.1	43.1	42.8
United Arab Emirates	2011	2015	52.1	7.0	52.1	7.3	31.3	1.7	0.5	53.0	51.2
	2015	2555	53.1	10.4	53.1	7.5	27.3	1.4	0.3	55.5	50.6
United States	2011	1499	73.4	4.6	73.4	7.0	13.6	0.9	0.4	76.0	70.6
	2015	1438	74.1	4.6	74.1	4.7	14.2	1.1	1.3	77.2	71.0
International Avg (n=33)	2011	28454	51.8	7.1	51.8	6.9	31.3	2.2	0.7	53.4	50.2
	2015	31162	53.6	6.7	53.6	6.9	30.1	2.0	0.7	55.4	51.8
Ontario, Canada	2011	671	62.6	4.9	62.6	5.2	23.6	3.2	0.5	60.8	64.3
	2015	650	66.1	4.6	66.1	3.7	22.3	1.6	1.7	68.1	64.0

DIFF = Percent correct
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M01_08 (M042202): Algebra / Applying Type: MC Key: B
Label: Formula for K the cost of trip

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	66.8	1.9	66.8	3.4	24.3	2.5	1.1	69.4	63.9
	2015	569	72.1	0.8	72.1	2.0	23.2	0.5	1.4	72.6	71.5
Norway (8)	2011	568	37.8	4.8	37.8	13.3	37.0	6.8	0.3	39.0	36.8
	2015	686	40.4	7.8	40.4	10.5	33.3	7.6	0.4	42.0	38.8
Abu Dhabi, UAE	2011	638	51.6	6.6	51.6	8.1	31.9	1.3	0.5	47.3	55.6
	2015	685	44.9	14.1	44.9	9.4	30.1	1.2	0.2	48.8	40.9
Dubai, UAE	2011	787	56.0	6.4	56.0	7.5	28.4	1.5	0.1	56.6	55.3
	2015	869	66.8	5.9	66.8	3.9	22.3	0.7	0.3	68.5	64.9
Florida, US	2011	240	74.5	7.6	74.5	5.7	11.7	0.0	0.5	73.9	75.1
	2015	290	70.7	8.5	70.7	7.1	12.8	0.5	0.4	72.2	69.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_09 (M042240): Algebra / Applying Type: MC Key: D
Label: Value of x and y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	52.0	8.9	22.7	13.0	52.0	3.1	0.4	51.7	52.3
	2015	1489	57.7	7.7	21.8	8.3	57.7	4.0	0.6	56.4	59.0
Bahrain	2011	658	42.4	11.0	28.6	13.4	42.4	2.9	1.6	47.4	37.2
	2015	701	61.4	8.7	19.3	9.0	61.4	1.0	0.7	62.6	60.1
Botswana	2011	766	25.7	11.3	49.6	10.4	25.7	2.5	0.5	25.0	26.4
	2015	846	27.8	13.1	44.1	11.8	27.8	2.3	0.8	29.4	26.1
Chile	2011	823	26.2	9.4	45.2	12.1	26.2	5.6	1.5	27.8	24.2
	2015	697	28.8	14.4	34.1	15.5	28.8	6.2	1.1	26.6	30.9
Chinese Taipei	2011	718	81.5	7.4	7.5	3.2	81.5	0.4	0.0	85.0	78.1
	2015	814	83.8	6.1	5.8	4.0	83.8	0.4	0.0	86.7	80.9
England	2011	538	50.3	11.7	21.3	11.0	50.3	5.4	0.2	50.2	50.3
	2015	685	52.1	10.8	19.1	11.9	52.1	5.9	0.2	53.9	50.2
Georgia	2011	649	54.2	7.9	25.0	9.0	54.2	2.9	1.1	52.1	56.5
	2015	569	52.1	10.4	24.7	7.9	52.1	2.9	2.0	57.4	46.8
Hong Kong SAR	2011	576	77.1	8.9	6.3	6.1	77.1	0.9	0.8	79.1	75.0
	2015	598	79.3	9.5	5.2	4.8	79.3	0.9	0.3	80.8	77.9
Hungary	2011	741	51.3	10.3	22.5	13.1	51.3	1.9	0.8	55.0	47.8
	2015	692	57.2	9.6	20.9	9.6	57.2	2.7	0.0	57.2	57.2
Iran, Islamic Rep. of	2011	857	35.7	14.3	30.2	15.4	35.7	3.1	1.3	36.3	35.2
	2015	878	31.5	14.4	32.0	15.7	31.5	5.2	1.3	34.0	29.3
Israel	2011	689	61.7	7.8	18.2	7.0	61.7	3.6	1.7	63.9	59.3
	2015	782	61.2	10.6	14.8	7.6	61.2	4.3	1.6	63.8	58.8
Italy	2011	559	56.3	8.4	19.6	10.4	56.3	4.7	0.7	57.2	55.4
	2015	642	59.0	9.6	21.5	7.3	59.0	2.3	0.3	64.5	53.8
Japan	2011	625	66.0	7.7	17.2	7.7	66.0	1.0	0.4	68.0	64.2
	2015	678	70.8	8.6	13.5	5.9	70.8	0.8	0.3	73.5	68.0
Jordan	2011	1094	50.4	10.0	26.2	11.4	50.4	1.4	0.6	57.4	43.5
	2015	1128	38.8	12.5	35.3	10.6	38.8	2.3	0.5	44.9	33.1
Kazakhstan	2011	629	52.4	5.9	30.3	6.8	52.4	3.2	1.3	49.8	54.8
	2015	706	68.7	6.1	19.0	3.9	68.7	1.4	0.8	69.9	67.7
Korea, Rep. of	2011	740	87.3	5.4	4.0	3.2	87.3	0.0	0.1	88.0	86.5
	2015	761	86.1	6.4	2.9	4.1	86.1	0.2	0.2	88.4	84.0
Lebanon	2011	562	50.1	10.0	26.5	8.7	50.1	4.1	0.7	50.1	50.0
	2015	546	48.0	11.5	19.2	10.0	48.0	7.5	3.7	52.6	41.8
Lithuania	2011	685	60.5	7.9	24.3	5.2	60.5	1.5	0.6	67.0	54.4
	2015	617	70.6	5.7	18.3	4.4	70.6	0.9	0.0	72.2	69.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_09 (M042240): Algebra / Applying Type: MC Key: D
Label: Value of x and y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	39.0	12.1	35.4	10.0	39.0	1.6	1.9	44.0	33.9
	2015	1377	45.0	11.1	30.4	10.3	45.0	1.8	1.4	50.6	38.9
Morocco	2011	1140	26.8	11.7	40.7	13.9	26.8	5.3	1.7	29.1	24.7
	2015	1894	27.5	15.1	39.9	13.7	27.5	3.4	0.4	30.3	24.8
New Zealand	2011	753	47.1	10.7	25.3	11.6	47.1	4.6	0.7	47.8	46.5
	2015	1180	46.4	12.4	24.6	13.2	46.4	3.1	0.3	47.6	45.0
Oman	2011	1380	34.0	16.8	32.9	12.9	34.0	2.8	0.7	44.0	23.9
	2015	1285	45.3	11.1	27.4	13.0	45.3	2.7	0.5	56.4	34.7
Qatar	2011	634	40.2	16.4	28.0	12.4	40.2	1.4	1.6	43.2	37.1
	2015	764	46.1	11.1	27.7	10.5	46.1	3.1	1.4	48.4	43.7
Russian Federation	2011	702	78.2	4.6	11.6	3.2	78.2	1.5	0.9	79.2	77.3
	2015	683	76.6	5.7	10.1	5.3	76.6	0.8	1.5	77.5	75.6
Saudi Arabia	2011	690	44.1	9.0	32.0	14.3	44.1	0.7	0.0	51.5	37.0
	2015	545	35.1	16.5	31.3	15.5	35.1	1.3	0.2	34.2	36.1
Singapore	2011	839	78.8	7.0	9.0	4.2	78.8	0.6	0.4	82.7	75.2
	2015	877	79.2	8.0	8.1	3.7	79.2	0.5	0.4	85.6	73.2
Slovenia	2011	625	64.3	7.7	13.4	10.6	64.3	3.9	0.1	65.7	63.0
	2015	606	71.8	7.4	13.2	4.5	71.8	2.8	0.2	77.0	66.3
South Africa	2011	1700	15.2	12.3	55.9	13.6	15.2	2.1	0.9	15.8	14.6
	2015	1755	16.6	11.3	60.2	9.2	16.6	2.2	0.6	18.2	14.8
Sweden	2011	804	30.0	10.3	34.5	15.5	30.0	8.9	0.9	30.0	30.0
	2015	582	32.8	11.4	38.0	9.7	32.8	6.3	1.7	32.8	32.7
Thailand	2011	876	50.9	12.7	18.9	12.0	50.9	4.2	1.4	55.7	45.5
	2015	926	52.7	14.9	21.4	8.6	52.7	1.9	0.5	57.4	47.5
Turkey	2011	989	52.9	11.3	24.0	9.3	52.9	2.2	0.3	56.2	50.1
	2015	865	51.4	14.8	19.6	12.5	51.4	1.5	0.1	56.1	47.2
United Arab Emirates	2011	2015	51.4	8.4	27.0	10.4	51.4	2.3	0.5	55.2	47.5
	2015	2555	49.5	9.6	28.1	10.1	49.5	2.3	0.4	50.9	47.9
United States	2011	1499	63.7	9.3	17.5	7.8	63.7	1.2	0.5	65.4	61.7
	2015	1438	66.7	7.3	17.5	5.4	66.7	1.6	1.5	68.5	64.9
International Avg (n=33)	2011	28454	51.4	9.8	25.2	10.0	51.4	2.8	0.8	53.8	49.1
	2015	31161	53.9	10.4	23.3	9.0	53.9	2.6	0.8	56.6	51.2
Ontario, Canada	2011	671	59.1	9.2	19.0	7.5	59.1	4.6	0.6	60.8	57.5
	2015	649	60.9	8.6	18.5	7.4	60.9	2.9	1.8	65.7	56.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_09 (M042240): Algebra / Applying Type: MC Key: D
Label: Value of x and y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	57.8	10.7	17.5	7.4	57.8	5.4	1.1	59.8	55.6
	2015	563	61.5	7.8	18.5	8.2	61.5	2.5	1.5	60.0	63.2
Norway (8)	2011	568	34.5	7.7	32.3	16.3	34.5	8.8	0.3	38.3	31.5
	2015	686	32.1	11.2	32.3	14.7	32.1	9.2	0.6	35.3	28.9
Abu Dhabi, UAE	2011	638	50.4	7.2	27.9	12.4	50.4	1.5	0.6	54.0	47.1
	2015	685	41.3	12.0	32.0	12.7	41.3	1.7	0.2	42.1	40.6
Dubai, UAE	2011	787	55.8	7.7	24.4	9.2	55.8	2.8	0.1	57.0	54.7
	2015	869	64.1	7.1	19.1	7.7	64.1	1.5	0.5	65.9	62.2
Florida, US	2011	240	63.3	10.0	19.4	6.1	63.3	0.7	0.5	64.4	62.2
	2015	290	60.5	13.6	16.7	7.0	60.5	1.7	0.4	61.7	59.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_10 (M042093): Algebra / Applying Type: CR 1 Point
Label: Temperature at mountain top

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	16.8	53.9	28.8	0.6	16.8	14.8	18.7
	2015	1489	15.8	56.5	27.0	0.7	15.8	16.5	15.1
Bahrain	2011	658	7.9	59.1	31.4	1.6	7.9	9.6	6.1
	2015	701	5.7	72.8	20.8	0.7	5.7	5.9	5.6
Botswana	2011	766	0.8	84.3	14.3	0.6	0.8	1.0	0.5
	2015	846	1.9	85.2	12.0	0.8	1.9	2.1	1.8
Chile	2011	822	1.4	42.3	54.7	1.6	1.4	0.7	2.3
	2015	695	1.7	39.0	57.9	1.3	1.7	1.8	1.7
Chinese Taipei	2011	718	61.7	26.4	11.9	0.0	61.7	62.4	61.0
	2015	814	61.2	27.6	11.2	0.0	61.2	60.3	62.1
England	2011	538	12.9	55.2	31.7	0.2	12.9	15.3	10.7
	2015	685	14.4	48.8	36.6	0.2	14.4	14.1	14.6
Georgia	2011	649	8.6	26.3	63.9	1.2	8.6	7.7	9.7
	2015	569	6.8	38.0	53.2	2.0	6.8	6.0	7.6
Hong Kong SAR	2011	576	44.8	38.2	16.2	0.8	44.8	44.3	45.4
	2015	598	48.7	37.1	13.9	0.3	48.7	45.0	51.9
Hungary	2011	741	10.9	42.1	46.2	0.8	10.9	11.0	10.7
	2015	692	16.1	43.3	40.6	0.0	16.1	17.4	14.9
Iran, Islamic Rep. of	2011	856	2.8	55.6	40.4	1.3	2.8	2.6	2.9
	2015	878	4.7	42.0	52.0	1.3	4.7	3.5	5.8
Israel	2011	689	19.3	42.7	36.1	1.9	19.3	18.8	19.8
	2015	782	16.2	44.3	37.9	1.7	16.2	16.5	15.9
Italy	2011	559	11.5	31.2	56.5	0.7	11.5	10.7	12.3
	2015	642	7.7	37.4	54.6	0.3	7.7	5.9	9.3
Japan	2011	625	36.4	46.4	16.8	0.4	36.4	37.3	35.5
	2015	678	42.4	39.9	17.4	0.3	42.4	43.8	40.9
Jordan	2011	1094	5.7	75.7	17.9	0.6	5.7	8.8	2.7
	2015	1128	4.1	71.0	24.4	0.5	4.1	4.3	4.0
Kazakhstan	2011	629	23.6	45.3	29.8	1.3	23.6	23.1	24.1
	2015	706	38.9	41.6	18.6	0.8	38.9	39.5	38.4
Korea, Rep. of	2011	740	54.1	38.2	7.6	0.1	54.1	55.7	52.4
	2015	761	53.5	38.3	8.0	0.2	53.5	51.5	55.2
Lebanon	2011	565	7.3	50.6	41.2	1.0	7.3	4.2	10.9
	2015	548	7.1	45.5	43.5	3.8	7.1	7.4	6.7
Lithuania	2011	685	14.7	45.5	39.1	0.6	14.7	11.5	17.8
	2015	617	19.3	38.9	41.8	0.0	19.3	21.2	17.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_10 (M042093): Algebra / Applying Type: CR 1 Point
Label: Temperature at mountain top

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	4.9	66.7	26.5	1.9	4.9	4.8	4.9
	2015	1377	8.6	60.4	29.6	1.4	8.6	8.6	8.6
Morocco	2011	1140	2.2	55.2	40.9	1.7	2.2	2.8	1.5
	2015	1894	2.1	63.2	34.4	0.4	2.1	2.3	1.9
New Zealand	2011	753	9.8	57.2	32.3	0.7	9.8	7.4	12.0
	2015	1180	9.1	58.9	31.7	0.3	9.1	7.6	10.8
Oman	2011	1380	3.8	72.3	23.0	0.9	3.8	5.4	2.2
	2015	1285	7.4	77.2	14.8	0.5	7.4	11.1	3.9
Qatar	2011	634	5.8	67.1	25.4	1.7	5.8	5.1	6.5
	2015	764	10.8	63.0	24.7	1.5	10.8	10.8	10.9
Russian Federation	2011	703	37.2	26.6	35.1	1.0	37.2	36.5	37.9
	2015	683	39.6	23.9	35.0	1.5	39.6	35.4	43.8
Saudi Arabia	2011	691	6.1	78.4	15.4	0.0	6.1	5.1	7.1
	2015	545	5.2	78.2	16.4	0.2	5.2	3.8	6.7
Singapore	2011	839	50.4	39.0	10.1	0.5	50.4	52.4	48.5
	2015	876	57.0	33.0	9.7	0.4	57.0	63.2	51.0
Slovenia	2011	625	15.1	45.2	39.4	0.2	15.1	13.8	16.3
	2015	605	14.1	42.4	43.2	0.2	14.1	14.3	13.9
South Africa	2011	1700	2.4	85.9	10.7	1.0	2.4	2.6	2.2
	2015	1752	2.9	85.7	10.6	0.9	2.9	3.0	2.8
Sweden	2011	804	6.0	51.6	41.2	1.2	6.0	5.4	6.4
	2015	581	8.1	52.3	37.7	1.9	8.1	7.2	9.0
Thailand	2011	876	5.5	58.6	34.2	1.7	5.5	6.3	4.6
	2015	926	6.8	68.0	24.5	0.6	6.8	5.8	7.9
Turkey	2011	989	8.4	56.0	35.2	0.5	8.4	8.1	8.6
	2015	865	5.7	71.3	22.9	0.1	5.7	6.2	5.3
United Arab Emirates	2011	2015	11.5	64.4	23.5	0.5	11.5	11.7	11.4
	2015	2554	16.1	65.9	17.5	0.5	16.1	17.1	15.0
United States	2011	1499	17.7	67.4	14.3	0.5	17.7	17.2	18.3
	2015	1438	22.3	65.6	10.5	1.6	22.3	22.3	22.3
International Avg (n=33)	2011	28457	16.0	53.1	30.1	0.9	16.0	15.9	16.1
	2015	31154	17.6	53.2	28.3	0.8	17.6	17.6	17.7
Ontario, Canada	2011	671	12.0	54.6	32.4	1.0	12.0	12.8	11.3
	2015	650	16.1	58.6	23.1	2.3	16.1	16.9	15.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_10 (M042093): Algebra / Applying Type: CR 1 Point
Label: Temperature at mountain top

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	15.9	49.2	33.6	1.2	15.9	14.7	17.2
	2015	569	16.4	48.1	33.4	2.1	16.4	13.3	20.0
Norway (8)	2011	568	4.1	55.6	39.9	0.4	4.1	1.4	6.2
	2015	686	4.6	55.3	39.5	0.6	4.6	3.9	5.3
Abu Dhabi, UAE	2011	638	9.6	67.8	22.0	0.6	9.6	10.3	9.0
	2015	685	13.1	70.2	16.5	0.2	13.1	13.7	12.4
Dubai, UAE	2011	787	16.2	54.6	29.2	0.1	16.2	15.8	16.5
	2015	869	26.3	55.8	17.4	0.5	26.3	27.0	25.6
Florida, US	2011	240	23.3	62.6	13.6	0.5	23.3	25.4	21.3
	2015	290	17.5	65.0	16.9	0.6	17.5	21.4	14.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_11 (M042271): Geometry / Applying Type: MC Key: C
Label: How many cubes were left

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	69.1	3.6	9.2	69.1	16.4	1.2	0.6	69.8	68.4
	2015	1489	68.0	3.1	11.3	68.0	15.5	1.0	1.1	67.9	68.1
Bahrain	2011	658	40.3	8.8	12.3	40.3	34.3	2.3	2.0	46.9	33.4
	2015	701	55.8	5.4	13.9	55.8	23.4	0.9	0.7	58.5	53.0
Botswana	2011	766	16.3	8.9	7.1	16.3	63.7	3.2	0.8	14.8	18.0
	2015	846	18.4	8.8	6.5	18.4	61.8	2.9	1.6	15.3	21.7
Chile	2011	823	40.7	4.8	9.3	40.7	41.6	1.8	1.8	40.4	41.0
	2015	695	45.1	6.1	11.7	45.1	32.5	2.8	1.8	40.3	49.4
Chinese Taipei	2011	718	81.2	1.1	7.0	81.2	10.4	0.3	0.0	80.1	82.3
	2015	814	76.6	4.0	6.3	76.6	13.0	0.1	0.0	74.4	78.7
England	2011	538	64.7	4.0	13.3	64.7	15.8	1.7	0.5	66.7	62.9
	2015	685	64.5	4.6	11.9	64.5	16.2	2.4	0.4	65.0	63.9
Georgia	2011	649	21.7	15.4	23.7	21.7	30.4	7.2	1.6	22.7	20.6
	2015	569	31.3	16.0	22.8	31.3	22.8	4.9	2.2	27.8	34.9
Hong Kong SAR	2011	575	64.7	7.1	16.8	64.7	9.3	1.1	1.0	67.2	62.1
	2015	598	74.1	5.3	14.1	74.1	6.0	0.2	0.3	72.3	75.6
Hungary	2011	741	61.3	5.4	15.6	61.3	16.5	0.4	0.8	62.5	60.1
	2015	692	70.9	3.4	14.3	70.9	10.6	0.8	0.0	69.9	71.8
Iran, Islamic Rep. of	2011	857	24.0	12.2	16.6	24.0	42.9	2.7	1.7	21.8	25.9
	2015	878	36.5	11.5	14.9	36.5	31.8	3.7	1.7	36.8	36.2
Israel	2011	689	60.8	5.7	8.6	60.8	20.0	2.7	2.2	60.3	61.3
	2015	782	57.1	6.3	10.1	57.1	20.7	3.4	2.5	59.9	54.6
Italy	2011	559	63.2	4.7	8.5	63.2	20.7	1.9	1.0	63.5	62.9
	2015	642	63.0	1.7	7.8	63.0	25.3	1.8	0.4	61.6	64.4
Japan	2011	625	68.2	5.3	10.5	68.2	14.2	1.4	0.4	66.2	69.9
	2015	678	71.9	2.6	12.8	71.9	12.3	0.1	0.3	69.3	74.6
Jordan	2011	1094	28.0	11.1	8.4	28.0	50.5	1.4	0.6	29.7	26.2
	2015	1128	26.6	9.1	10.5	26.6	51.3	1.8	0.7	27.6	25.5
Kazakhstan	2011	629	41.4	10.3	14.0	41.4	30.5	2.6	1.3	39.9	42.8
	2015	706	54.5	5.3	13.3	54.5	24.9	1.1	0.8	51.5	57.3
Korea, Rep. of	2011	740	82.0	2.0	7.3	82.0	8.5	0.0	0.1	77.8	86.5
	2015	761	80.1	2.7	8.6	80.1	7.6	0.8	0.2	77.2	82.8
Lebanon	2011	566	23.9	16.7	9.2	23.9	44.0	4.6	1.6	22.2	25.9
	2015	547	29.7	10.5	11.3	29.7	38.5	5.9	4.1	29.5	30.1
Lithuania	2011	685	65.9	3.5	9.4	65.9	19.5	0.8	1.0	70.0	62.0
	2015	617	73.3	2.6	8.5	73.3	14.8	0.5	0.3	74.4	72.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_11 (M042271): Geometry / Applying Type: MC Key: C
Label: How many cubes were left

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	32.4	11.2	13.6	32.4	38.7	1.6	2.5	32.6	32.2
	2015	1377	41.0	10.2	14.6	41.0	30.4	1.9	2.0	41.2	40.8
Morocco	2011	1140	21.3	12.9	6.1	21.3	54.3	2.9	2.4	21.9	20.8
	2015	1894	21.8	12.6	14.2	21.8	49.5	1.6	0.4	22.1	21.6
New Zealand	2011	753	61.2	2.9	12.8	61.2	19.4	2.9	0.8	58.7	63.5
	2015	1180	60.9	4.3	14.7	60.9	18.1	1.7	0.5	65.4	55.5
Oman	2011	1380	30.0	10.6	9.8	30.0	46.3	2.2	1.1	33.8	26.2
	2015	1287	36.2	7.9	12.2	36.2	41.7	1.3	0.7	39.0	33.5
Qatar	2011	634	33.8	8.1	12.9	33.8	41.2	1.7	2.3	37.8	29.7
	2015	764	38.3	8.9	14.3	38.3	33.8	2.8	1.8	43.2	33.2
Russian Federation	2011	703	59.9	6.7	12.3	59.9	17.3	2.5	1.3	57.3	62.3
	2015	683	61.5	5.3	12.4	61.5	15.3	3.8	1.7	59.7	63.3
Saudi Arabia	2011	690	36.0	8.2	6.7	36.0	48.6	0.6	0.0	38.0	34.0
	2015	545	27.6	12.2	13.6	27.6	46.0	0.3	0.2	30.1	25.0
Singapore	2011	839	73.8	2.3	8.8	73.8	13.8	0.7	0.5	75.8	72.0
	2015	876	76.8	1.9	7.3	76.8	12.9	0.5	0.5	76.4	77.2
Slovenia	2011	625	51.8	10.4	16.6	51.8	16.0	4.9	0.3	54.5	49.3
	2015	605	59.0	10.2	12.8	59.0	16.4	1.4	0.2	56.4	61.8
South Africa	2011	1700	12.7	22.6	10.7	12.7	50.5	2.2	1.2	11.6	13.9
	2015	1752	18.9	14.6	9.7	18.9	53.6	1.9	1.2	17.6	20.3
Sweden	2011	804	59.7	4.8	17.5	59.7	13.6	2.8	1.6	62.3	57.2
	2015	582	63.0	3.3	14.5	63.0	14.0	3.2	2.0	61.0	65.0
Thailand	2011	876	22.9	16.0	21.0	22.9	34.1	4.0	2.1	24.8	20.7
	2015	925	25.7	16.0	19.7	25.7	35.4	2.6	0.7	25.7	25.7
Turkey	2011	989	41.3	8.2	16.0	41.3	30.6	3.3	0.6	40.7	41.9
	2015	865	41.7	10.0	18.9	41.7	28.0	1.3	0.1	40.6	42.6
United Arab Emirates	2011	2015	38.8	7.5	8.6	38.8	42.1	2.4	0.7	38.6	39.0
	2015	2555	41.6	7.7	11.3	41.6	37.0	1.7	0.8	43.4	39.7
United States	2011	1499	59.2	5.4	11.8	59.2	22.1	0.8	0.6	59.3	59.1
	2015	1438	61.1	4.4	10.6	61.1	20.9	1.1	1.9	62.1	60.1
International Avg (n=33)	2011	28458	47.0	8.1	11.9	47.0	29.6	2.2	1.1	47.6	46.5
	2015	31156	50.7	7.2	12.5	50.7	26.7	1.9	1.0	50.4	50.9
Ontario, Canada	2011	671	67.5	3.1	9.7	67.5	16.3	1.8	1.5	70.2	65.0
	2015	650	65.6	4.4	8.9	65.6	16.5	2.1	2.5	67.1	64.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_11 (M042271): Geometry / Applying Type: MC Key: C
Label: How many cubes were left

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	80.2	1.2	4.3	80.2	10.8	1.9	1.6	82.3	77.8
	2015	569	77.4	1.7	5.8	77.4	11.5	1.2	2.4	75.4	79.8
Norway (8)	2011	568	55.5	7.1	18.5	55.5	16.5	1.7	0.6	54.1	56.6
	2015	686	58.9	7.4	15.1	58.9	14.8	3.0	1.0	56.8	60.9
Abu Dhabi, UAE	2011	638	38.7	7.7	7.5	38.7	43.5	2.1	0.6	37.1	40.1
	2015	685	36.7	9.4	11.2	36.7	39.6	2.3	0.8	41.4	31.8
Dubai, UAE	2011	787	44.9	7.3	9.6	44.9	35.2	2.3	0.7	48.5	41.7
	2015	869	51.7	4.6	10.3	51.7	31.2	1.7	0.5	51.2	52.4
Florida, US	2011	240	59.8	4.5	9.5	59.8	25.0	0.7	0.5	57.4	62.1
	2015	290	52.2	4.5	13.9	52.2	27.8	0.6	1.0	53.9	50.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_12 (M042268): Geometry / Reasoning Type: MC Key: B
Label: Area of the triangle ABC

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	28.4	24.2	28.4	27.4	16.8	2.6	0.6	23.2	33.5
	2015	1489	25.7	25.6	25.7	26.7	16.9	4.0	1.1	21.9	29.7
Bahrain	2011	658	18.8	39.4	18.8	15.9	19.7	4.2	2.1	15.1	22.6
	2015	701	37.4	30.8	37.4	16.3	12.9	2.0	0.7	28.4	46.2
Botswana	2011	766	9.8	53.7	9.8	9.9	22.9	2.8	0.9	8.6	11.1
	2015	846	10.2	52.9	10.2	10.2	21.4	3.2	2.1	8.0	12.6
Chile	2011	823	20.0	40.4	20.0	14.2	18.5	5.0	1.8	20.8	19.0
	2015	695	20.4	35.6	20.4	16.6	17.8	7.8	1.8	16.1	24.3
Chinese Taipei	2011	718	79.8	5.9	79.8	8.3	5.7	0.4	0.0	82.8	76.8
	2015	814	77.7	7.7	77.7	8.2	5.9	0.5	0.0	77.0	78.3
England	2011	538	27.5	18.5	27.5	29.6	19.5	4.4	0.5	24.5	30.1
	2015	685	24.0	19.9	24.0	26.6	24.4	4.7	0.4	24.8	23.2
Georgia	2011	649	24.0	40.3	24.0	10.3	18.8	5.0	1.6	25.5	22.4
	2015	569	24.2	37.1	24.2	15.2	16.2	5.2	2.2	20.0	28.3
Hong Kong SAR	2011	576	63.6	8.6	63.6	15.4	11.4	0.0	0.9	65.4	61.6
	2015	598	68.0	8.0	68.0	14.9	8.2	0.6	0.3	68.9	67.3
Hungary	2011	741	29.9	25.9	29.9	20.5	17.2	5.8	0.8	26.9	32.8
	2015	692	36.1	26.5	36.1	20.2	12.9	4.3	0.0	35.5	36.7
Iran, Islamic Rep. of	2011	857	22.6	31.8	22.6	18.7	21.2	3.5	2.2	22.5	22.7
	2015	878	23.4	33.4	23.4	15.9	19.3	6.0	2.0	22.3	24.5
Israel	2011	689	37.6	22.2	37.6	20.3	13.5	4.0	2.4	38.7	36.5
	2015	782	33.4	24.4	33.4	18.9	15.7	5.1	2.6	32.3	34.4
Italy	2011	559	46.8	23.2	46.8	9.9	15.3	3.9	1.0	45.3	48.2
	2015	642	47.0	21.8	47.0	13.2	14.9	2.7	0.4	48.6	45.5
Japan	2011	625	43.4	17.5	43.4	25.4	11.9	1.2	0.6	45.4	41.7
	2015	678	45.1	17.4	45.1	25.4	10.9	0.9	0.3	46.6	43.5
Jordan	2011	1094	18.3	44.3	18.3	14.3	19.5	2.9	0.7	17.8	18.9
	2015	1128	20.1	49.2	20.1	13.1	14.2	2.5	0.9	17.5	22.6
Kazakhstan	2011	629	30.6	33.2	30.6	12.0	19.0	3.9	1.3	31.4	29.8
	2015	706	45.9	25.7	45.9	9.1	15.5	2.9	0.8	43.6	48.2
Korea, Rep. of	2011	740	57.4	5.7	57.4	23.1	13.3	0.4	0.1	57.4	57.5
	2015	761	53.4	10.7	53.4	25.4	8.2	1.8	0.4	50.8	55.6
Lebanon	2011	566	18.1	49.5	18.1	11.5	13.8	5.4	1.7	16.6	19.8
	2015	547	23.3	39.1	23.3	11.1	16.1	6.3	4.1	23.4	23.2
Lithuania	2011	685	28.5	23.2	28.5	27.1	15.2	5.1	1.0	28.3	28.7
	2015	617	34.4	18.0	34.4	25.7	17.5	4.1	0.3	32.8	35.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_12 (M042268): Geometry / Reasoning Type: MC Key: B
Label: Area of the triangle ABC

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	32.3	27.9	32.3	20.0	15.2	2.1	2.5	33.4	31.1
	2015	1377	31.8	21.3	31.8	24.7	17.1	3.2	2.0	32.7	30.9
Morocco	2011	1139	13.4	51.2	13.4	10.7	18.5	3.7	2.5	12.9	13.9
	2015	1894	14.9	48.8	14.9	9.1	23.8	3.0	0.5	13.6	16.0
New Zealand	2011	753	22.3	28.3	22.3	27.2	17.2	4.1	0.8	19.4	25.1
	2015	1180	21.9	28.6	21.9	27.2	19.1	2.9	0.5	19.2	25.1
Oman	2011	1380	18.9	44.9	18.9	15.2	16.9	2.9	1.2	17.2	20.6
	2015	1287	21.3	42.7	21.3	15.6	17.5	2.3	0.7	19.0	23.4
Qatar	2011	634	19.5	40.9	19.5	17.2	18.4	1.6	2.5	16.8	22.1
	2015	764	20.3	40.2	20.3	14.8	18.8	3.9	2.0	16.9	23.8
Russian Federation	2011	703	38.7	16.8	38.7	13.8	21.2	8.3	1.3	40.0	37.5
	2015	683	44.5	19.1	44.5	13.8	14.6	6.3	1.7	42.2	46.8
Saudi Arabia	2011	689	17.9	43.5	17.9	16.4	21.5	0.8	0.0	13.7	21.9
	2015	544	18.2	49.2	18.2	17.0	14.2	1.2	0.2	13.5	23.2
Singapore	2011	839	67.5	12.3	67.5	12.4	6.4	1.0	0.5	70.4	64.8
	2015	876	72.1	9.6	72.1	10.5	6.5	0.8	0.5	75.0	69.3
Slovenia	2011	625	23.7	19.1	23.7	25.2	23.6	8.1	0.3	21.3	25.8
	2015	605	22.4	20.2	22.4	28.8	21.6	6.9	0.2	22.2	22.7
South Africa	2011	1700	12.7	63.9	12.7	7.4	12.3	2.1	1.6	11.8	13.6
	2015	1752	11.4	64.8	11.4	7.3	13.0	2.0	1.5	11.2	11.6
Sweden	2011	804	26.9	23.1	26.9	21.8	21.0	5.5	1.6	26.0	27.7
	2015	582	24.2	20.3	24.2	27.1	21.0	5.2	2.2	22.9	25.4
Thailand	2011	876	20.9	38.3	20.9	18.3	16.3	4.1	2.1	19.0	23.1
	2015	926	29.2	36.5	29.2	16.4	15.0	2.3	0.7	29.3	29.0
Turkey	2011	989	34.4	27.7	34.4	16.2	17.7	3.4	0.6	34.6	34.3
	2015	865	38.2	28.9	38.2	15.5	16.4	0.8	0.2	40.3	36.3
United Arab Emirates	2011	2015	20.4	44.5	20.4	13.0	18.2	3.2	0.8	17.8	23.1
	2015	2555	24.3	40.5	24.3	16.0	15.8	2.7	0.8	21.8	26.8
United States	2011	1499	24.6	27.7	24.6	20.3	24.3	2.5	0.7	23.5	25.9
	2015	1438	23.1	29.3	23.1	21.1	22.2	2.4	2.0	21.3	24.9
International Avg (n=33)	2011	28457	30.3	30.8	30.3	17.2	17.0	3.4	1.2	29.5	31.0
	2015	31156	32.3	29.8	32.3	17.5	15.9	3.3	1.1	30.9	33.8
Ontario, Canada	2011	671	26.2	25.7	26.2	19.1	23.0	4.2	1.8	24.6	27.8
	2015	649	31.7	25.4	31.7	20.3	16.6	2.8	3.1	30.8	32.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_12 (M042268): Geometry / Reasoning Type: MC Key: B
Label: Area of the triangle ABC

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	27.7	19.9	27.7	29.8	16.0	4.7	1.8	25.0	30.7
	2015	569	27.0	24.5	27.0	24.3	16.7	5.1	2.4	24.5	29.9
Norway (8)	2011	568	19.6	23.4	19.6	28.9	24.9	2.6	0.6	16.2	22.4
	2015	686	24.9	24.9	24.9	26.0	19.5	3.7	1.0	21.9	27.9
Abu Dhabi, UAE	2011	638	20.5	43.2	20.5	13.8	17.6	4.2	0.6	16.4	24.4
	2015	685	19.4	45.8	19.4	15.0	16.5	2.5	0.8	16.8	22.0
Dubai, UAE	2011	787	23.6	39.4	23.6	14.9	18.2	3.2	0.7	20.8	26.2
	2015	869	34.6	31.6	34.6	17.1	12.7	3.5	0.6	29.1	40.5
Florida, US	2011	240	29.6	23.0	29.6	25.9	19.9	1.2	0.5	32.1	27.3
	2015	290	27.4	25.0	27.4	24.3	19.3	3.0	1.0	25.2	29.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M01_13 (M042159): Data and Chance / Applying Type: CR 1 Point
Label: Complete the bar chart

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	57.0	24.6	15.2	2.4	0.7	57.0	60.9	53.3
	2015	1489	73.9	13.0	8.2	3.6	1.3	73.9	73.8	74.1
Bahrain	2011	658	64.0	12.2	7.0	14.3	2.6	64.0	78.3	49.1
	2015	701	67.0	12.8	10.8	8.6	0.8	67.0	76.4	57.7
Botswana	2011	765	50.7	18.2	23.7	6.1	1.2	50.7	50.1	51.4
	2015	846	43.6	23.3	23.4	6.3	3.3	43.6	42.5	44.8
Chile	2011	823	49.2	20.4	18.3	9.4	2.7	49.2	48.1	50.5
	2015	697	56.4	15.5	9.6	15.2	3.2	56.4	57.0	55.9
Chinese Taipei	2011	718	90.9	5.5	1.2	2.3	0.0	90.9	93.3	88.6
	2015	814	75.7	16.3	5.7	2.2	0.1	75.7	80.2	71.2
England	2011	538	61.2	20.5	13.6	3.6	1.1	61.2	67.5	55.4
	2015	685	57.7	27.0	11.6	3.0	0.6	57.7	59.1	56.3
Georgia	2011	644	47.9	10.4	13.4	26.2	2.1	47.9	53.1	42.3
	2015	569	51.8	12.9	11.5	21.0	2.9	51.8	52.1	51.4
Hong Kong SAR	2011	576	79.3	9.6	6.6	3.4	0.9	79.3	83.3	75.1
	2015	598	84.5	8.0	5.6	1.5	0.3	84.5	88.1	81.3
Hungary	2011	741	76.4	9.3	8.9	4.3	1.1	76.4	78.1	74.7
	2015	692	69.9	15.0	8.5	6.2	0.3	69.9	67.7	71.9
Iran, Islamic Rep. of	2011	856	47.2	15.9	21.0	13.4	2.5	47.2	48.1	46.4
	2015	878	56.2	9.1	19.1	12.4	3.2	56.2	66.0	47.4
Israel	2011	689	70.7	8.0	5.2	12.6	3.5	70.7	77.1	64.1
	2015	782	64.1	8.3	12.4	11.2	4.1	64.1	65.3	63.0
Italy	2011	559	62.7	15.6	9.4	10.6	1.8	62.7	62.4	62.9
	2015	642	60.4	22.7	9.4	6.6	0.8	60.4	60.4	60.5
Japan	2011	625	84.8	8.2	4.6	1.6	0.7	84.8	85.1	84.6
	2015	678	78.8	12.7	5.4	2.6	0.5	78.8	80.1	77.4
Jordan	2011	1094	56.7	13.6	18.7	9.9	1.1	56.7	66.8	46.9
	2015	1128	41.6	9.6	34.9	12.2	1.6	41.6	45.5	37.8
Kazakhstan	2011	629	65.7	5.8	10.3	16.7	1.5	65.7	73.5	58.5
	2015	706	64.2	9.0	12.3	13.2	1.2	64.2	63.3	65.1
Korea, Rep. of	2011	740	91.4	5.3	2.6	0.6	0.1	91.4	92.4	90.4
	2015	761	71.1	23.1	4.5	0.8	0.4	71.1	72.8	69.7
Lebanon	2011	566	70.8	9.5	8.8	8.7	2.2	70.8	74.5	66.3
	2015	548	68.9	7.2	6.4	12.9	4.6	68.9	68.7	69.1
Lithuania	2011	685	62.1	24.0	10.1	2.1	1.7	62.1	67.6	57.0
	2015	617	81.0	10.0	6.8	1.7	0.4	81.0	82.3	79.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_13 (M042159): Data and Chance / Applying Type: CR 1 Point
Label: Complete the bar chart

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	62.3	9.2	16.9	7.9	3.6	62.3	59.5	65.2
	2015	1377	63.0	19.8	5.1	9.2	2.9	63.0	64.8	61.0
Morocco	2011	1139	57.1	8.9	14.2	16.0	3.8	57.1	57.8	56.5
	2015	1894	61.4	4.4	19.8	13.4	1.0	61.4	59.9	62.7
New Zealand	2011	753	52.3	32.7	9.7	4.1	1.2	52.3	50.5	53.9
	2015	1180	50.8	28.5	15.7	4.1	0.9	50.8	52.4	48.8
Oman	2011	1380	46.4	12.4	23.6	15.5	2.1	46.4	55.4	37.3
	2015	1286	61.2	12.6	16.3	9.0	0.9	61.2	68.3	54.4
Qatar	2011	634	55.6	10.0	22.4	9.5	2.6	55.6	61.4	49.5
	2015	764	61.9	12.1	14.6	8.6	2.7	61.9	67.7	55.8
Russian Federation	2011	703	74.1	8.8	6.0	8.8	2.3	74.1	72.9	75.2
	2015	683	69.9	11.8	6.6	9.4	2.3	69.9	72.6	67.2
Saudi Arabia	2011	691	64.3	11.5	18.1	6.0	0.1	64.3	64.7	63.9
	2015	545	49.1	16.8	26.5	7.1	0.4	49.1	50.0	48.2
Singapore	2011	839	63.7	22.5	11.4	1.8	0.5	63.7	66.2	61.4
	2015	876	82.9	12.7	2.5	1.1	0.9	82.9	81.6	84.1
Slovenia	2011	625	72.1	15.0	9.2	3.1	0.6	72.1	72.9	71.5
	2015	604	81.2	9.2	5.4	3.8	0.4	81.2	83.0	79.2
South Africa	2011	1700	40.8	10.0	32.4	14.6	2.2	40.8	41.7	39.8
	2015	1752	52.3	17.2	21.5	7.2	1.8	52.3	52.9	51.7
Sweden	2011	804	65.5	14.7	7.2	9.5	3.0	65.5	69.6	61.8
	2015	579	56.8	20.2	13.0	6.5	3.4	56.8	56.5	57.1
Thailand	2011	876	61.6	5.0	14.8	15.2	3.3	61.6	66.3	56.3
	2015	926	63.9	5.8	16.8	12.0	1.4	63.9	68.6	58.9
Turkey	2011	989	60.1	7.3	20.9	10.8	0.9	60.1	62.7	57.8
	2015	865	62.0	9.1	21.7	6.9	0.3	62.0	63.6	60.6
United Arab Emirates	2011	2015	55.6	22.7	13.0	7.5	1.1	55.6	61.0	50.2
	2015	2555	66.5	12.8	12.2	7.0	1.4	66.5	72.1	60.8
United States	2011	1499	35.5	31.6	27.9	4.0	0.9	35.5	35.8	35.2
	2015	1438	64.4	18.1	12.6	2.6	2.4	64.4	62.9	65.9
International Avg (n=33)	2011	28452	62.3	13.9	13.5	8.6	1.7	62.3	65.4	59.2
	2015	31155	64.1	14.1	12.6	7.6	1.6	64.1	66.0	62.2
Ontario, Canada	2011	671	76.9	9.1	6.6	4.8	2.6	76.9	81.1	72.8
	2015	650	58.8	20.7	13.8	3.0	3.7	58.8	58.9	58.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_13 (M042159): Data and Chance / Applying Type: CR 1 Point
Label: Complete the bar chart

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	72.7	11.0	9.6	3.8	2.8	72.7	74.9	70.3
	2015	569	55.5	21.4	14.9	4.7	3.5	55.5	59.0	51.3
Norway (8)	2011	568	48.8	29.5	16.0	4.7	1.0	48.8	56.9	42.3
	2015	686	71.1	14.8	7.6	5.4	1.1	71.1	76.5	65.7
Abu Dhabi, UAE	2011	638	52.8	23.4	13.4	8.9	1.4	52.8	58.8	47.2
	2015	685	60.4	13.5	17.2	7.8	1.0	60.4	68.1	52.4
Dubai, UAE	2011	787	54.9	21.3	14.1	8.8	0.9	54.9	60.5	49.8
	2015	869	74.9	11.8	7.2	4.8	1.4	74.9	77.0	72.6
Florida, US	2011	240	36.3	28.5	28.9	5.4	0.9	36.3	37.5	35.2
	2015	290	61.8	16.3	14.2	5.5	2.2	61.8	67.4	57.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_14 (M042164): Data and Chance / Reasoning Type: CR 1 Point
Label: Agree/disagree with the salesman

COUNTRY	Year	N	10 %	11 %	12 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	5.2	26.8	10.1	10.8	36.5	9.4	1.2	42.1	42.9	41.3
	2015	1489	4.1	30.7	12.4	5.3	39.5	5.2	2.7	47.2	45.7	48.7
Bahrain	2011	658	1.3	4.8	9.0	11.0	47.0	16.9	10.2	15.0	15.8	14.1
	2015	701	1.0	14.4	5.2	12.0	51.4	10.6	5.4	20.7	21.7	19.7
Botswana	2011	765	0.2	4.9	3.0	5.9	74.3	8.4	3.2	8.1	9.9	6.2
	2015	846	0.2	7.8	2.8	4.1	71.1	7.9	6.0	10.8	12.4	9.1
Chile	2011	823	0.4	8.0	4.1	26.4	40.9	12.7	7.5	12.5	9.9	15.8
	2015	697	0.6	11.3	6.5	18.0	37.1	16.5	10.1	18.4	15.8	20.7
Chinese Taipei	2011	718	1.7	58.9	8.8	5.4	19.7	4.4	1.2	69.4	73.2	65.6
	2015	814	2.4	53.8	7.5	2.2	29.0	4.2	1.0	63.6	66.4	60.9
England	2011	538	3.5	39.0	8.5	6.7	33.6	6.3	2.5	51.0	52.1	50.0
	2015	685	2.6	41.0	9.9	7.7	29.0	7.8	1.8	53.5	51.3	55.8
Georgia	2011	649	0.0	14.5	5.7	1.8	43.3	18.2	16.5	20.2	20.4	20.0
	2015	569	1.5	14.9	11.7	3.1	43.1	15.1	10.6	28.1	29.9	26.3
Hong Kong SAR	2011	576	14.9	42.2	11.4	3.1	16.3	9.3	2.8	68.5	71.1	65.7
	2015	598	8.8	53.4	11.2	1.2	20.6	3.7	1.0	73.5	71.9	74.9
Hungary	2011	741	1.9	24.1	15.8	12.7	32.6	11.1	2.0	41.8	43.1	40.5
	2015	692	2.3	33.7	12.5	9.3	31.6	8.4	2.1	48.5	46.3	50.5
Iran, Islamic Rep. of	2011	856	0.6	8.6	2.2	10.9	55.6	14.4	7.8	11.4	10.8	11.9
	2015	878	1.1	11.5	4.4	7.6	52.7	14.6	8.1	17.0	15.9	18.0
Israel	2011	689	1.3	39.6	9.8	5.3	24.6	10.2	9.3	50.7	53.5	47.7
	2015	782	1.6	36.1	15.0	4.8	24.1	10.0	8.3	52.8	53.3	52.3
Italy	2011	559	0.9	20.8	9.5	8.8	38.0	15.5	6.5	31.1	27.9	34.1
	2015	642	0.3	23.5	5.9	4.0	50.5	13.2	2.7	29.7	28.2	31.0
Japan	2011	625	6.1	27.1	21.5	7.4	28.1	8.1	1.7	54.7	54.5	54.8
	2015	678	6.1	37.1	14.7	10.1	22.3	8.4	1.4	57.8	59.4	56.2
Jordan	2011	1094	1.8	4.7	1.6	8.1	65.4	13.6	4.7	8.2	10.2	6.2
	2015	1128	2.3	4.6	1.9	2.3	64.6	17.8	6.4	8.9	9.1	8.7
Kazakhstan	2011	629	10.8	5.4	7.2	8.7	37.5	23.4	7.0	23.4	23.6	23.2
	2015	706	24.2	8.3	6.7	9.8	34.1	10.3	6.6	39.2	37.9	40.4
Korea, Rep. of	2011	740	3.2	42.2	22.1	2.6	25.7	3.7	0.4	67.5	69.3	65.5
	2015	761	2.2	52.9	15.8	7.0	17.5	3.7	0.8	71.0	72.0	70.1
Lebanon	2011	566	1.2	14.4	3.1	5.8	36.6	31.6	7.3	18.6	18.8	18.5
	2015	548	0.6	8.2	0.6	4.9	37.0	38.2	10.5	9.4	11.9	6.1
Lithuania	2011	685	0.9	20.6	13.9	11.3	41.6	9.3	2.4	35.4	37.0	33.9
	2015	617	1.9	27.4	18.2	6.1	38.7	6.5	1.2	47.5	44.5	50.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_14 (M042164): Data and Chance / Reasoning Type: CR 1 Point
Label: Agree/disagree with the salesman

COUNTRY	Year	N	10 %	11 %	12 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	4.1	8.8	3.4	10.9	45.4	20.5	6.9	16.2	16.2	16.1
	2015	1377	0.0	13.7	3.6	5.8	50.5	19.4	7.0	17.3	19.5	14.9
Morocco	2011	1140	0.8	2.3	0.4	0.7	44.8	40.7	10.4	3.5	3.3	3.6
	2015	1894	1.6	0.5	0.1	0.0	55.3	35.2	7.2	2.2	1.9	2.4
New Zealand	2011	753	3.1	27.5	10.3	19.1	28.2	9.6	2.2	40.9	35.2	46.3
	2015	1180	4.4	29.0	8.5	5.3	43.2	7.1	2.5	41.8	44.2	39.1
Oman	2011	1380	0.2	5.0	3.2	5.3	55.4	22.8	8.1	8.4	11.8	5.0
	2015	1284	1.3	9.3	2.8	10.2	60.7	11.7	4.1	13.4	17.7	9.3
Qatar	2011	634	0.8	12.3	3.5	11.4	44.3	20.1	7.7	16.5	19.0	14.1
	2015	764	0.9	14.2	5.1	11.7	45.8	14.8	7.6	20.1	20.1	20.1
Russian Federation	2011	703	2.4	19.8	16.7	12.8	29.9	12.7	5.7	38.9	41.0	36.9
	2015	683	1.3	22.5	13.4	5.7	35.6	15.4	6.0	37.3	32.3	42.3
Saudi Arabia	2011	691	0.5	7.1	12.5	8.2	44.9	24.2	2.7	20.2	23.2	17.3
	2015	545	1.2	3.7	2.4	12.7	51.8	24.2	4.0	7.3	5.5	9.2
Singapore	2011	839	3.7	53.7	12.5	7.4	18.4	3.0	1.2	69.9	73.4	66.7
	2015	876	8.3	58.5	7.2	5.6	16.4	2.3	1.7	74.0	78.4	69.9
Slovenia	2011	625	1.5	24.6	17.0	12.9	34.5	8.2	1.3	43.1	41.4	44.6
	2015	604	4.3	26.6	14.1	14.4	34.1	4.8	1.5	45.1	44.5	45.7
South Africa	2011	1700	3.2	3.8	1.6	3.5	69.2	13.0	5.7	8.6	9.4	7.9
	2015	1752	0.3	4.5	4.4	11.7	67.8	7.6	3.7	9.2	10.6	7.7
Sweden	2011	804	4.5	26.1	7.8	15.6	29.4	10.0	6.7	38.4	40.5	36.4
	2015	579	8.8	29.1	8.8	9.5	23.2	13.7	7.0	46.6	48.3	45.0
Thailand	2011	876	0.2	5.9	4.4	11.6	40.5	25.2	12.2	10.5	11.7	9.3
	2015	926	0.1	9.1	3.4	7.4	53.3	18.7	8.0	12.6	14.4	10.7
Turkey	2011	989	0.7	16.9	10.6	1.7	51.6	12.8	5.6	28.2	30.7	26.1
	2015	865	2.2	23.2	11.5	6.7	41.2	11.4	3.8	36.9	39.1	34.9
United Arab Emirates	2011	2015	1.3	15.9	4.5	7.7	51.4	14.6	4.6	21.7	21.3	22.1
	2015	2554	1.6	19.4	4.8	8.1	50.2	11.3	4.5	25.9	26.5	25.2
United States	2011	1499	3.9	32.4	10.2	11.2	36.2	4.0	2.2	46.4	46.5	46.4
	2015	1438	1.8	39.8	9.8	6.0	35.8	3.6	3.2	51.4	52.1	50.7
International Avg (n=33)	2011	28458	2.6	20.3	8.7	8.9	40.0	14.2	5.4	31.5	32.4	30.7
	2015	31152	3.1	23.5	8.0	7.3	41.2	12.2	4.8	34.5	34.8	34.1
Ontario, Canada	2011	671	4.2	36.5	11.7	10.2	26.9	6.7	3.8	52.4	50.8	53.9
	2015	650	2.9	44.8	8.7	11.2	20.7	6.8	5.0	56.4	57.7	55.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_14 (M042164): Data and Chance / Reasoning Type: CR 1 Point
Label: Agree/disagree with the salesman

COUNTRY	Year	N	10 %	11 %	12 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	3.9	47.9	14.6	5.4	19.0	4.6	4.5	66.4	65.5	67.4
	2015	569	3.1	49.6	13.7	8.3	16.2	3.5	5.7	66.4	63.3	70.0
Norway (8)	2011	568	6.6	24.5	16.7	14.7	28.6	6.8	2.2	47.7	45.8	49.2
	2015	686	2.9	27.8	14.9	7.9	36.6	6.8	3.2	45.5	42.0	49.1
Abu Dhabi, UAE	2011	638	0.6	14.7	4.3	6.1	53.0	15.9	5.4	19.5	19.9	19.2
	2015	685	0.9	15.6	3.6	4.4	59.7	11.0	5.0	20.0	23.7	16.1
Dubai, UAE	2011	787	1.5	23.8	4.5	9.3	42.3	13.1	5.4	29.8	25.3	34.0
	2015	869	1.3	32.9	7.4	10.6	37.0	7.6	3.3	41.6	40.5	42.8
Florida, US	2011	240	6.0	27.6	11.6	11.5	37.6	4.8	0.9	45.2	36.5	53.3
	2015	290	1.8	33.0	5.2	5.0	41.8	8.0	5.1	40.0	38.6	41.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_15 (M042167): Data and Chance / Reasoning Type: CR 1 Point
Label: Overall average of 9 for Ahmed

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1085	24.1	60.1	10.0	5.8	24.1	19.9	28.2
	2015	1489	23.3	63.1	8.7	4.9	23.3	22.2	24.5
Bahrain	2011	658	11.6	53.0	20.0	15.4	11.6	13.8	9.3
	2015	701	9.9	67.8	13.6	8.7	9.9	9.4	10.3
Botswana	2011	765	2.0	77.9	13.3	6.8	2.0	2.6	1.4
	2015	846	1.6	76.7	12.5	9.2	1.6	1.4	1.8
Chile	2011	823	11.4	55.9	19.7	13.0	11.4	9.7	13.5
	2015	697	10.9	52.6	21.1	15.4	10.9	9.6	12.1
Chinese Taipei	2011	718	61.9	29.3	5.7	3.0	61.9	60.2	63.5
	2015	814	55.3	37.3	5.1	2.4	55.3	50.7	59.7
England	2011	538	21.2	61.0	11.9	5.9	21.2	19.6	22.6
	2015	685	24.6	58.8	10.4	6.2	24.6	23.8	25.4
Georgia	2011	643	18.5	36.6	21.7	23.3	18.5	18.3	18.8
	2015	569	23.3	42.1	20.0	14.6	23.3	19.9	26.7
Hong Kong SAR	2011	576	51.9	35.7	5.6	6.8	51.9	54.1	49.6
	2015	598	59.3	33.4	4.2	3.2	59.3	58.2	60.2
Hungary	2011	741	34.9	44.5	14.1	6.5	34.9	33.3	36.4
	2015	692	38.8	45.4	11.5	4.3	38.8	35.3	41.9
Iran, Islamic Rep. of	2011	854	10.0	59.4	18.8	11.8	10.0	7.8	11.8
	2015	878	16.0	55.7	15.6	12.6	16.0	16.3	15.8
Israel	2011	689	32.8	40.7	14.0	12.5	32.8	31.5	34.1
	2015	782	37.5	36.7	15.0	10.7	37.5	37.8	37.3
Italy	2011	559	38.1	40.0	12.5	9.4	38.1	38.6	37.7
	2015	642	38.4	47.1	7.5	6.9	38.4	36.2	40.5
Japan	2011	625	46.1	43.3	6.0	4.7	46.1	43.1	48.8
	2015	678	45.2	43.6	7.5	3.7	45.2	45.1	45.4
Jordan	2011	1094	10.1	70.0	10.7	9.2	10.1	9.3	10.9
	2015	1128	3.9	68.7	15.2	12.2	3.9	4.1	3.8
Kazakhstan	2011	628	13.2	47.2	24.4	15.1	13.2	14.7	11.8
	2015	706	26.9	52.3	11.6	9.1	26.9	27.5	26.4
Korea, Rep. of	2011	740	62.6	31.5	3.1	2.8	62.6	60.3	65.1
	2015	761	58.7	34.2	5.0	2.1	58.7	56.5	60.8
Lebanon	2011	566	7.8	42.6	30.2	19.3	7.8	5.3	10.9
	2015	548	9.3	39.4	28.4	22.9	9.3	10.7	7.3
Lithuania	2011	685	63.9	25.4	4.4	6.3	63.9	63.5	64.3
	2015	617	59.0	32.1	4.5	4.5	59.0	60.0	57.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_15 (M042167): Data and Chance / Reasoning Type: CR 1 Point
Label: Overall average of 9 for Ahmed

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	814	9.7	54.0	22.3	14.0	9.7	8.7	10.7
	2015	1377	8.1	56.5	20.0	15.4	8.1	9.5	6.6
Morocco	2011	1140	4.9	50.8	25.2	19.0	4.9	5.8	4.2
	2015	1894	4.1	50.6	25.3	20.0	4.1	3.4	4.8
New Zealand	2011	753	17.5	64.4	10.9	7.2	17.5	12.9	21.7
	2015	1180	19.1	63.4	10.9	6.6	19.1	18.0	20.4
Oman	2011	1380	3.1	62.1	19.8	15.1	3.1	3.9	2.2
	2015	1283	5.5	76.0	11.4	7.2	5.5	7.2	3.8
Qatar	2011	634	10.7	56.8	17.8	14.8	10.7	8.3	13.1
	2015	764	10.3	59.7	17.3	12.8	10.3	10.4	10.1
Russian Federation	2011	703	27.6	38.8	22.2	11.4	27.6	26.0	29.1
	2015	683	27.0	41.6	18.2	13.2	27.0	28.2	25.8
Saudi Arabia	2011	691	7.6	69.6	12.2	10.6	7.6	5.4	9.6
	2015	545	3.4	70.2	15.2	11.1	3.4	2.7	4.2
Singapore	2011	839	64.3	29.4	4.0	2.3	64.3	64.7	63.9
	2015	876	63.8	29.6	3.5	3.2	63.8	68.2	59.6
Slovenia	2011	625	25.3	62.3	8.1	4.3	25.3	26.2	24.5
	2015	606	37.2	51.6	8.0	3.3	37.2	37.0	37.3
South Africa	2011	1700	2.7	70.9	16.4	10.0	2.7	2.7	2.7
	2015	1752	2.6	79.1	11.2	7.2	2.6	2.9	2.2
Sweden	2011	804	19.9	55.5	14.5	10.1	19.9	19.4	20.4
	2015	580	22.0	51.1	13.6	13.4	22.0	20.3	23.8
Thailand	2011	876	4.3	53.3	21.1	21.3	4.3	4.7	3.9
	2015	926	8.5	58.8	19.0	13.8	8.5	7.6	9.4
Turkey	2011	989	28.3	50.2	12.3	9.2	28.3	28.2	28.3
	2015	865	34.8	50.1	8.1	7.0	34.8	33.4	36.0
United Arab Emirates	2011	2015	11.1	64.9	14.1	9.9	11.1	8.7	13.6
	2015	2555	14.2	65.0	12.4	8.4	14.2	12.5	15.9
United States	2011	1499	26.6	64.7	4.3	4.3	26.6	25.0	28.5
	2015	1438	26.0	64.5	4.3	5.2	26.0	24.8	27.2
International Avg (n=33)	2011	28449	23.8	51.6	14.3	10.3	23.8	22.9	24.7
	2015	31155	25.1	53.2	12.6	9.1	25.1	24.6	25.6
Ontario, Canada	2011	671	35.2	46.2	10.8	7.8	35.2	33.9	36.4
	2015	650	33.3	47.7	10.8	8.3	33.3	34.0	32.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M01_15 (M042167): Data and Chance / Reasoning Type: CR 1 Point
Label: Overall average of 9 for Ahmed

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	863	43.9	41.5	8.6	6.0	43.9	42.9	44.9
	2015	569	39.7	43.0	9.4	7.9	39.7	36.4	43.6
Norway (8)	2011	568	36.7	50.7	7.6	4.9	36.7	40.7	33.5
	2015	686	33.6	51.2	9.4	5.7	33.6	34.2	33.1
Abu Dhabi, UAE	2011	638	11.8	62.4	14.6	11.2	11.8	9.8	13.7
	2015	685	9.0	70.4	12.4	8.2	9.0	7.6	10.4
Dubai, UAE	2011	787	16.5	59.3	13.4	10.8	16.5	10.0	22.5
	2015	869	24.6	57.9	11.1	6.4	24.6	22.6	26.8
Florida, US	2011	240	31.8	58.2	6.5	3.5	31.8	25.2	38.0
	2015	290	18.9	65.2	7.6	8.4	18.9	18.6	19.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_01 (M052209): Number / Knowing Type: MC Key: C
Label: Decimal closest in size to 3/4.

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	74.2	19.5	2.9	74.2	2.6	0.7	0.1	71.5	76.6
	2015	1465	71.1	20.8	2.9	71.1	4.0	1.1	0.2	67.9	74.5
Bahrain	2011	664	39.5	30.2	23.2	39.5	4.4	2.4	0.3	42.0	37.2
	2015	705	52.2	20.9	19.8	52.2	5.1	1.8	0.1	54.2	50.5
Botswana	2011	768	44.5	41.5	7.4	44.5	4.2	2.0	0.4	48.8	40.0
	2015	860	51.2	36.4	7.1	51.2	4.7	0.6	0.0	55.9	45.8
Chile	2011	840	29.0	49.7	11.2	29.0	6.4	2.8	0.8	30.2	27.9
	2015	695	35.9	41.6	12.6	35.9	7.2	2.7	0.0	36.9	35.1
Chinese Taipei	2011	724	79.7	9.1	6.6	79.7	4.5	0.1	0.0	80.8	78.7
	2015	823	80.0	8.7	6.4	80.0	4.9	0.0	0.1	79.3	80.6
England	2011	530	77.5	15.1	3.4	77.5	2.9	1.0	0.1	78.3	76.8
	2015	681	76.4	17.2	3.8	76.4	1.9	0.7	0.0	74.2	78.6
Georgia	2011	652	45.2	33.0	11.4	45.2	9.3	0.9	0.3	45.9	44.6
	2015	573	41.0	38.1	11.5	41.0	8.8	0.6	0.1	45.4	37.3
Hong Kong SAR	2011	577	84.5	7.9	4.0	84.5	2.7	0.5	0.3	84.9	84.2
	2015	601	90.6	4.4	2.8	90.6	1.9	0.0	0.2	92.6	88.8
Hungary	2011	736	57.8	29.9	6.6	57.8	4.3	1.1	0.3	54.0	61.6
	2015	702	56.9	27.2	10.1	56.9	5.9	0.0	0.0	55.6	58.2
Iran, Islamic Rep. of	2011	873	24.0	54.7	8.9	24.0	9.8	2.6	0.1	21.9	25.8
	2015	891	35.3	43.0	9.9	35.3	10.1	1.6	0.2	37.2	33.7
Israel	2011	672	70.6	13.4	6.1	70.6	8.7	1.0	0.2	69.6	71.7
	2015	792	64.6	17.1	9.9	64.6	7.5	0.9	0.0	63.6	65.7
Italy	2011	577	62.0	28.7	4.1	62.0	3.8	1.4	0.0	60.1	63.8
	2015	640	59.5	26.0	4.0	59.5	8.7	1.8	0.0	59.7	59.3
Japan	2011	635	74.8	11.6	8.8	74.8	4.0	0.6	0.1	73.9	75.7
	2015	683	75.0	9.7	9.7	75.0	5.1	0.4	0.0	74.0	76.0
Jordan	2011	1112	29.7	31.0	32.7	29.7	4.1	2.4	0.0	31.1	28.6
	2015	1125	28.7	30.7	35.9	28.7	2.4	2.3	0.1	31.4	26.1
Kazakhstan	2011	632	69.9	19.6	5.7	69.9	2.7	2.0	0.0	69.8	70.0
	2015	701	74.9	13.8	6.8	74.9	3.9	0.6	0.0	79.4	70.4
Korea, Rep. of	2011	740	88.1	6.8	3.5	88.1	1.7	0.0	0.0	89.3	86.8
	2015	763	87.6	6.4	3.9	87.6	1.7	0.4	0.0	89.2	86.3
Lebanon	2011	569	80.6	9.5	4.4	80.6	4.2	1.2	0.0	82.4	78.3
	2015	554	75.1	12.3	3.1	75.1	3.4	4.9	1.2	73.6	76.8
Lithuania	2011	681	60.5	30.5	3.8	60.5	4.7	0.5	0.0	66.3	54.5
	2015	633	66.3	23.9	5.9	66.3	3.3	0.7	0.0	70.2	62.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_01 (M052209): Number / Knowing Type: MC Key: C
Label: Decimal closest in size to 3/4.

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	56.3	30.0	9.6	56.3	3.2	0.7	0.2	61.0	51.3
	2015	1401	62.5	25.4	7.5	62.5	3.1	1.4	0.0	67.3	57.9
Morocco	2011	1295	51.5	24.5	14.6	51.5	6.9	2.4	0.2	53.6	49.6
	2015	1862	51.8	22.9	18.0	51.8	5.6	1.7	0.0	57.3	47.5
New Zealand	2011	755	60.9	28.7	4.0	60.9	5.4	1.0	0.0	56.5	65.1
	2015	1145	66.3	24.6	5.1	66.3	3.1	0.6	0.3	65.7	66.9
Oman	2011	1365	35.1	28.5	30.4	35.1	3.5	2.3	0.2	35.6	34.5
	2015	1262	41.0	26.5	26.8	41.0	4.7	0.9	0.1	44.5	37.7
Qatar	2011	633	51.6	27.9	13.1	51.6	6.2	1.1	0.2	56.8	46.1
	2015	783	58.5	25.8	8.6	58.5	6.0	0.9	0.1	55.7	61.5
Russian Federation	2011	695	71.1	17.7	4.1	71.1	5.7	1.2	0.2	72.7	69.6
	2015	684	74.9	17.2	3.5	74.9	3.4	0.9	0.2	75.4	74.4
Saudi Arabia	2011	621	48.4	20.3	22.1	48.4	8.8	0.4	0.0	54.4	42.8
	2015	536	35.0	32.6	26.1	35.0	5.3	0.7	0.4	36.7	33.2
Singapore	2011	848	88.6	6.1	2.0	88.6	2.9	0.4	0.0	89.1	88.1
	2015	875	95.0	2.8	0.6	95.0	1.3	0.3	0.0	95.8	94.3
Slovenia	2011	634	66.6	19.8	8.2	66.6	4.6	0.7	0.0	63.6	69.5
	2015	615	66.5	21.5	5.9	66.5	4.7	1.4	0.0	67.3	65.8
South Africa	2011	1732	36.5	48.1	9.5	36.5	3.1	2.7	0.1	37.6	35.7
	2015	1794	37.3	48.8	10.1	37.3	3.1	0.6	0.0	40.1	34.2
Sweden	2011	805	78.9	13.0	2.5	78.9	4.3	1.3	0.1	78.7	79.1
	2015	583	69.4	12.9	5.4	69.4	5.6	6.6	0.2	70.4	68.6
Thailand	2011	874	35.4	43.5	11.9	35.4	6.3	2.9	0.1	38.9	30.8
	2015	931	35.6	45.2	11.5	35.6	7.1	0.7	0.0	38.3	32.4
Turkey	2011	993	31.7	47.3	9.3	31.7	9.7	2.0	0.0	32.2	31.2
	2015	875	38.7	36.7	13.4	38.7	10.3	0.9	0.0	38.7	38.7
United Arab Emirates	2011	2006	62.2	23.7	7.8	62.2	5.2	1.0	0.1	64.8	59.7
	2015	2563	65.1	21.4	7.1	65.1	5.2	1.2	0.0	67.2	63.1
United States	2011	1490	82.2	11.3	2.2	82.2	2.8	1.2	0.2	82.6	81.9
	2015	1454	84.5	9.6	2.4	84.5	2.3	0.8	0.4	87.0	82.1
International Avg (n=33)	2011	28612	59.1	25.2	9.3	59.1	5.0	1.4	0.1	60.0	58.1
	2015	31250	60.7	23.4	9.6	60.7	4.9	1.2	0.1	62.0	59.5
Ontario, Canada	2011	682	75.1	16.9	2.6	75.1	4.5	0.9	0.0	74.0	76.1
	2015	640	76.7	16.4	3.8	76.7	2.7	0.4	0.0	76.6	76.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_01 (M052209): Number / Knowing Type: MC Key: C
Label: Decimal closest in size to 3/4.

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	82.9	11.2	1.5	82.9	3.1	1.2	0.3	79.9	85.9
	2015	558	87.4	8.5	1.6	87.4	0.8	1.4	0.3	89.5	84.9
Norway (8)	2011	546	65.8	25.1	2.8	65.8	5.1	1.1	0.1	64.9	66.8
	2015	681	59.6	27.4	5.7	59.6	6.4	0.6	0.4	56.5	63.3
Abu Dhabi, UAE	2011	613	59.1	23.8	10.5	59.1	6.1	0.5	0.0	61.7	56.7
	2015	686	61.7	23.7	7.0	61.7	5.6	2.1	0.0	69.0	54.9
Dubai, UAE	2011	792	64.1	25.2	4.3	64.1	4.4	2.1	0.0	63.3	64.8
	2015	880	72.3	16.8	4.6	72.3	5.6	0.7	0.0	69.8	75.1
Florida, US	2011	247	85.3	8.8	1.1	85.3	3.4	1.3	0.0	88.9	82.1
	2015	296	84.9	9.2	2.5	84.9	3.0	0.4	0.0	84.7	85.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_02 (M052142): Number / Applying Type: MC Key: A
Label: Height of a stack of stools

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	49.8	49.8	15.0	11.3	22.8	0.8	0.3	47.4	52.2
	2015	1465	43.8	43.8	20.6	14.7	19.4	1.2	0.2	41.6	46.2
Bahrain	2011	664	24.7	24.7	20.3	18.8	32.3	3.5	0.4	23.9	25.5
	2015	705	37.3	37.3	16.8	17.3	27.0	1.5	0.1	33.7	40.6
Botswana	2011	768	20.2	20.2	15.1	23.1	38.0	2.7	0.9	22.7	17.7
	2015	860	21.0	21.0	15.7	26.4	35.1	1.8	0.0	22.5	19.3
Chile	2011	840	29.7	29.7	15.4	18.1	34.8	1.2	0.8	27.7	31.7
	2015	695	37.1	37.1	18.7	18.6	24.5	0.6	0.5	32.5	40.9
Chinese Taipei	2011	724	70.5	70.5	12.9	4.4	11.7	0.4	0.0	68.2	72.7
	2015	823	71.3	71.3	14.1	3.5	11.0	0.0	0.1	67.6	74.7
England	2011	530	44.7	44.7	20.3	8.1	25.5	1.3	0.1	43.9	45.5
	2015	681	45.7	45.7	15.4	12.3	26.2	0.3	0.0	44.4	47.0
Georgia	2011	652	27.1	27.1	21.8	18.9	30.0	1.9	0.3	24.3	29.2
	2015	573	29.6	29.6	20.6	18.2	30.4	1.1	0.1	25.6	32.8
Hong Kong SAR	2011	577	51.6	51.6	18.8	7.2	20.8	1.4	0.3	50.4	52.8
	2015	601	59.9	59.9	19.1	7.5	13.2	0.1	0.2	55.7	63.9
Hungary	2011	736	43.3	43.3	19.2	9.4	27.1	0.7	0.3	39.0	47.5
	2015	702	46.1	46.1	22.5	9.7	21.5	0.2	0.0	45.4	46.8
Iran, Islamic Rep. of	2011	873	27.5	27.5	15.9	19.8	33.7	2.9	0.2	22.7	31.6
	2015	891	34.2	34.2	17.3	19.0	25.8	3.4	0.2	32.6	35.7
Israel	2011	672	36.7	36.7	21.6	6.7	32.8	2.0	0.3	38.6	34.5
	2015	792	40.4	40.4	20.0	9.9	28.3	1.4	0.0	38.6	42.2
Italy	2011	577	35.6	35.6	15.1	12.0	36.0	1.2	0.0	31.2	40.0
	2015	640	33.1	33.1	15.7	11.5	37.7	1.9	0.0	31.7	34.6
Japan	2011	635	59.5	59.5	25.6	4.9	9.4	0.4	0.1	57.3	61.6
	2015	683	66.0	66.0	20.3	5.1	8.5	0.2	0.0	61.4	70.4
Jordan	2011	1112	21.4	21.4	14.4	22.8	38.7	2.7	0.0	23.8	19.3
	2015	1125	22.9	22.9	18.7	20.2	35.0	3.1	0.1	20.6	25.1
Kazakhstan	2011	632	31.9	31.9	22.3	18.6	26.3	1.0	0.0	27.8	36.0
	2015	701	53.4	53.4	19.2	10.9	15.9	0.6	0.0	52.7	54.2
Korea, Rep. of	2011	740	76.6	76.6	13.6	4.7	5.0	0.1	0.0	73.4	80.0
	2015	763	72.1	72.1	14.0	5.3	8.6	0.0	0.0	67.6	75.9
Lebanon	2011	570	17.2	17.2	10.3	32.1	36.4	4.0	0.0	15.2	19.7
	2015	550	17.8	17.8	13.1	23.5	37.5	6.5	1.6	15.8	19.9
Lithuania	2011	681	40.3	40.3	23.4	8.0	27.2	1.0	0.0	42.1	38.5
	2015	633	42.6	42.6	24.6	10.6	22.0	0.2	0.0	40.7	44.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_02 (M052142): Number / Applying Type: MC Key: A
Label: Height of a stack of stools

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	32.0	32.0	19.6	19.8	26.9	1.3	0.4	30.7	33.4
	2015	1401	45.6	45.6	17.7	14.7	20.6	1.4	0.0	47.4	43.8
Morocco	2011	1302	14.6	14.6	19.0	24.8	37.3	4.1	0.4	14.1	14.9
	2015	1862	16.1	16.1	20.2	25.2	34.5	4.0	0.0	16.0	16.1
New Zealand	2011	755	44.7	44.7	19.0	11.7	22.9	1.8	0.0	43.2	46.1
	2015	1145	42.7	42.7	23.8	10.1	22.3	0.8	0.3	41.5	43.9
Oman	2011	1365	17.7	17.7	18.0	25.7	34.9	3.2	0.5	17.2	18.1
	2015	1262	20.9	20.9	17.1	26.6	33.5	1.8	0.1	20.4	21.5
Qatar	2011	633	22.7	22.7	23.2	22.9	28.3	2.7	0.2	21.4	24.2
	2015	783	27.0	27.0	22.4	21.2	27.2	2.0	0.1	24.7	29.4
Russian Federation	2011	695	44.8	44.8	23.0	6.7	23.7	1.5	0.4	46.7	43.1
	2015	684	44.3	44.3	26.5	9.7	17.7	1.7	0.2	40.0	48.4
Saudi Arabia	2011	621	17.9	17.9	19.8	22.8	37.0	2.4	0.0	16.2	19.5
	2015	536	20.4	20.4	20.6	26.2	31.0	1.5	0.4	14.0	27.2
Singapore	2011	848	68.0	68.0	10.8	4.9	16.0	0.3	0.0	65.5	70.6
	2015	875	71.0	71.0	11.9	3.5	12.9	0.7	0.0	67.9	73.6
Slovenia	2011	634	43.5	43.5	17.2	7.0	31.2	1.2	0.0	43.9	43.1
	2015	615	46.4	46.4	21.0	6.9	24.7	1.0	0.0	42.8	49.2
South Africa	2011	1732	16.7	16.7	16.4	29.8	34.2	2.6	0.2	15.9	17.6
	2015	1794	24.2	24.2	16.5	26.4	31.2	1.6	0.0	24.5	23.9
Sweden	2011	805	42.9	42.9	25.2	9.0	20.7	1.7	0.5	40.4	45.4
	2015	583	44.7	44.7	26.7	7.0	16.3	5.2	0.2	41.4	47.6
Thailand	2011	874	41.7	41.7	14.6	16.3	25.8	1.5	0.1	41.9	41.3
	2015	931	43.9	43.9	17.6	16.4	20.9	1.2	0.0	45.7	42.0
Turkey	2011	993	28.7	28.7	19.3	15.6	34.5	1.8	0.1	25.7	31.3
	2015	875	33.3	33.3	19.6	16.1	30.2	0.8	0.0	32.9	33.6
United Arab Emirates	2011	2006	26.8	26.8	20.7	19.0	31.7	1.8	0.1	24.0	29.5
	2015	2563	32.3	32.3	21.7	19.5	24.7	1.8	0.0	33.6	31.0
United States	2011	1490	46.1	46.1	18.2	11.2	23.1	1.0	0.4	44.9	47.4
	2015	1454	48.8	48.8	18.9	10.8	20.0	1.0	0.4	49.3	48.2
International Avg (n=33)	2011	28620	36.9	36.9	18.3	15.0	27.8	1.8	0.2	35.5	38.2
	2015	31246	40.5	40.5	19.1	14.7	24.1	1.5	0.1	38.6	42.2
Ontario, Canada	2011	682	48.2	48.2	18.7	9.1	22.0	2.1	0.0	48.3	48.1
	2015	640	54.8	54.8	15.7	7.9	20.4	1.1	0.0	51.1	59.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_02 (M052142): Number / Applying Type: MC Key: A
Label: Height of a stack of stools

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	50.5	50.5	19.9	5.1	22.8	1.4	0.3	53.4	47.5
	2015	558	51.7	51.7	19.2	8.3	17.6	2.8	0.3	48.1	56.1
Norway (8)	2011	546	34.5	34.5	28.5	12.1	23.4	1.4	0.1	34.2	34.8
	2015	681	36.3	36.3	26.7	14.3	21.1	1.2	0.5	35.7	36.9
Abu Dhabi, UAE	2011	613	26.9	26.9	20.9	19.4	32.1	0.8	0.0	20.8	32.5
	2015	686	29.2	29.2	20.0	20.8	27.6	2.5	0.0	30.8	27.7
Dubai, UAE	2011	792	29.1	29.1	20.7	16.9	30.0	3.3	0.0	28.7	29.4
	2015	880	39.9	39.9	21.9	14.7	21.8	1.6	0.0	40.5	39.3
Florida, US	2011	247	45.3	45.3	17.7	12.8	22.5	1.6	0.0	45.8	44.9
	2015	296	43.2	43.2	19.6	10.7	25.4	1.1	0.0	37.4	47.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_03 (M052006): Number / Reasoning Type: MC Key: D
Label: Which statement about x is true

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	40.9	15.7	20.1	20.4	40.9	2.5	0.3	40.4	41.5
	2015	1465	39.8	19.9	17.3	18.3	39.8	4.4	0.3	38.1	41.7
Bahrain	2011	664	44.9	19.8	16.5	13.6	44.9	4.6	0.5	49.0	41.0
	2015	705	46.9	18.8	15.6	15.3	46.9	3.3	0.1	47.4	46.6
Botswana	2011	768	44.5	17.5	16.9	16.6	44.5	3.6	0.9	50.8	38.0
	2015	860	43.3	15.7	19.8	18.1	43.3	3.0	0.1	46.1	40.2
Chile	2011	840	35.7	19.4	25.1	12.4	35.7	6.6	0.8	34.9	36.4
	2015	695	25.7	19.8	32.9	15.2	25.7	5.9	0.5	26.5	25.0
Chinese Taipei	2011	724	74.9	8.7	8.1	7.8	74.9	0.4	0.0	80.4	69.9
	2015	823	76.1	8.0	7.3	7.7	76.1	0.8	0.1	78.1	74.2
England	2011	530	36.6	19.8	15.0	23.7	36.6	4.6	0.1	39.0	34.5
	2015	681	41.0	15.7	17.4	22.2	41.0	3.7	0.0	46.4	35.9
Georgia	2011	652	33.5	19.3	18.0	21.5	33.5	7.4	0.3	35.6	31.8
	2015	574	34.4	18.0	27.5	13.5	34.4	6.4	0.1	36.7	32.5
Hong Kong SAR	2011	577	62.9	9.5	11.5	13.9	62.9	2.0	0.3	62.9	62.9
	2015	601	62.0	11.1	9.5	16.0	62.0	1.2	0.2	59.5	64.4
Hungary	2011	736	38.9	21.6	18.9	14.2	38.9	6.1	0.3	40.1	37.7
	2015	702	36.1	20.6	20.8	18.4	36.1	4.1	0.0	35.1	37.1
Iran, Islamic Rep. of	2011	873	50.8	13.8	12.7	17.3	50.8	5.1	0.3	53.8	48.1
	2015	891	43.7	12.8	18.6	16.7	43.7	8.0	0.2	44.9	42.5
Israel	2011	672	52.8	10.7	13.5	16.1	52.8	6.3	0.6	52.1	53.6
	2015	792	50.4	12.7	14.9	15.4	50.4	6.6	0.0	53.9	46.9
Italy	2011	577	48.5	14.9	19.8	11.4	48.5	5.4	0.0	49.4	47.6
	2015	640	51.4	14.0	16.2	13.1	51.4	5.4	0.0	52.3	50.4
Japan	2011	635	51.6	10.7	11.2	24.6	51.6	1.8	0.1	54.2	49.2
	2015	683	57.4	8.8	10.7	21.9	57.4	1.2	0.0	57.4	57.4
Jordan	2011	1112	46.3	16.5	15.9	16.1	46.3	5.2	0.0	53.9	39.4
	2015	1125	44.3	18.7	15.4	16.7	44.3	4.9	0.1	52.9	36.3
Kazakhstan	2011	632	44.1	19.9	17.9	12.0	44.1	6.1	0.0	48.2	40.0
	2015	701	59.9	15.0	15.0	9.0	59.9	1.2	0.0	65.5	54.3
Korea, Rep. of	2011	740	77.7	8.8	5.5	7.7	77.7	0.3	0.0	78.0	77.4
	2015	763	78.1	4.3	7.1	8.7	78.1	1.8	0.0	78.0	78.1
Lebanon	2011	560	33.6	18.4	18.8	19.9	33.6	9.1	0.2	33.8	33.4
	2015	521	31.3	17.9	22.6	10.3	31.3	16.1	1.7	33.3	29.2
Lithuania	2011	681	32.6	18.0	29.1	15.8	32.6	4.5	0.0	36.0	29.1
	2015	633	33.7	19.3	26.0	17.5	33.7	3.4	0.0	33.5	33.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_03 (M052006): Number / Reasoning Type: MC Key: D
Label: Which statement about x is true

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	30.5	23.6	25.9	16.4	30.5	3.0	0.7	31.0	29.9
	2015	1401	38.3	21.3	20.8	13.5	38.3	6.1	0.0	42.2	34.4
Morocco	2011	1282	34.5	24.0	22.9	11.1	34.5	7.1	0.4	42.0	28.0
	2015	1867	37.1	22.5	21.6	12.9	37.1	6.0	0.0	42.4	32.9
New Zealand	2011	755	38.8	21.3	18.2	17.5	38.8	4.0	0.3	37.0	40.5
	2015	1145	39.7	20.0	17.9	18.4	39.7	3.7	0.3	41.4	37.9
Oman	2011	1365	37.0	18.8	19.9	17.9	37.0	5.7	0.7	41.0	32.6
	2015	1262	40.3	22.1	16.6	17.9	40.3	3.0	0.1	43.5	37.2
Qatar	2011	633	38.2	18.9	17.3	19.7	38.2	5.6	0.2	43.3	32.9
	2015	783	40.3	19.0	15.5	18.9	40.3	6.3	0.1	48.0	32.2
Russian Federation	2011	695	57.0	10.3	17.9	8.5	57.0	5.8	0.6	59.4	54.9
	2015	684	57.7	10.4	17.2	8.2	57.7	6.4	0.2	55.5	59.7
Saudi Arabia	2011	621	40.7	22.3	15.7	18.1	40.7	2.9	0.3	44.1	37.4
	2015	536	39.0	23.0	17.0	18.1	39.0	2.5	0.4	45.0	32.4
Singapore	2011	848	64.3	15.5	9.1	9.9	64.3	1.2	0.0	66.2	62.5
	2015	875	66.3	12.5	7.0	12.8	66.3	1.3	0.0	66.7	66.0
Slovenia	2011	634	41.8	16.4	20.8	12.2	41.8	8.7	0.0	41.0	42.7
	2015	615	39.4	17.6	19.0	15.7	39.4	8.2	0.0	39.4	39.5
South Africa	2011	1732	27.4	23.9	24.0	20.0	27.4	4.2	0.5	29.5	25.6
	2015	1794	25.7	23.3	29.3	18.0	25.7	3.7	0.0	28.5	22.5
Sweden	2011	805	33.3	26.3	20.5	12.0	33.3	7.4	0.5	35.2	31.5
	2015	583	31.9	28.9	17.4	14.0	31.9	7.6	0.2	33.3	30.9
Thailand	2011	874	49.5	13.8	15.1	16.0	49.5	5.5	0.1	51.7	46.5
	2015	931	56.4	12.2	11.3	15.9	56.4	4.1	0.0	60.3	51.8
Turkey	2011	993	32.8	29.2	15.8	14.4	32.8	7.7	0.1	37.2	29.0
	2015	875	31.3	31.4	20.4	15.3	31.3	1.5	0.0	35.5	27.5
United Arab Emirates	2011	2007	45.7	16.4	15.7	17.4	45.7	4.7	0.1	49.8	41.6
	2015	2563	47.6	15.8	15.4	16.7	47.6	4.5	0.0	53.9	41.2
United States	2011	1490	48.1	14.1	15.0	20.3	48.1	2.0	0.5	49.4	46.8
	2015	1454	50.6	12.5	13.5	21.0	50.6	1.9	0.4	52.0	49.2
International Avg (n=33)	2011	28591	44.6	17.5	17.2	15.7	44.6	4.8	0.3	47.0	42.2
	2015	31223	45.4	17.1	17.4	15.5	45.4	4.5	0.2	47.7	43.1
Ontario, Canada	2011	682	38.2	20.8	16.8	18.9	38.2	4.9	0.4	41.6	34.8
	2015	636	38.6	23.2	17.5	17.0	38.6	3.6	0.1	38.1	38.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_03 (M052006): Number / Reasoning Type: MC Key: D
Label: Which statement about x is true

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	38.7	18.5	18.9	18.1	38.7	5.7	0.3	42.6	34.7
	2015	553	35.4	21.0	17.3	20.4	35.4	5.5	0.3	34.3	36.8
Norway (8)	2011	546	30.0	26.8	19.3	17.2	30.0	6.5	0.3	30.1	30.0
	2015	681	31.2	25.3	20.0	17.6	31.2	5.4	0.5	29.6	33.1
Abu Dhabi, UAE	2011	613	47.2	17.4	15.3	17.1	47.2	3.1	0.0	50.1	44.5
	2015	686	44.6	18.1	14.0	17.4	44.6	5.8	0.0	55.2	34.9
Dubai, UAE	2011	793	46.1	16.7	16.0	15.2	46.1	5.8	0.1	51.5	41.6
	2015	880	55.0	13.8	14.8	13.2	55.0	3.2	0.0	57.0	52.8
Florida, US	2011	247	41.1	15.9	17.3	24.8	41.1	0.9	0.0	39.3	42.8
	2015	296	49.2	10.2	17.8	19.0	49.2	3.4	0.4	52.9	46.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_04 (M052035): Number / Knowing Type: CR 1 Point
Label: Compare size of decimal numbers

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	44.4	54.5	0.8	0.3	44.4	41.7	47.0
	2015	1465	43.1	55.7	0.9	0.3	43.1	37.5	49.3
Bahrain	2011	664	19.5	78.6	1.5	0.5	19.5	19.4	19.5
	2015	705	21.0	78.4	0.5	0.1	21.0	18.3	23.3
Botswana	2011	768	12.6	85.9	0.6	0.9	12.6	9.7	15.6
	2015	860	9.4	90.4	0.2	0.1	9.4	8.4	10.4
Chile	2011	840	16.6	80.5	2.0	0.8	16.6	14.7	18.6
	2015	695	15.6	80.4	3.2	0.7	15.6	11.9	18.7
Chinese Taipei	2011	724	76.3	23.4	0.3	0.0	76.3	74.4	78.1
	2015	823	80.4	19.3	0.3	0.1	80.4	77.7	82.8
England	2011	530	36.2	62.1	1.6	0.1	36.2	32.7	39.4
	2015	681	46.9	52.3	0.8	0.0	46.9	45.8	47.9
Georgia	2011	652	32.1	61.3	6.2	0.3	32.1	25.5	37.2
	2015	574	33.6	63.8	2.4	0.1	33.6	31.4	35.4
Hong Kong SAR	2011	577	78.5	21.1	0.2	0.3	78.5	75.8	81.0
	2015	601	80.6	19.0	0.0	0.4	80.6	81.7	79.6
Hungary	2011	736	49.8	49.3	0.6	0.3	49.8	43.6	56.1
	2015	702	48.4	51.4	0.1	0.0	48.4	42.2	54.7
Iran, Islamic Rep. of	2011	873	21.7	76.8	1.1	0.4	21.7	18.2	24.7
	2015	891	31.2	68.2	0.4	0.2	31.2	32.7	29.8
Israel	2011	672	58.1	40.5	0.8	0.6	58.1	57.4	58.7
	2015	792	56.6	42.0	1.2	0.1	56.6	54.7	58.5
Italy	2011	577	40.9	58.1	0.7	0.3	40.9	34.8	46.7
	2015	640	49.0	50.8	0.2	0.0	49.0	42.8	55.6
Japan	2011	635	70.5	28.7	0.7	0.1	70.5	68.8	72.1
	2015	683	78.0	21.1	0.7	0.1	78.0	75.8	80.1
Jordan	2011	1112	16.2	83.1	0.7	0.0	16.2	17.2	15.4
	2015	1125	13.7	85.5	0.6	0.2	13.7	15.7	12.0
Kazakhstan	2011	632	42.9	55.1	2.0	0.0	42.9	38.2	47.7
	2015	701	55.0	44.2	0.8	0.0	55.0	52.7	57.3
Korea, Rep. of	2011	740	82.3	17.6	0.1	0.0	82.3	77.3	87.7
	2015	763	79.8	20.2	0.0	0.0	79.8	75.0	83.7
Lebanon	2011	571	31.6	45.5	22.6	0.3	31.6	27.7	36.7
	2015	555	39.5	57.8	1.1	1.6	39.5	36.6	42.7
Lithuania	2011	681	49.4	50.6	0.0	0.0	49.4	44.1	54.8
	2015	633	53.5	46.4	0.1	0.0	53.5	50.1	56.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_04 (M052035): Number / Knowing Type: CR 1 Point
Label: Compare size of decimal numbers

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	19.1	76.5	3.6	0.8	19.1	18.3	20.0
	2015	1401	25.1	72.8	1.8	0.2	25.1	23.9	26.3
Morocco	2011	1309	25.8	71.9	1.7	0.7	25.8	27.3	24.5
	2015	1867	23.9	75.0	1.1	0.0	23.9	25.6	22.5
New Zealand	2011	755	35.8	61.9	2.0	0.4	35.8	29.0	42.3
	2015	1145	39.3	59.9	0.4	0.3	39.3	35.8	43.1
Oman	2011	1365	9.0	88.0	2.1	0.9	9.0	9.6	8.3
	2015	1258	11.9	86.7	1.2	0.1	11.9	12.5	11.4
Qatar	2011	633	20.7	77.2	1.8	0.3	20.7	21.0	20.4
	2015	783	27.5	70.3	2.1	0.1	27.5	25.4	29.7
Russian Federation	2011	695	57.1	40.7	1.6	0.6	57.1	54.0	59.7
	2015	684	59.7	39.3	0.6	0.4	59.7	57.5	61.7
Saudi Arabia	2011	621	12.1	86.8	0.8	0.3	12.1	12.5	11.8
	2015	536	8.3	90.3	1.1	0.4	8.3	8.9	7.6
Singapore	2011	848	71.2	28.5	0.3	0.0	71.2	72.2	70.3
	2015	875	73.5	26.3	0.1	0.0	73.5	72.3	74.6
Slovenia	2011	634	62.3	37.4	0.2	0.1	62.3	53.1	71.2
	2015	615	57.6	42.0	0.4	0.0	57.6	50.8	63.0
South Africa	2011	1732	5.2	91.1	3.0	0.7	5.2	4.4	5.9
	2015	1794	8.3	91.1	0.6	0.0	8.3	9.1	7.4
Sweden	2011	805	35.9	58.4	5.0	0.8	35.9	33.1	38.7
	2015	583	42.0	52.6	4.2	1.2	42.0	42.9	41.5
Thailand	2011	874	30.7	67.5	1.6	0.2	30.7	31.0	30.2
	2015	931	30.3	69.2	0.5	0.0	30.3	29.6	31.2
Turkey	2011	993	16.4	81.0	2.5	0.1	16.4	18.6	14.6
	2015	875	22.7	76.6	0.8	0.0	22.7	21.2	24.1
United Arab Emirates	2011	2007	28.1	70.7	0.9	0.2	28.1	26.4	29.8
	2015	2563	32.8	66.4	0.9	0.0	32.8	31.7	33.9
United States	2011	1490	56.3	42.3	0.7	0.7	56.3	51.5	61.1
	2015	1454	57.5	41.6	0.2	0.7	57.5	55.4	59.5
International Avg (n=33)	2011	28629	38.3	59.2	2.1	0.4	38.3	35.9	40.8
	2015	31253	41.1	57.8	0.9	0.2	41.1	39.2	42.9
Ontario, Canada	2011	682	52.6	46.3	0.8	0.4	52.6	51.3	53.9
	2015	640	60.0	38.4	1.5	0.1	60.0	55.3	65.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_04 (M052035): Number / Knowing Type: CR 1 Point
Label: Compare size of decimal numbers

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	66.0	32.6	1.1	0.3	66.0	60.2	72.0
	2015	559	75.5	23.8	0.3	0.4	75.5	72.1	79.6
Norway (8)	2011	546	66.6	32.5	0.4	0.4	66.6	68.5	64.6
	2015	681	68.0	30.6	0.8	0.5	68.0	62.8	74.1
Abu Dhabi, UAE	2011	613	29.7	69.3	0.9	0.0	29.7	25.0	34.0
	2015	686	26.5	72.1	1.4	0.0	26.5	25.9	27.1
Dubai, UAE	2011	793	32.3	67.0	0.6	0.1	32.3	27.9	36.0
	2015	880	47.3	52.2	0.5	0.0	47.3	47.6	47.0
Florida, US	2011	247	45.4	54.2	0.4	0.0	45.4	39.3	51.0
	2015	296	46.8	52.2	0.7	0.4	46.8	39.8	52.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_05 (M052016): Number / Applying Type: CR 1 Point
Label: Milk needed in cake recipe

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	41.6	54.8	3.3	0.3	41.6	36.7	46.3
	2015	1465	40.0	56.2	3.4	0.3	40.0	33.8	46.9
Bahrain	2011	664	15.5	72.9	11.0	0.5	15.5	14.5	16.5
	2015	705	20.9	71.8	7.2	0.1	20.9	19.5	22.2
Botswana	2011	768	8.4	86.9	3.8	0.9	8.4	8.0	8.8
	2015	860	11.4	85.8	2.7	0.1	11.4	12.0	10.9
Chile	2011	840	18.8	69.8	10.5	0.9	18.8	17.7	19.9
	2015	695	15.2	74.7	9.4	0.7	15.2	9.7	19.7
Chinese Taipei	2011	724	73.2	24.5	2.3	0.0	73.2	71.1	75.2
	2015	823	70.3	27.8	1.8	0.1	70.3	66.4	73.9
England	2011	530	46.0	47.3	6.6	0.1	46.0	43.8	48.1
	2015	681	52.4	45.7	1.9	0.0	52.4	51.5	53.3
Georgia	2011	652	26.4	61.0	12.3	0.3	26.4	22.3	29.6
	2015	574	28.5	59.5	11.8	0.1	28.5	29.5	27.7
Hong Kong SAR	2011	577	72.1	25.6	2.1	0.3	72.1	72.6	71.6
	2015	601	74.0	23.6	2.0	0.4	74.0	72.0	75.8
Hungary	2011	736	51.4	43.8	4.5	0.3	51.4	44.2	58.6
	2015	702	48.4	49.8	1.8	0.0	48.4	44.5	52.4
Iran, Islamic Rep. of	2011	873	12.4	78.9	8.4	0.4	12.4	9.2	15.1
	2015	891	16.4	74.4	9.0	0.2	16.4	12.5	19.9
Israel	2011	672	48.3	46.8	4.1	0.8	48.3	48.9	47.7
	2015	792	44.7	49.3	5.8	0.1	44.7	42.9	46.5
Italy	2011	577	45.1	50.9	3.7	0.3	45.1	38.7	51.2
	2015	640	40.6	53.2	6.2	0.0	40.6	36.0	45.5
Japan	2011	635	66.8	30.6	2.4	0.1	66.8	63.8	69.5
	2015	683	70.3	28.3	1.2	0.1	70.3	69.7	70.9
Jordan	2011	1112	11.8	83.7	4.3	0.1	11.8	9.9	13.5
	2015	1125	9.3	86.4	4.2	0.2	9.3	9.0	9.5
Kazakhstan	2011	632	43.0	51.0	6.0	0.0	43.0	36.7	49.2
	2015	701	52.5	43.6	3.9	0.0	52.5	50.8	54.1
Korea, Rep. of	2011	740	81.8	17.7	0.4	0.0	81.8	78.9	85.0
	2015	763	78.3	20.7	1.0	0.0	78.3	72.3	83.3
Lebanon	2011	571	39.1	54.0	6.6	0.3	39.1	38.9	39.2
	2015	555	36.2	47.9	14.2	1.7	36.2	32.6	40.1
Lithuania	2011	681	58.6	39.7	1.8	0.0	58.6	57.9	59.2
	2015	633	55.1	40.3	4.7	0.0	55.1	52.2	57.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_05 (M052016): Number / Applying Type: CR 1 Point
Label: Milk needed in cake recipe

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	34.8	57.6	6.8	0.8	34.8	34.2	35.5
	2015	1401	36.3	58.6	4.8	0.4	36.3	35.2	37.3
Morocco	2011	1309	18.5	67.8	13.0	0.7	18.5	22.3	15.3
	2015	1867	17.2	74.4	8.4	0.0	17.2	20.2	14.8
New Zealand	2011	755	39.2	57.5	3.0	0.4	39.2	32.3	45.7
	2015	1145	41.3	55.9	2.4	0.3	41.3	40.1	42.7
Oman	2011	1365	9.7	80.8	8.5	1.0	9.7	11.5	7.8
	2015	1258	14.5	79.8	5.6	0.1	14.5	17.0	12.1
Qatar	2011	633	17.6	72.3	9.7	0.4	17.6	18.4	16.7
	2015	783	23.1	69.7	7.1	0.1	23.1	21.7	24.6
Russian Federation	2011	695	53.3	39.9	6.2	0.6	53.3	49.9	56.1
	2015	684	52.3	41.4	5.9	0.4	52.3	46.9	57.4
Saudi Arabia	2011	621	12.1	83.4	4.2	0.3	12.1	12.9	11.3
	2015	536	7.0	84.7	7.9	0.4	7.0	6.5	7.6
Singapore	2011	848	80.4	18.6	1.0	0.0	80.4	79.7	81.2
	2015	875	77.6	21.9	0.5	0.0	77.6	77.2	77.9
Slovenia	2011	634	51.2	45.7	3.0	0.1	51.2	44.2	58.0
	2015	615	52.5	45.0	2.6	0.0	52.5	43.6	59.5
South Africa	2011	1732	6.8	89.3	3.1	0.8	6.8	4.1	9.3
	2015	1794	7.8	89.2	3.0	0.0	7.8	7.3	8.2
Sweden	2011	805	51.5	44.3	3.3	0.9	51.5	49.7	53.6
	2015	582	53.6	43.1	2.1	1.2	53.6	45.1	60.9
Thailand	2011	874	19.4	73.5	6.8	0.2	19.4	20.2	18.3
	2015	931	21.6	74.1	4.2	0.0	21.6	21.8	21.5
Turkey	2011	993	20.7	71.0	8.2	0.1	20.7	19.1	22.2
	2015	875	24.9	70.9	4.2	0.0	24.9	19.8	29.6
United Arab Emirates	2011	2007	24.4	71.5	3.8	0.2	24.4	23.7	25.1
	2015	2563	28.1	67.3	4.6	0.0	28.1	24.2	31.9
United States	2011	1490	31.9	64.3	3.1	0.7	31.9	29.5	34.3
	2015	1454	37.3	60.0	2.0	0.7	37.3	36.1	38.5
International Avg (n=33)	2011	28629	37.3	56.9	5.4	0.4	37.3	35.3	39.2
	2015	31252	38.2	56.8	4.8	0.2	38.2	35.7	40.5
Ontario, Canada	2011	682	41.9	55.9	1.8	0.4	41.9	41.8	42.0
	2015	640	46.1	51.8	2.0	0.2	46.1	43.1	49.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_05 (M052016): Number / Applying Type: CR 1 Point
Label: Milk needed in cake recipe

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	66.8	28.9	4.0	0.3	66.8	64.7	69.0
	2015	559	70.3	25.4	4.0	0.4	70.3	69.0	71.8
Norway (8)	2011	546	40.6	56.6	2.3	0.4	40.6	37.1	44.5
	2015	681	44.6	52.6	2.3	0.5	44.6	38.2	52.0
Abu Dhabi, UAE	2011	613	22.3	74.2	3.5	0.0	22.3	19.2	25.1
	2015	686	22.5	71.7	5.9	0.0	22.5	20.9	23.9
Dubai, UAE	2011	793	31.6	64.3	3.9	0.1	31.6	32.5	30.9
	2015	880	40.6	55.0	4.3	0.0	40.6	35.5	46.2
Florida, US	2011	247	37.0	59.2	3.8	0.0	37.0	32.1	41.4
	2015	296	34.1	62.9	2.7	0.4	34.1	29.9	37.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_06 (M052064): Algebra / Knowing Type: MC Key: C
Label: Value of the given expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	52.3	13.2	18.9	52.3	12.8	2.5	0.3	54.4	50.3
	2015	1465	48.8	10.7	24.0	48.8	12.2	4.0	0.3	52.4	44.9
Bahrain	2011	664	33.1	18.9	24.6	33.1	16.9	6.0	0.6	33.0	33.1
	2015	705	45.7	15.5	21.7	45.7	13.1	3.8	0.1	46.3	45.2
Botswana	2011	768	23.1	23.2	22.4	23.1	24.2	5.8	1.3	22.1	24.2
	2015	860	35.7	22.0	21.8	35.7	18.0	2.5	0.1	39.3	31.6
Chile	2011	841	25.8	22.1	26.8	25.8	13.7	10.4	1.2	24.4	27.3
	2015	695	28.5	25.3	26.2	28.5	12.4	6.2	1.5	24.4	31.9
Chinese Taipei	2011	724	72.3	10.5	10.9	72.3	5.7	0.7	0.0	74.9	69.9
	2015	823	70.5	9.6	12.6	70.5	6.7	0.4	0.2	70.3	70.6
England	2011	530	52.1	15.2	17.0	52.1	10.9	4.0	0.8	53.3	51.0
	2015	681	51.1	15.1	14.7	51.1	14.2	4.8	0.2	56.8	45.7
Georgia	2011	648	41.2	19.4	21.0	41.2	12.3	5.8	0.4	37.8	43.7
	2015	574	45.4	18.8	20.5	45.4	12.2	2.7	0.4	50.3	41.4
Hong Kong SAR	2011	577	78.2	6.5	8.5	78.2	5.3	1.2	0.3	80.0	76.5
	2015	601	81.5	5.5	7.0	81.5	4.1	1.5	0.4	84.1	79.0
Hungary	2011	736	47.8	17.9	18.3	47.8	11.0	4.6	0.3	49.9	45.8
	2015	702	56.5	15.3	17.7	56.5	8.2	2.3	0.0	58.8	54.0
Iran, Islamic Rep. of	2011	873	24.7	15.2	30.5	24.7	22.1	6.4	1.1	26.1	23.5
	2015	891	33.2	14.6	28.7	33.2	16.1	7.3	0.2	33.7	32.7
Israel	2011	672	61.2	11.8	13.5	61.2	8.9	3.7	0.8	65.2	57.0
	2015	792	61.8	11.4	12.9	61.8	9.8	4.0	0.1	63.1	60.5
Italy	2011	577	46.1	18.2	22.2	46.1	6.5	6.7	0.3	43.3	48.9
	2015	640	45.8	16.3	21.2	45.8	9.1	7.5	0.1	45.2	46.3
Japan	2011	635	52.5	8.7	23.4	52.5	13.7	1.6	0.1	48.7	55.8
	2015	683	56.0	6.3	26.0	56.0	10.3	1.2	0.1	56.2	55.9
Jordan	2011	1112	32.0	20.9	25.2	32.0	18.0	3.7	0.2	31.7	32.3
	2015	1125	28.3	20.6	27.6	28.3	17.4	5.9	0.2	29.0	27.6
Kazakhstan	2011	632	57.3	15.1	13.9	57.3	9.9	3.8	0.0	55.7	58.9
	2015	701	69.5	12.2	12.4	69.5	5.0	0.9	0.0	73.5	65.6
Korea, Rep. of	2011	740	70.1	7.2	15.9	70.1	6.0	0.8	0.0	68.3	72.0
	2015	763	68.2	9.8	16.8	68.2	3.8	1.4	0.0	65.0	71.0
Lebanon	2011	570	55.6	10.2	18.2	55.6	9.8	5.6	0.6	58.6	51.6
	2015	552	53.1	8.9	14.1	53.1	12.0	9.7	2.3	52.8	53.4
Lithuania	2011	681	52.3	17.4	16.1	52.3	10.0	4.3	0.0	57.4	47.0
	2015	633	50.1	16.9	20.5	50.1	9.6	2.8	0.0	50.7	49.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_06 (M052064): Algebra / Knowing Type: MC Key: C
Label: Value of the given expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	49.1	13.2	20.1	49.1	13.4	3.2	1.0	51.9	46.2
	2015	1401	58.1	10.8	16.2	58.1	11.6	2.8	0.5	63.7	52.5
Morocco	2011	1299	28.9	16.8	26.8	28.9	18.7	7.3	1.5	29.6	28.3
	2015	1864	30.4	18.4	27.0	30.4	18.3	5.8	0.0	31.9	29.4
New Zealand	2011	755	40.4	14.5	23.2	40.4	15.6	5.9	0.4	39.2	41.6
	2015	1145	41.3	16.5	22.3	41.3	14.9	4.8	0.3	41.0	41.5
Oman	2011	1365	34.8	16.5	25.1	34.8	16.6	5.2	1.7	39.9	29.4
	2015	1262	40.6	16.6	22.1	40.6	17.3	3.3	0.2	44.6	36.9
Qatar	2011	633	44.3	15.7	24.0	44.3	12.9	2.5	0.6	46.9	41.6
	2015	783	45.3	19.2	19.6	45.3	10.9	4.9	0.1	44.6	46.0
Russian Federation	2011	695	68.3	8.6	11.4	68.3	6.9	3.7	0.9	68.1	68.5
	2015	684	67.1	8.7	14.4	67.1	7.4	2.1	0.4	67.0	67.2
Saudi Arabia	2011	621	39.0	16.0	24.7	39.0	18.5	1.5	0.3	41.8	36.4
	2015	536	31.0	19.5	28.5	31.0	18.5	2.1	0.4	30.6	31.4
Singapore	2011	848	84.6	3.9	5.9	84.6	4.3	1.3	0.0	86.5	82.6
	2015	875	89.5	3.1	4.4	89.5	2.4	0.6	0.0	92.2	87.1
Slovenia	2011	633	53.6	19.9	12.1	53.6	7.5	6.8	0.1	56.1	51.2
	2015	615	52.6	18.0	16.4	52.6	8.2	4.8	0.0	56.2	49.9
South Africa	2011	1732	26.1	13.2	30.4	26.1	25.6	3.5	1.1	25.7	26.5
	2015	1794	32.1	12.8	31.3	32.1	22.0	1.7	0.0	35.4	28.4
Sweden	2011	805	30.2	17.9	24.5	30.2	18.4	8.1	1.0	29.8	30.6
	2015	583	39.7	12.7	21.2	39.7	16.9	8.2	1.2	36.6	42.5
Thailand	2011	874	28.2	18.2	29.7	28.2	13.9	9.7	0.2	28.5	27.9
	2015	931	29.9	18.4	27.4	29.9	19.0	5.3	0.0	28.6	31.4
Turkey	2011	993	32.4	16.0	23.3	32.4	18.4	9.7	0.1	32.0	32.8
	2015	875	28.3	18.3	29.9	28.3	20.3	3.1	0.0	30.7	26.1
United Arab Emirates	2011	2007	53.1	15.1	17.0	53.1	11.4	3.0	0.4	59.0	47.3
	2015	2563	56.7	13.5	16.7	56.7	10.4	2.6	0.0	60.9	52.6
United States	2011	1490	59.4	15.8	14.3	59.4	7.2	2.3	0.9	61.9	56.9
	2015	1454	61.8	14.2	12.6	61.8	8.5	2.1	0.8	64.4	59.2
International Avg (n=33)	2011	28614	47.0	14.9	20.0	47.0	12.9	4.6	0.6	47.9	46.0
	2015	31251	49.5	14.4	19.9	49.5	12.1	3.7	0.3	50.9	48.1
Ontario, Canada	2011	682	51.4	16.0	17.7	51.4	10.1	4.4	0.4	54.5	48.3
	2015	640	54.8	12.7	16.0	54.8	13.1	2.6	0.7	58.8	50.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_06 (M052064): Algebra / Knowing Type: MC Key: C
Label: Value of the given expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	59.1	14.7	13.8	59.1	8.5	3.6	0.4	62.9	55.1
	2015	558	66.8	12.8	7.9	66.8	9.5	2.8	0.4	69.0	64.2
Norway (8)	2011	546	25.8	18.7	32.9	25.8	14.5	7.6	0.4	28.8	22.6
	2015	681	29.8	19.1	27.5	29.8	14.9	8.1	0.5	30.7	28.7
Abu Dhabi, UAE	2011	613	49.0	16.2	20.8	49.0	12.4	1.6	0.1	55.5	43.0
	2015	686	53.9	13.5	17.7	53.9	11.2	3.7	0.0	63.0	45.4
Dubai, UAE	2011	793	54.3	14.5	17.2	54.3	9.8	3.7	0.4	55.5	53.3
	2015	880	61.1	13.5	14.3	61.1	8.8	2.3	0.0	60.6	61.6
Florida, US	2011	247	59.4	18.9	14.6	59.4	5.5	1.5	0.0	62.2	56.9
	2015	296	58.1	16.7	13.8	58.1	8.2	2.9	0.4	55.1	60.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_07 (M052126): Algebra / Applying Type: CR 1 Point
Label: Expression for the shaded area

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	8.6	80.8	10.4	0.3	8.6	7.3	9.7
	2015	1465	6.7	82.9	10.0	0.3	6.7	7.0	6.4
Bahrain	2011	664	3.1	78.6	17.4	0.8	3.1	4.0	2.3
	2015	705	4.3	78.9	16.5	0.3	4.3	5.1	3.7
Botswana	2011	768	0.7	90.6	6.4	2.3	0.7	0.0	1.5
	2015	860	0.7	95.4	3.8	0.1	0.7	0.6	0.8
Chile	2011	841	2.3	71.1	25.3	1.3	2.3	2.3	2.3
	2015	695	2.7	65.3	30.3	1.6	2.7	2.9	2.7
Chinese Taipei	2011	724	63.5	31.3	5.2	0.0	63.5	71.0	56.4
	2015	823	59.7	35.3	4.7	0.2	59.7	60.6	58.9
England	2011	530	10.1	74.1	15.0	0.8	10.1	11.7	8.6
	2015	681	11.2	74.3	14.4	0.2	11.2	13.3	9.2
Georgia	2011	648	9.9	53.7	35.7	0.7	9.9	8.1	11.3
	2015	574	7.1	61.2	31.4	0.4	7.1	7.8	6.4
Hong Kong SAR	2011	577	54.3	42.1	3.4	0.3	54.3	58.0	50.7
	2015	601	55.1	41.0	3.6	0.4	55.1	58.0	52.3
Hungary	2011	735	6.4	72.6	20.7	0.3	6.4	6.5	6.3
	2015	702	11.2	71.3	17.5	0.0	11.2	9.7	12.8
Iran, Islamic Rep. of	2011	873	5.9	67.5	25.2	1.3	5.9	6.7	5.3
	2015	891	9.1	60.3	30.4	0.2	9.1	9.0	9.2
Israel	2011	672	25.9	55.4	17.8	0.8	25.9	30.5	21.1
	2015	792	24.7	54.4	20.8	0.1	24.7	26.4	22.9
Italy	2011	577	13.4	54.0	32.3	0.3	13.4	14.3	12.5
	2015	640	15.3	52.8	31.8	0.1	15.3	17.3	13.2
Japan	2011	635	55.4	36.0	8.5	0.1	55.4	56.6	54.4
	2015	683	64.3	30.6	5.0	0.1	64.3	69.5	59.5
Jordan	2011	1112	4.2	82.7	12.8	0.3	4.2	2.8	5.4
	2015	1125	4.1	82.9	12.8	0.2	4.1	4.6	3.6
Kazakhstan	2011	632	20.9	61.9	17.2	0.0	20.9	20.0	21.9
	2015	701	32.4	56.6	11.0	0.0	32.4	36.0	28.8
Korea, Rep. of	2011	740	52.9	40.7	6.4	0.0	52.9	52.5	53.3
	2015	763	56.7	37.8	5.4	0.0	56.7	56.9	56.6
Lebanon	2011	571	7.7	71.7	20.1	0.6	7.7	9.4	5.4
	2015	555	4.8	62.9	29.2	3.1	4.8	3.3	6.4
Lithuania	2011	681	14.9	69.2	15.8	0.1	14.9	19.3	10.4
	2015	633	17.7	63.9	18.4	0.0	17.7	22.6	13.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_07 (M052126): Algebra / Applying Type: CR 1 Point
Label: Expression for the shaded area

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	4.0	85.9	9.1	1.0	4.0	4.3	3.7
	2015	1401	8.1	80.5	10.8	0.6	8.1	7.4	8.9
Morocco	2011	1309	1.3	67.9	29.4	1.5	1.3	1.7	0.9
	2015	1863	3.4	74.7	21.9	0.0	3.4	3.6	3.2
New Zealand	2011	755	4.7	85.3	9.5	0.5	4.7	4.0	5.4
	2015	1145	7.6	81.0	10.4	1.0	7.6	8.2	7.0
Oman	2011	1365	4.1	79.2	14.8	1.8	4.1	5.0	3.2
	2015	1260	8.2	81.8	9.8	0.2	8.2	11.5	5.0
Qatar	2011	633	4.8	77.6	16.9	0.7	4.8	6.9	2.6
	2015	783	6.2	80.0	13.7	0.1	6.2	5.3	7.3
Russian Federation	2011	695	34.6	42.9	21.6	0.9	34.6	33.3	35.7
	2015	684	30.4	46.5	22.7	0.4	30.4	32.6	28.4
Saudi Arabia	2011	620	4.2	85.5	9.9	0.3	4.2	3.3	5.0
	2015	536	1.7	85.8	12.1	0.4	1.7	2.6	0.8
Singapore	2011	848	63.8	34.3	1.9	0.0	63.8	64.5	63.1
	2015	875	71.5	27.4	1.2	0.0	71.5	73.1	70.1
Slovenia	2011	633	8.0	76.0	15.9	0.2	8.0	5.6	10.3
	2015	615	13.8	64.0	22.3	0.0	13.8	14.5	13.2
South Africa	2011	1732	1.2	90.9	6.6	1.3	1.2	1.1	1.2
	2015	1794	0.8	94.5	4.5	0.2	0.8	1.0	0.7
Sweden	2011	805	10.9	70.9	17.1	1.0	10.9	9.1	12.8
	2015	583	17.0	70.2	11.5	1.2	17.0	16.3	17.8
Thailand	2011	874	1.8	79.9	17.9	0.4	1.8	2.0	1.6
	2015	931	3.3	83.9	12.8	0.0	3.3	3.7	2.9
Turkey	2011	993	12.6	71.6	15.6	0.2	12.6	16.0	9.6
	2015	875	11.0	78.2	10.8	0.0	11.0	12.9	9.3
United Arab Emirates	2011	2007	7.0	83.0	9.5	0.4	7.0	8.3	5.8
	2015	2563	13.0	78.7	8.3	0.0	13.0	15.3	10.8
United States	2011	1490	7.9	86.4	4.7	0.9	7.9	8.2	7.6
	2015	1454	9.3	84.2	5.7	0.8	9.3	10.2	8.4
International Avg (n=33)	2011	28623	16.1	68.2	15.0	0.6	16.1	16.8	15.4
	2015	31251	18.0	67.3	14.4	0.4	18.0	19.0	17.0
Ontario, Canada	2011	682	4.8	83.9	10.6	0.6	4.8	4.8	4.9
	2015	640	7.9	82.5	8.8	0.8	7.9	8.2	7.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_07 (M052126): Algebra / Applying Type: CR 1 Point
Label: Expression for the shaded area

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	19.6	65.5	14.4	0.5	19.6	21.2	17.9
	2015	559	20.5	66.1	13.1	0.4	20.5	21.2	19.6
Norway (8)	2011	546	7.2	75.2	17.0	0.5	7.2	6.7	7.8
	2015	681	6.3	69.3	23.9	0.5	6.3	7.4	5.1
Abu Dhabi, UAE	2011	613	6.2	85.6	8.1	0.1	6.2	6.1	6.2
	2015	686	10.1	82.3	7.6	0.0	10.1	13.0	7.4
Dubai, UAE	2011	793	9.2	76.2	14.2	0.4	9.2	9.8	8.7
	2015	880	22.5	67.4	10.1	0.0	22.5	26.8	17.8
Florida, US	2011	247	7.8	84.1	8.1	0.0	7.8	8.5	7.3
	2015	296	8.6	82.3	8.3	0.7	8.6	3.6	12.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_08 (M052103): Algebra / Knowing Type: MC Key: B
Label: Value of y when x = 25

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	56.5	4.6	56.5	13.7	23.9	1.1	0.3	57.4	55.6
	2015	1465	52.0	5.1	52.0	14.4	25.0	3.1	0.4	52.5	51.5
Bahrain	2011	664	41.0	11.0	41.0	14.2	30.8	2.1	0.9	41.0	41.1
	2015	705	53.9	8.8	53.9	10.7	24.9	1.3	0.3	58.1	50.2
Botswana	2011	768	14.1	12.8	14.1	9.9	57.4	2.6	3.3	13.0	15.4
	2015	859	24.0	11.4	24.0	11.1	52.2	1.2	0.1	28.4	19.0
Chile	2011	841	23.8	11.4	23.8	17.3	38.9	6.8	1.7	23.5	24.1
	2015	695	40.3	8.8	40.3	18.8	26.7	3.8	1.6	41.6	39.2
Chinese Taipei	2011	724	80.8	3.9	80.8	7.4	7.8	0.1	0.0	84.5	77.3
	2015	823	76.9	4.3	76.9	7.6	10.5	0.4	0.2	76.6	77.1
England	2011	530	53.1	5.9	53.1	12.8	24.9	2.3	0.9	57.1	49.3
	2015	681	55.9	4.6	55.9	11.7	25.6	2.1	0.2	63.0	49.2
Georgia	2011	646	45.0	11.9	45.0	10.3	29.9	2.2	0.7	47.6	43.0
	2015	574	46.5	11.8	46.5	10.6	29.5	1.3	0.4	52.4	41.6
Hong Kong SAR	2011	577	85.8	3.8	85.8	2.8	6.5	0.8	0.3	87.8	84.0
	2015	601	86.9	1.4	86.9	4.3	6.7	0.3	0.4	89.0	85.1
Hungary	2011	736	54.9	9.3	54.9	10.4	23.9	1.2	0.3	52.4	57.6
	2015	702	57.9	6.9	57.9	10.3	23.7	1.1	0.0	59.2	56.5
Iran, Islamic Rep. of	2011	873	33.8	20.5	33.8	15.4	25.5	3.5	1.4	32.3	35.0
	2015	891	41.1	18.1	41.1	14.0	25.1	1.4	0.3	40.5	41.7
Israel	2011	672	74.0	5.0	74.0	6.7	12.4	1.1	0.8	80.1	67.5
	2015	792	63.8	5.8	63.8	10.8	17.8	1.8	0.1	71.0	56.6
Italy	2011	577	74.1	5.6	74.1	4.9	13.9	0.8	0.6	74.5	73.7
	2015	640	70.5	6.9	70.5	7.7	12.9	1.8	0.2	72.3	68.5
Japan	2011	635	28.7	10.5	28.7	24.9	34.1	1.6	0.1	24.6	32.4
	2015	683	31.5	9.2	31.5	18.0	38.4	2.8	0.1	31.4	31.5
Jordan	2011	1112	37.7	11.7	37.7	13.3	34.7	2.3	0.3	37.0	38.3
	2015	1125	37.4	9.5	37.4	12.8	38.5	1.6	0.2	38.0	36.7
Kazakhstan	2011	632	60.6	10.3	60.6	8.4	20.0	0.8	0.0	61.1	60.1
	2015	701	71.7	7.2	71.7	4.1	16.7	0.3	0.0	74.5	68.9
Korea, Rep. of	2011	740	56.9	3.0	56.9	12.6	26.9	0.7	0.0	53.6	60.5
	2015	763	58.9	2.3	58.9	13.0	24.6	1.2	0.0	52.9	63.8
Lebanon	2011	568	55.0	13.0	55.0	6.5	22.0	2.6	0.9	53.4	57.1
	2015	552	54.3	12.4	54.3	7.5	17.1	5.6	3.2	55.0	53.5
Lithuania	2011	681	66.4	10.3	66.4	7.0	15.9	0.3	0.1	71.5	61.2
	2015	633	63.5	10.8	63.5	9.4	15.0	1.3	0.0	63.9	63.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_08 (M052103): Algebra / Knowing Type: MC Key: B
Label: Value of y when x = 25

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	55.1	7.7	55.1	13.9	21.1	1.1	1.1	62.3	47.6
	2015	1401	66.4	4.9	66.4	10.1	17.5	0.5	0.6	70.8	62.1
Morocco	2011	1296	25.2	15.9	25.2	19.6	31.5	5.9	1.9	29.1	21.8
	2015	1866	27.4	15.9	27.4	17.3	35.9	3.3	0.3	29.7	25.5
New Zealand	2011	755	43.0	6.4	43.0	18.9	27.3	4.0	0.5	43.9	42.1
	2015	1145	46.3	5.6	46.3	15.8	28.1	3.3	1.0	45.1	47.6
Oman	2011	1365	32.2	11.8	32.2	14.8	36.0	2.9	2.3	36.2	28.0
	2015	1262	43.2	9.7	43.2	10.6	35.1	1.2	0.2	46.8	39.8
Qatar	2011	633	39.1	16.1	39.1	11.0	31.5	1.4	0.9	39.8	38.4
	2015	783	42.4	11.9	42.4	12.1	32.0	1.4	0.1	44.4	40.4
Russian Federation	2011	695	77.0	2.8	77.0	5.8	11.6	1.2	1.6	79.7	74.8
	2015	684	74.3	4.0	74.3	5.3	15.2	0.9	0.4	76.5	72.2
Saudi Arabia	2011	621	38.8	16.6	38.8	10.8	32.7	0.8	0.3	38.8	38.8
	2015	536	36.1	12.3	36.1	15.7	35.5	0.1	0.4	35.6	36.6
Singapore	2011	848	91.5	0.9	91.5	3.0	3.7	0.7	0.1	94.0	88.9
	2015	875	93.2	0.9	93.2	2.6	2.8	0.5	0.0	94.9	91.6
Slovenia	2011	633	65.7	5.8	65.7	7.8	19.1	1.3	0.2	69.7	61.8
	2015	615	68.3	4.5	68.3	9.3	16.7	1.2	0.0	68.6	68.0
South Africa	2011	1732	26.6	25.6	26.6	17.0	27.5	2.0	1.4	26.0	27.1
	2015	1794	36.2	24.9	36.2	10.5	26.6	1.3	0.5	37.7	34.5
Sweden	2011	805	27.3	3.8	27.3	15.7	44.1	8.0	1.0	23.8	30.8
	2015	583	29.3	5.3	29.3	18.7	35.9	9.1	1.6	29.0	29.7
Thailand	2011	874	27.3	13.9	27.3	17.6	35.7	5.0	0.4	26.5	28.4
	2015	931	29.0	16.5	29.0	15.5	36.3	2.7	0.0	29.2	28.8
Turkey	2011	993	41.9	13.0	41.9	11.4	32.0	1.3	0.4	46.9	37.4
	2015	875	45.1	12.8	45.1	11.6	30.1	0.2	0.1	47.5	42.8
United Arab Emirates	2011	2007	55.8	7.7	55.8	8.5	26.1	1.3	0.6	58.8	52.8
	2015	2563	62.8	6.2	62.8	8.7	21.2	1.1	0.0	68.0	57.6
United States	2011	1490	66.4	7.5	66.4	7.3	16.0	1.7	1.0	67.6	65.2
	2015	1454	70.6	5.6	70.6	8.0	13.1	1.7	1.0	72.7	68.6
International Avg (n=33)	2011	28607	50.2	9.7	50.2	11.6	25.6	2.2	0.8	51.4	49.0
	2015	31252	53.3	8.7	53.3	11.2	24.6	1.8	0.4	55.1	51.5
Ontario, Canada	2011	682	49.2	8.0	49.2	11.2	28.0	2.8	0.7	52.2	46.1
	2015	640	60.1	7.9	60.1	8.7	21.0	0.9	1.4	59.9	60.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_08 (M052103): Algebra / Knowing Type: MC Key: B
Label: Value of y when x = 25

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	71.4	7.2	71.4	7.0	10.8	2.8	0.8	75.3	67.4
	2015	557	80.9	6.2	80.9	3.1	6.9	2.2	0.7	83.0	78.4
Norway (8)	2011	546	32.2	6.4	32.2	13.6	42.4	4.5	0.8	33.6	30.7
	2015	681	29.7	5.5	29.7	20.3	36.7	7.2	0.6	29.0	30.6
Abu Dhabi, UAE	2011	613	50.4	8.0	50.4	10.2	30.3	0.7	0.4	53.2	47.8
	2015	686	59.6	5.6	59.6	9.8	23.9	1.0	0.1	68.5	51.4
Dubai, UAE	2011	793	61.5	6.5	61.5	6.9	22.5	2.0	0.6	60.1	62.7
	2015	880	72.4	4.8	72.4	6.8	14.9	1.1	0.0	76.2	68.3
Florida, US	2011	247	72.4	11.5	72.4	5.8	9.5	0.7	0.0	77.6	67.7
	2015	296	62.4	11.8	62.4	10.7	11.7	2.7	0.7	66.4	59.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_09 (M052066): Algebra / Applying Type: MC Key: C
Label: Formula for the new rectangle

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	54.5	14.4	16.0	54.5	11.3	3.3	0.4	53.9	55.1
	2015	1465	52.5	19.1	15.1	52.5	10.0	2.8	0.5	53.6	51.3
Bahrain	2011	664	43.0	15.4	25.9	43.0	11.6	3.2	0.9	48.4	37.9
	2015	705	50.1	17.2	18.0	50.1	12.1	2.2	0.5	54.3	46.4
Botswana	2011	768	36.6	19.9	22.1	36.6	14.7	3.0	3.8	35.6	37.7
	2015	859	34.6	28.0	21.9	34.6	13.4	1.9	0.1	38.0	30.9
Chile	2011	841	27.9	36.3	21.5	27.9	8.2	4.1	1.9	27.1	28.7
	2015	695	29.1	37.2	20.6	29.1	7.5	3.8	1.8	30.3	28.1
Chinese Taipei	2011	724	76.3	10.0	9.1	76.3	4.3	0.3	0.0	76.0	76.6
	2015	823	75.8	12.2	6.5	75.8	5.1	0.1	0.2	75.1	76.4
England	2011	530	54.1	15.7	13.8	54.1	11.7	3.8	0.9	56.0	52.3
	2015	681	56.4	16.5	14.8	56.4	9.5	2.7	0.2	59.3	53.6
Georgia	2011	646	50.3	16.8	21.4	50.3	7.9	2.8	0.7	54.0	47.6
	2015	574	50.8	17.7	19.0	50.8	9.7	2.3	0.4	55.9	46.7
Hong Kong SAR	2011	577	74.5	11.3	7.8	74.5	5.6	0.5	0.3	77.2	71.9
	2015	601	77.8	10.9	6.6	77.8	3.8	0.6	0.4	78.6	77.0
Hungary	2011	736	46.6	21.4	17.4	46.6	11.4	2.8	0.3	45.8	47.4
	2015	702	48.2	20.6	15.6	48.2	14.6	1.0	0.0	50.6	45.7
Iran, Islamic Rep. of	2011	873	42.0	13.6	22.1	42.0	17.8	3.0	1.4	41.0	42.9
	2015	891	49.6	18.2	19.8	49.6	10.4	1.7	0.3	51.7	47.7
Israel	2011	672	53.6	13.2	19.8	53.6	9.5	2.9	1.0	55.3	51.7
	2015	792	53.2	18.2	18.0	53.2	6.9	3.6	0.1	54.7	51.8
Italy	2011	577	53.8	14.6	16.5	53.8	10.5	3.9	0.6	52.4	55.2
	2015	640	47.6	21.8	18.5	47.6	9.1	2.8	0.2	48.1	47.1
Japan	2011	635	70.4	11.5	12.3	70.4	5.1	0.6	0.1	69.6	71.2
	2015	683	73.9	10.0	11.4	73.9	3.4	1.1	0.1	76.9	71.2
Jordan	2011	1112	44.3	16.6	22.3	44.3	13.7	2.7	0.5	45.7	43.0
	2015	1125	38.9	20.9	25.6	38.9	12.1	2.3	0.3	39.9	38.0
Kazakhstan	2011	632	60.4	14.2	15.5	60.4	7.5	2.4	0.0	64.6	56.2
	2015	701	70.3	10.3	9.7	70.3	9.1	0.6	0.0	75.9	64.7
Korea, Rep. of	2011	740	78.5	7.5	10.0	78.5	3.7	0.3	0.0	78.6	78.4
	2015	763	76.8	9.2	8.4	76.8	5.2	0.4	0.0	76.7	76.9
Lebanon	2011	567	50.2	17.2	16.7	50.2	10.6	4.5	0.9	47.8	53.2
	2015	550	46.1	15.2	18.2	46.1	10.8	6.5	3.2	47.6	44.5
Lithuania	2011	681	61.8	14.6	15.4	61.8	6.8	1.3	0.1	69.2	54.2
	2015	633	58.8	18.1	13.0	58.8	8.5	1.6	0.0	65.1	53.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_09 (M052066): Algebra / Applying Type: MC Key: C
Label: Formula for the new rectangle

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	34.3	24.8	24.1	34.3	12.8	2.7	1.2	37.1	31.3
	2015	1401	36.4	25.9	22.8	36.4	12.9	1.4	0.6	41.6	31.2
Morocco	2011	1295	33.7	18.5	31.0	33.7	9.7	4.9	2.2	34.7	32.8
	2015	1866	39.0	19.0	24.6	39.0	13.8	3.3	0.3	42.7	36.0
New Zealand	2011	755	51.8	16.8	18.0	51.8	9.1	3.9	0.5	50.7	52.9
	2015	1145	49.0	20.2	19.7	49.0	7.7	2.4	1.0	49.1	48.9
Oman	2011	1365	27.4	25.3	26.6	27.4	14.1	4.3	2.4	27.9	26.8
	2015	1262	31.9	25.7	28.4	31.9	11.6	2.2	0.2	32.0	31.8
Qatar	2011	633	38.4	17.8	27.0	38.4	12.5	3.5	0.9	41.2	35.3
	2015	783	45.9	25.3	17.2	45.9	9.4	1.9	0.2	47.0	44.8
Russian Federation	2011	695	70.8	11.4	9.3	70.8	4.5	2.2	1.9	73.6	68.4
	2015	684	75.0	7.6	7.6	75.0	7.4	2.1	0.4	79.6	70.6
Saudi Arabia	2011	621	31.7	18.7	28.9	31.7	19.5	0.8	0.3	32.2	31.2
	2015	536	25.7	20.4	37.5	25.7	15.3	0.7	0.4	25.8	25.6
Singapore	2011	848	77.0	8.2	6.4	77.0	7.2	1.0	0.2	80.8	73.2
	2015	875	81.7	8.2	4.2	81.7	5.2	0.8	0.0	81.2	82.2
Slovenia	2011	633	45.2	23.8	16.6	45.2	10.4	3.8	0.3	44.6	45.9
	2015	615	45.0	23.9	15.5	45.0	13.1	2.5	0.0	47.3	43.1
South Africa	2011	1732	26.4	20.6	31.8	26.4	16.8	2.9	1.4	26.1	26.8
	2015	1794	29.5	25.0	26.6	29.5	16.7	1.6	0.6	30.8	27.9
Sweden	2011	805	42.1	20.1	18.9	42.1	11.4	6.3	1.2	45.2	39.0
	2015	583	44.0	17.5	15.3	44.0	12.5	9.0	1.7	49.6	39.7
Thailand	2011	874	40.5	20.7	18.6	40.5	13.7	5.9	0.5	41.8	38.8
	2015	931	37.7	24.4	22.4	37.7	10.5	5.0	0.0	39.0	36.2
Turkey	2011	993	45.2	20.4	19.1	45.2	11.3	3.5	0.4	46.9	43.7
	2015	875	47.3	19.1	20.0	47.3	13.1	0.3	0.1	49.2	45.6
United Arab Emirates	2011	2007	47.6	17.9	21.3	47.6	10.0	2.4	0.7	49.6	45.6
	2015	2563	49.5	17.5	20.2	49.5	11.2	1.5	0.1	50.6	48.4
United States	2011	1490	59.0	16.0	12.6	59.0	9.2	1.7	1.5	61.9	56.1
	2015	1454	59.6	17.6	12.4	59.6	7.5	1.9	1.0	64.8	54.4
International Avg (n=33)	2011	28605	50.0	17.1	18.7	50.0	10.4	2.9	0.9	51.3	48.8
	2015	31250	51.1	18.7	17.4	51.1	10.0	2.3	0.5	53.4	49.0
Ontario, Canada	2011	682	62.3	14.1	10.5	62.3	8.8	3.0	1.2	66.3	58.2
	2015	640	61.8	15.6	9.4	61.8	10.3	1.5	1.4	63.4	59.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_09 (M052066): Algebra / Applying Type: MC Key: C
Label: Formula for the new rectangle

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	62.7	14.8	11.4	62.7	7.3	2.3	1.4	63.7	61.6
	2015	558	69.9	10.0	7.3	69.9	10.5	1.6	0.7	70.6	69.1
Norway (8)	2011	546	30.9	23.7	29.1	30.9	11.6	3.8	0.8	31.6	30.2
	2015	681	33.2	24.5	23.0	33.2	12.1	6.5	0.6	33.3	33.1
Abu Dhabi, UAE	2011	613	42.6	19.6	24.3	42.6	10.9	2.2	0.4	40.9	44.1
	2015	686	42.6	19.1	24.7	42.6	12.3	1.0	0.4	46.5	39.0
Dubai, UAE	2011	793	52.4	17.3	15.6	52.4	10.3	3.6	0.8	56.3	49.1
	2015	880	63.2	15.2	10.7	63.2	8.3	2.7	0.0	63.9	62.6
Florida, US	2011	247	61.6	16.3	13.2	61.6	7.9	1.0	0.0	64.7	58.7
	2015	296	54.4	18.7	14.6	54.4	8.6	2.7	1.1	55.6	53.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_10 (M052041): Geometry / Reasoning Type: CR 1 Point
Label: Height of the building

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	15.2	72.4	12.0	0.4	15.2	13.1	17.2
	2015	1465	13.2	75.3	10.9	0.6	13.2	11.7	14.9
Bahrain	2011	664	9.5	71.1	18.4	1.0	9.5	10.3	8.7
	2015	705	8.2	73.7	17.1	1.0	8.2	8.6	7.8
Botswana	2011	768	3.0	86.3	6.2	4.5	3.0	2.9	3.1
	2015	859	2.7	92.7	4.3	0.3	2.7	2.6	2.8
Chile	2011	841	4.8	70.9	22.1	2.1	4.8	4.1	5.6
	2015	695	5.5	66.4	26.0	2.1	5.5	5.2	5.7
Chinese Taipei	2011	724	44.8	42.9	12.3	0.0	44.8	40.6	48.7
	2015	823	39.9	46.6	13.2	0.2	39.9	37.4	42.3
England	2011	530	11.1	77.6	10.4	0.9	11.1	9.1	13.0
	2015	681	11.7	75.4	12.7	0.2	11.7	11.4	11.9
Georgia	2011	650	6.2	41.5	51.5	0.7	6.2	1.6	9.7
	2015	574	6.0	55.1	38.4	0.4	6.0	4.2	7.5
Hong Kong SAR	2011	577	42.1	47.5	10.1	0.3	42.1	43.3	41.1
	2015	601	43.7	46.4	9.5	0.4	43.7	40.1	47.2
Hungary	2011	736	14.4	65.1	20.1	0.3	14.4	10.6	18.3
	2015	702	16.1	67.8	16.2	0.0	16.1	16.1	16.1
Iran, Islamic Rep. of	2011	873	5.7	67.8	24.9	1.6	5.7	4.1	7.1
	2015	891	5.1	64.5	29.7	0.6	5.1	3.9	6.2
Israel	2011	672	24.1	53.2	21.2	1.4	24.1	24.6	23.5
	2015	792	19.6	58.0	21.8	0.6	19.6	21.1	18.0
Italy	2011	577	15.1	47.3	37.0	0.6	15.1	15.3	14.8
	2015	640	15.2	51.7	32.6	0.5	15.2	13.7	16.8
Japan	2011	635	31.1	58.9	9.8	0.1	31.1	26.8	34.9
	2015	683	34.2	58.0	7.7	0.1	34.2	32.4	35.8
Jordan	2011	1112	5.3	83.1	11.2	0.5	5.3	3.8	6.6
	2015	1125	5.2	83.2	11.4	0.3	5.2	5.0	5.3
Kazakhstan	2011	632	20.8	60.1	19.0	0.1	20.8	18.5	23.2
	2015	701	48.7	44.8	6.5	0.0	48.7	49.2	48.2
Korea, Rep. of	2011	740	62.0	33.2	4.8	0.0	62.0	60.1	64.1
	2015	763	61.3	32.3	6.4	0.0	61.3	55.0	66.5
Lebanon	2011	571	6.3	60.1	32.7	0.9	6.3	4.8	8.3
	2015	555	6.0	56.5	34.1	3.3	6.0	4.4	7.8
Lithuania	2011	681	11.0	64.6	24.3	0.1	11.0	8.8	13.3
	2015	633	12.1	61.9	26.0	0.0	12.1	8.2	15.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_10 (M052041): Geometry / Reasoning Type: CR 1 Point
Label: Height of the building

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	9.5	75.9	12.7	1.8	9.5	8.4	10.7
	2015	1401	11.8	73.5	13.8	0.9	11.8	11.4	12.2
Morocco	2011	1309	4.7	62.9	30.0	2.4	4.7	6.3	3.3
	2015	1868	6.5	70.7	22.4	0.4	6.5	8.5	4.9
New Zealand	2011	755	10.2	77.7	11.6	0.5	10.2	5.7	14.6
	2015	1145	13.6	75.4	9.9	1.1	13.6	12.0	15.3
Oman	2011	1365	3.1	75.8	18.5	2.6	3.1	3.6	2.6
	2015	1259	4.6	84.3	10.9	0.2	4.6	5.9	3.3
Qatar	2011	633	7.5	71.3	20.2	1.1	7.5	8.5	6.4
	2015	783	7.2	77.8	14.6	0.4	7.2	7.9	6.4
Russian Federation	2011	695	31.2	48.1	18.4	2.3	31.2	30.8	31.6
	2015	683	34.3	42.3	23.0	0.4	34.3	30.8	37.8
Saudi Arabia	2011	621	11.6	77.8	10.3	0.3	11.6	10.6	12.4
	2015	535	5.9	83.3	10.4	0.4	5.9	5.8	6.1
Singapore	2011	848	47.4	47.3	5.1	0.2	47.4	45.0	49.9
	2015	875	48.7	45.2	6.0	0.1	48.7	46.3	50.8
Slovenia	2011	633	11.2	67.6	20.9	0.3	11.2	9.2	13.2
	2015	615	11.3	72.0	16.7	0.0	11.3	10.8	11.6
South Africa	2011	1732	2.6	90.2	5.3	1.9	2.6	1.4	3.7
	2015	1794	3.5	90.3	5.4	0.8	3.5	3.5	3.5
Sweden	2011	805	11.3	63.8	23.6	1.3	11.3	9.8	12.8
	2015	583	10.6	65.2	21.9	2.2	10.6	9.4	11.7
Thailand	2011	874	4.6	76.4	18.3	0.6	4.6	3.8	5.8
	2015	931	4.8	84.9	10.3	0.0	4.8	3.7	6.2
Turkey	2011	993	13.7	62.9	22.8	0.6	13.7	13.5	13.9
	2015	875	12.8	74.8	12.3	0.1	12.8	14.0	11.8
United Arab Emirates	2011	2007	12.4	73.9	12.9	0.8	12.4	14.5	10.3
	2015	2562	12.5	76.1	11.2	0.2	12.5	10.3	14.8
United States	2011	1490	20.8	71.3	6.4	1.6	20.8	20.4	21.1
	2015	1454	17.5	75.9	5.6	1.0	17.5	14.7	20.4
International Avg (n=33)	2011	28627	16.2	65.0	17.7	1.0	16.2	15.0	17.4
	2015	31251	17.0	66.7	15.7	0.6	17.0	15.9	18.0
Ontario, Canada	2011	682	12.0	73.7	12.9	1.5	12.0	9.2	14.9
	2015	640	12.5	71.7	14.5	1.4	12.5	10.7	14.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_10 (M052041): Geometry / Reasoning Type: CR 1 Point
Label: Height of the building

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	25.3	54.3	18.9	1.4	25.3	25.0	25.6
	2015	559	22.6	52.6	23.9	0.9	22.6	19.9	26.0
Norway (8)	2011	546	8.8	74.4	16.0	0.8	8.8	8.4	9.3
	2015	681	9.1	73.0	17.1	0.8	9.1	8.3	10.1
Abu Dhabi, UAE	2011	613	8.9	78.6	12.0	0.4	8.9	9.3	8.6
	2015	686	11.9	76.3	11.5	0.4	11.9	9.5	14.1
Dubai, UAE	2011	793	12.1	70.2	16.5	1.2	12.1	15.1	9.5
	2015	879	15.0	71.9	12.8	0.3	15.0	10.6	19.8
Florida, US	2011	247	40.5	56.1	3.5	0.0	40.5	45.1	36.3
	2015	296	14.0	77.0	8.0	1.1	14.0	9.8	17.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_11 (M052057): Geometry / Reasoning Type: MC Key: D
Label: Figure that can be folded as box

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	69.9	7.0	16.4	5.4	69.9	0.9	0.4	67.9	71.8
	2015	1465	68.3	6.9	16.2	5.0	68.3	2.8	0.7	67.8	68.8
Bahrain	2011	664	37.4	22.3	18.1	18.7	37.4	2.2	1.4	42.0	33.0
	2015	699	54.1	15.1	17.1	11.5	54.1	0.8	1.4	51.4	56.4
Botswana	2011	768	34.1	22.5	20.1	15.6	34.1	2.6	5.1	30.2	38.2
	2015	859	42.4	22.2	18.8	14.8	42.4	1.4	0.4	42.4	42.5
Chile	2011	841	56.5	13.2	21.6	5.3	56.5	1.0	2.4	53.1	59.9
	2015	695	57.9	11.5	22.6	5.7	57.9	0.1	2.1	56.3	59.2
Chinese Taipei	2011	724	78.3	2.8	14.5	3.3	78.3	1.2	0.0	79.5	77.1
	2015	823	77.1	3.1	14.2	5.3	77.1	0.1	0.2	73.9	80.2
England	2011	530	62.2	7.9	21.4	6.7	62.2	0.8	0.9	68.5	56.4
	2015	681	67.1	6.7	20.2	4.9	67.1	0.8	0.2	69.6	64.8
Georgia	2011	649	37.7	25.7	22.8	10.2	37.7	1.9	1.6	36.4	38.7
	2015	574	45.9	17.8	23.4	9.8	45.9	2.3	0.8	46.9	45.1
Hong Kong SAR	2011	577	71.3	3.5	20.3	4.3	71.3	0.2	0.3	73.4	69.4
	2015	601	74.8	3.6	17.9	3.2	74.8	0.2	0.4	71.0	78.4
Hungary	2011	736	63.7	7.6	18.5	7.8	63.7	1.8	0.5	62.5	65.0
	2015	702	62.3	10.3	19.5	7.1	62.3	0.8	0.0	61.1	63.5
Iran, Islamic Rep. of	2011	873	46.6	22.4	17.5	9.6	46.6	2.1	1.9	47.9	45.4
	2015	891	56.0	17.0	15.5	9.0	56.0	1.8	0.6	57.3	54.9
Israel	2011	672	56.8	10.5	18.6	10.1	56.8	2.1	1.9	56.6	57.0
	2015	792	56.7	14.2	17.1	9.5	56.7	1.5	0.9	58.1	55.2
Italy	2011	577	59.5	11.4	20.5	6.4	59.5	1.2	1.0	55.8	63.0
	2015	640	62.2	9.4	18.0	8.2	62.2	1.8	0.5	62.5	61.9
Japan	2011	635	76.7	2.6	15.9	3.1	76.7	1.6	0.1	75.6	77.8
	2015	683	76.7	2.3	16.0	3.7	76.7	1.2	0.1	75.8	77.6
Jordan	2011	1112	38.7	26.7	17.4	14.8	38.7	1.3	1.0	40.7	36.9
	2015	1125	35.9	29.7	16.4	16.3	35.9	1.4	0.4	38.7	33.3
Kazakhstan	2011	632	51.4	17.3	21.5	8.2	51.4	1.4	0.2	50.3	52.6
	2015	701	69.0	11.4	15.2	3.7	69.0	0.6	0.0	68.0	70.0
Korea, Rep. of	2011	740	81.7	2.6	13.4	2.1	81.7	0.1	0.0	82.4	81.0
	2015	763	80.8	2.4	12.8	3.5	80.8	0.4	0.0	78.3	82.9
Lebanon	2011	567	37.6	19.4	22.3	14.4	37.6	4.3	1.9	36.2	39.3
	2015	547	29.1	23.8	22.5	15.3	29.1	5.8	3.5	26.7	31.7
Lithuania	2011	681	67.6	6.3	20.3	4.2	67.6	1.5	0.1	71.4	63.7
	2015	633	67.8	5.2	19.0	6.8	67.8	1.3	0.0	71.4	64.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_11 (M052057): Geometry / Reasoning Type: MC Key: D
Label: Figure that can be folded as box

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	56.3	10.7	22.8	6.7	56.3	1.1	2.5	55.1	57.6
	2015	1401	64.0	10.4	18.4	5.7	64.0	0.3	1.2	61.0	66.9
Morocco	2011	1293	43.0	21.8	17.8	10.8	43.0	3.1	3.4	38.9	46.4
	2015	1868	49.6	24.1	16.7	7.3	49.6	1.6	0.7	47.4	51.4
New Zealand	2011	755	64.6	6.4	20.5	5.9	64.6	2.0	0.7	62.6	66.4
	2015	1145	68.6	6.9	16.1	6.6	68.6	0.7	1.1	67.9	69.3
Oman	2011	1365	35.0	24.6	19.9	14.6	35.0	3.1	2.9	39.3	30.3
	2015	1262	39.6	25.7	18.2	14.2	39.6	2.0	0.2	45.7	33.9
Qatar	2011	633	35.0	24.3	21.8	15.1	35.0	2.5	1.2	39.6	30.2
	2015	783	48.8	20.2	18.8	10.3	48.8	1.1	0.8	53.1	44.3
Russian Federation	2011	695	60.9	9.0	18.6	6.7	60.9	2.0	2.8	60.5	61.2
	2015	683	68.6	8.7	14.5	5.0	68.6	2.6	0.5	67.9	69.2
Saudi Arabia	2011	621	45.0	21.5	19.8	12.3	45.0	0.9	0.5	48.7	41.7
	2015	536	34.1	30.3	17.6	16.5	34.1	1.2	0.4	40.2	27.4
Singapore	2011	848	73.9	2.6	19.4	3.7	73.9	0.2	0.3	70.5	77.3
	2015	875	79.6	2.7	13.5	3.5	79.6	0.6	0.1	74.1	84.4
Slovenia	2011	634	67.3	9.1	15.3	5.1	67.3	2.3	0.8	64.5	69.9
	2015	615	67.5	7.0	19.1	4.6	67.5	1.7	0.0	66.3	68.5
South Africa	2011	1732	29.6	26.0	20.6	18.6	29.6	3.1	2.1	28.1	31.0
	2015	1794	39.0	23.4	23.0	12.7	39.0	1.0	0.8	37.9	40.2
Sweden	2011	805	55.3	10.8	23.9	5.4	55.3	3.1	1.5	58.1	52.9
	2015	583	57.3	7.0	21.4	6.7	57.3	4.6	3.0	55.3	59.1
Thailand	2011	874	49.0	15.6	25.4	7.9	49.0	1.5	0.7	45.5	53.5
	2015	931	56.4	17.2	21.2	4.6	56.4	0.5	0.0	52.6	60.8
Turkey	2011	993	44.4	20.1	22.9	10.9	44.4	1.0	0.7	48.2	41.1
	2015	875	48.9	20.8	18.9	10.9	48.9	0.2	0.3	49.4	48.6
United Arab Emirates	2011	2007	49.7	16.6	18.6	12.6	49.7	1.5	1.0	53.1	46.3
	2015	2563	53.8	16.6	18.1	9.3	53.8	1.9	0.3	59.6	48.0
United States	2011	1490	60.5	11.9	17.9	7.1	60.5	0.9	1.8	61.4	59.7
	2015	1454	62.1	12.9	17.5	5.9	62.1	0.7	1.0	61.4	62.8
International Avg (n=33)	2011	28607	54.5	14.0	19.6	8.9	54.5	1.7	1.3	54.7	54.3
	2015	31242	58.2	13.5	18.0	8.1	58.2	1.4	0.7	58.1	58.3
Ontario, Canada	2011	682	63.8	8.9	17.2	6.9	63.8	1.0	2.1	63.8	63.8
	2015	639	68.6	7.4	15.3	6.3	68.6	0.5	2.0	65.7	72.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_11 (M052057): Geometry / Reasoning Type: MC Key: D
Label: Figure that can be folded as box

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	68.2	3.9	17.6	6.9	68.2	1.7	1.8	68.1	68.2
	2015	556	70.9	2.7	13.8	10.6	70.9	1.1	0.9	70.5	71.5
Norway (8)	2011	546	56.2	9.3	21.3	8.0	56.2	3.6	1.5	54.5	58.1
	2015	681	60.5	10.7	20.3	4.4	60.5	3.3	0.8	63.5	57.0
Abu Dhabi, UAE	2011	613	51.5	14.6	19.0	12.8	51.5	1.3	0.8	54.6	48.7
	2015	686	52.6	18.7	16.9	9.0	52.6	2.2	0.5	58.9	46.7
Dubai, UAE	2011	793	51.1	15.9	17.3	11.6	51.1	2.9	1.2	49.9	52.2
	2015	880	59.2	12.4	18.3	7.8	59.2	2.0	0.3	62.4	55.8
Florida, US	2011	247	55.8	15.4	22.4	5.8	55.8	0.6	0.0	42.8	67.8
	2015	296	61.4	9.6	16.4	10.6	61.4	0.8	1.1	62.7	60.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_12 (M052417): Geometry / Applying Type: CR 1 Point
Label: Value of angle x in figure

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	36.8	54.0	8.8	0.4	36.8	33.9	39.5
	2015	1465	31.6	58.5	9.2	0.7	31.6	30.0	33.4
Bahrain	2011	664	24.0	61.6	12.9	1.5	24.0	25.8	22.3
	2015	699	20.3	66.9	11.3	1.5	20.3	22.8	18.1
Botswana	2011	768	18.1	72.6	3.5	5.9	18.1	20.4	15.6
	2015	859	27.2	70.3	1.7	0.7	27.2	29.4	24.8
Chile	2011	841	19.8	56.0	21.2	3.0	19.8	20.8	18.8
	2015	695	22.3	52.0	23.7	2.1	22.3	19.9	24.2
Chinese Taipei	2011	724	67.3	26.1	6.5	0.0	67.3	70.9	64.0
	2015	823	74.4	20.8	4.6	0.2	74.4	74.3	74.5
England	2011	530	48.4	42.4	8.3	0.9	48.4	50.4	46.5
	2015	681	49.2	41.3	9.3	0.2	49.2	50.5	48.0
Georgia	2011	652	21.5	46.5	30.4	1.7	21.5	20.8	21.9
	2015	574	28.7	50.3	20.3	0.8	28.7	29.1	28.3
Hong Kong SAR	2011	577	80.2	15.9	3.6	0.3	80.2	82.0	78.4
	2015	601	80.3	16.1	3.2	0.4	80.3	80.4	80.3
Hungary	2011	736	45.2	39.9	14.3	0.5	45.2	44.6	45.8
	2015	702	47.3	43.5	9.2	0.0	47.3	47.2	47.3
Iran, Islamic Rep. of	2011	873	35.5	51.5	10.8	2.1	35.5	32.3	38.4
	2015	891	38.7	50.1	10.4	0.8	38.7	41.2	36.3
Israel	2011	671	52.7	33.3	11.9	2.1	52.7	52.6	52.9
	2015	792	53.2	34.4	11.5	0.9	53.2	54.1	52.2
Italy	2011	577	44.0	39.7	15.3	1.0	44.0	41.3	46.6
	2015	640	36.5	46.1	17.0	0.5	36.5	37.4	35.4
Japan	2011	635	79.9	17.9	2.1	0.1	79.9	78.7	81.0
	2015	683	86.3	11.8	1.8	0.1	86.3	88.4	84.3
Jordan	2011	1112	32.6	61.1	5.3	1.0	32.6	34.4	30.9
	2015	1125	29.6	65.3	4.7	0.4	29.6	30.0	29.2
Kazakhstan	2011	632	47.5	41.0	11.2	0.2	47.5	46.7	48.3
	2015	701	62.5	31.4	6.1	0.1	62.5	64.0	61.0
Korea, Rep. of	2011	740	87.8	11.2	1.0	0.0	87.8	89.7	85.8
	2015	763	87.2	10.7	2.1	0.0	87.2	88.1	86.5
Lebanon	2011	571	45.8	40.7	11.3	2.2	45.8	43.1	49.1
	2015	555	50.6	35.4	10.5	3.6	50.6	47.9	53.4
Lithuania	2011	681	39.3	50.4	10.2	0.1	39.3	39.2	39.4
	2015	633	40.6	47.2	12.2	0.0	40.6	39.7	41.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_12 (M052417): Geometry / Applying Type: CR 1 Point
Label: Value of angle x in figure

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	27.4	61.9	7.9	2.9	27.4	28.4	26.3
	2015	1401	32.0	58.9	8.0	1.2	32.0	33.1	30.9
Morocco	2011	1309	21.8	53.0	21.8	3.5	21.8	23.2	20.6
	2015	1867	33.2	55.0	11.0	0.8	33.2	34.7	32.1
New Zealand	2011	755	34.9	58.2	6.2	0.8	34.9	28.5	41.0
	2015	1145	34.4	56.3	8.1	1.1	34.4	34.1	34.8
Oman	2011	1365	21.0	65.4	10.4	3.1	21.0	23.9	18.0
	2015	1256	30.4	64.2	5.0	0.4	30.4	32.8	28.2
Qatar	2011	633	30.1	59.6	9.1	1.2	30.1	32.8	27.2
	2015	783	30.6	62.2	6.5	0.8	30.6	29.2	32.0
Russian Federation	2011	695	60.9	29.4	6.7	3.1	60.9	59.1	62.4
	2015	684	63.6	25.0	10.2	1.1	63.6	61.6	65.6
Saudi Arabia	2011	621	22.7	70.0	6.9	0.5	22.7	22.2	23.1
	2015	535	13.1	76.8	9.7	0.4	13.1	13.0	13.1
Singapore	2011	848	79.4	19.0	1.3	0.3	79.4	80.8	78.1
	2015	875	85.1	14.1	0.7	0.1	85.1	85.5	84.7
Slovenia	2011	634	44.6	48.2	6.3	0.8	44.6	40.1	49.0
	2015	615	45.4	45.6	9.0	0.0	45.4	46.7	44.3
South Africa	2011	1732	15.4	77.6	4.7	2.2	15.4	15.5	15.4
	2015	1794	21.9	75.2	2.1	0.8	21.9	24.1	19.3
Sweden	2011	805	36.1	44.2	17.9	1.8	36.1	36.8	35.5
	2015	582	36.5	43.9	16.5	3.2	36.5	38.7	34.8
Thailand	2011	874	30.6	56.3	12.0	1.1	30.6	32.2	28.6
	2015	931	29.5	62.0	8.3	0.1	29.5	31.4	27.4
Turkey	2011	993	40.9	45.8	12.4	0.8	40.9	45.1	37.2
	2015	875	37.2	56.2	6.3	0.3	37.2	38.8	35.8
United Arab Emirates	2011	2007	28.9	64.9	5.2	1.0	28.9	31.5	26.4
	2015	2558	34.5	59.6	5.4	0.5	34.5	34.7	34.3
United States	2011	1490	37.6	56.8	3.6	2.0	37.6	37.4	37.9
	2015	1454	42.3	53.1	3.5	1.2	42.3	41.1	43.4
International Avg (n=33)	2011	28629	41.2	47.6	9.7	1.5	41.2	41.4	41.0
	2015	31237	43.5	47.3	8.4	0.8	43.5	44.1	43.0
Ontario, Canada	2011	682	41.6	49.4	6.7	2.3	41.6	37.0	46.3
	2015	640	47.8	44.7	5.4	2.1	47.8	43.1	53.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_12 (M052417): Geometry / Applying Type: CR 1 Point
Label: Value of angle x in figure

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	53.7	35.8	8.6	1.8	53.7	53.3	54.2
	2015	559	57.6	33.0	8.5	0.9	57.6	56.0	59.5
Norway (8)	2011	546	32.0	56.0	10.6	1.5	32.0	29.1	35.1
	2015	681	35.6	51.4	12.1	0.9	35.6	35.0	36.2
Abu Dhabi, UAE	2011	613	30.8	62.9	5.6	0.8	30.8	33.7	28.1
	2015	684	30.1	63.4	5.7	0.8	30.1	32.0	28.3
Dubai, UAE	2011	793	28.3	64.2	6.3	1.2	28.3	28.6	28.0
	2015	879	46.9	46.9	5.5	0.7	46.9	46.6	47.1
Florida, US	2011	247	38.9	58.1	3.0	0.0	38.9	42.0	36.1
	2015	296	34.9	58.4	5.6	1.1	34.9	32.1	37.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_13 (M052501): Data and Chance / Reasoning Type: CR 1 Point
Label: Sports survey bar graph mistake

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	39.5	39.1	20.7	0.6	39.5	41.3	37.9
	2015	1465	38.2	42.4	18.4	1.0	38.2	39.9	36.4
Bahrain	2011	664	11.3	44.7	41.2	2.8	11.3	15.3	7.4
	2015	705	15.3	49.9	32.9	1.9	15.3	18.9	12.2
Botswana	2011	768	1.6	70.7	21.3	6.4	1.6	1.4	1.7
	2015	860	4.0	73.2	21.7	1.1	4.0	5.4	2.4
Chile	2011	841	11.9	41.0	42.9	4.3	11.9	14.5	9.2
	2015	695	20.6	29.1	48.0	2.3	20.6	20.3	20.9
Chinese Taipei	2011	724	31.7	53.2	15.2	0.0	31.7	33.6	29.9
	2015	823	40.3	44.8	14.6	0.2	40.3	43.8	37.1
England	2011	530	44.1	39.4	15.4	1.2	44.1	54.1	34.9
	2015	681	52.4	34.3	12.6	0.6	52.4	60.4	44.9
Georgia	2011	652	8.0	23.8	66.0	2.2	8.0	9.0	7.3
	2015	574	12.3	27.7	57.2	2.9	12.3	14.2	10.6
Hong Kong SAR	2011	577	45.9	39.6	14.3	0.3	45.9	50.5	41.5
	2015	601	46.5	43.5	9.7	0.4	46.5	47.3	45.7
Hungary	2011	736	42.1	27.8	29.0	1.1	42.1	45.5	38.8
	2015	702	45.7	31.0	23.2	0.0	45.7	50.4	40.9
Iran, Islamic Rep. of	2011	873	13.2	40.4	44.0	2.5	13.2	14.5	12.0
	2015	891	19.3	41.3	38.5	0.9	19.3	21.3	17.4
Israel	2011	672	29.1	44.4	23.8	2.8	29.1	32.3	25.6
	2015	792	35.8	37.4	25.6	1.2	35.8	37.7	33.9
Italy	2011	577	23.4	33.2	41.9	1.5	23.4	24.5	22.4
	2015	640	22.5	40.8	35.1	1.6	22.5	27.4	17.5
Japan	2011	635	51.9	31.8	16.1	0.3	51.9	52.2	51.7
	2015	683	50.8	36.0	13.1	0.1	50.8	57.5	44.6
Jordan	2011	1112	13.8	55.8	28.9	1.6	13.8	14.4	13.2
	2015	1125	5.0	64.8	29.4	0.7	5.0	5.3	4.7
Kazakhstan	2011	632	19.8	32.3	47.1	0.7	19.8	20.6	19.1
	2015	701	26.7	42.8	30.4	0.1	26.7	29.0	24.4
Korea, Rep. of	2011	740	47.1	44.5	8.4	0.0	47.1	50.2	43.7
	2015	763	40.1	49.3	10.1	0.4	40.1	40.6	39.7
Lebanon	2011	571	16.0	29.7	50.0	4.3	16.0	16.7	15.2
	2015	555	13.5	27.3	54.7	4.5	13.5	15.0	11.9
Lithuania	2011	681	28.0	42.5	29.2	0.2	28.0	30.3	25.7
	2015	633	29.9	37.0	33.1	0.0	29.9	36.0	24.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_13 (M052501): Data and Chance / Reasoning Type: CR 1 Point
Label: Sports survey bar graph mistake

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	5.9	58.1	32.5	3.5	5.9	7.2	4.5
	2015	1401	11.0	59.8	27.4	1.7	11.0	10.8	11.1
Morocco	2011	1309	6.4	31.4	57.4	4.9	6.4	8.4	4.7
	2015	1868	7.2	37.6	54.0	1.1	7.2	9.0	5.7
New Zealand	2011	755	37.5	43.1	18.6	0.8	37.5	40.4	34.7
	2015	1145	35.9	44.8	18.0	1.3	35.9	39.5	31.9
Oman	2011	1365	7.2	50.8	37.8	4.2	7.2	8.4	6.0
	2015	1258	10.1	63.3	26.1	0.6	10.1	12.8	7.5
Qatar	2011	633	9.1	48.6	40.4	1.9	9.1	12.2	5.7
	2015	783	20.4	46.3	32.2	1.0	20.4	24.2	16.4
Russian Federation	2011	695	31.1	25.4	39.7	3.9	31.1	33.1	29.4
	2015	684	25.6	30.8	41.8	1.7	25.6	28.5	22.9
Saudi Arabia	2011	621	8.5	58.8	32.1	0.7	8.5	9.0	8.0
	2015	535	8.9	50.9	39.8	0.4	8.9	15.3	1.9
Singapore	2011	848	51.0	41.9	6.6	0.5	51.0	56.4	45.4
	2015	875	64.2	29.4	6.3	0.1	64.2	67.1	61.7
Slovenia	2011	634	30.3	42.5	25.8	1.5	30.3	33.4	27.2
	2015	615	42.4	33.8	23.9	0.0	42.4	50.0	36.4
South Africa	2011	1732	6.6	65.6	25.1	2.7	6.6	6.3	6.9
	2015	1794	7.5	71.4	20.0	1.2	7.5	8.9	5.9
Sweden	2011	805	33.0	34.8	29.6	2.6	33.0	41.9	24.3
	2015	581	43.3	27.1	23.9	5.7	43.3	50.3	37.6
Thailand	2011	874	16.3	39.0	42.9	1.8	16.3	17.7	14.4
	2015	931	22.0	45.6	30.8	1.5	22.0	26.1	17.3
Turkey	2011	993	14.9	45.1	39.2	0.9	14.9	18.9	11.3
	2015	875	23.6	48.8	27.3	0.3	23.6	24.6	22.6
United Arab Emirates	2011	2007	16.7	53.9	28.3	1.2	16.7	20.3	13.0
	2015	2563	17.4	57.2	24.6	0.8	17.4	21.4	13.5
United States	2011	1490	27.4	61.5	8.7	2.4	27.4	29.4	25.4
	2015	1454	34.8	55.0	8.7	1.5	34.8	36.4	33.2
International Avg (n=33)	2011	28630	23.6	43.5	30.9	2.0	23.6	26.2	21.2
	2015	31251	27.1	44.1	27.7	1.2	27.1	30.2	24.1
Ontario, Canada	2011	682	45.9	37.9	13.3	2.9	45.9	50.1	41.6
	2015	640	49.0	35.0	13.5	2.5	49.0	52.8	45.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_13 (M052501): Data and Chance / Reasoning Type: CR 1 Point
Label: Sports survey bar graph mistake

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	35.8	46.2	15.8	2.3	35.8	34.1	37.4
	2015	559	24.9	57.0	16.4	1.7	24.9	24.8	25.0
Norway (8)	2011	546	29.4	47.4	21.5	1.7	29.4	34.9	23.5
	2015	681	36.8	37.9	24.0	1.3	36.8	40.6	32.3
Abu Dhabi, UAE	2011	613	17.5	53.5	27.9	1.1	17.5	21.1	14.1
	2015	686	14.4	62.7	21.5	1.4	14.4	19.0	10.2
Dubai, UAE	2011	793	20.4	49.5	28.6	1.6	20.4	24.0	17.3
	2015	880	26.0	52.0	20.9	1.1	26.0	29.0	22.8
Florida, US	2011	247	20.8	68.8	10.4	0.0	20.8	22.5	19.2
	2015	296	24.8	59.5	13.9	1.8	24.8	25.2	24.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M03_14 (M052410): Data and Chance / Applying Type: MC Key: B
Label: Students that chose History

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1067	63.8	20.5	63.8	11.4	2.0	1.7	0.7	64.5	63.1
	2015	1465	60.0	24.4	60.0	10.0	2.6	1.8	1.2	62.5	57.3
Bahrain	2011	664	42.6	25.9	42.6	19.0	7.3	1.9	3.4	39.2	45.8
	2015	705	46.1	23.9	46.1	19.1	6.5	1.3	3.1	45.2	46.9
Botswana	2011	768	34.1	31.0	34.1	15.4	8.0	2.6	8.9	34.6	33.6
	2015	860	31.3	33.6	31.3	21.0	10.7	2.0	1.6	31.6	30.9
Chile	2011	841	42.3	29.5	42.3	16.7	3.8	2.2	5.5	38.9	45.9
	2015	695	43.0	31.8	43.0	16.5	4.3	1.7	2.7	43.8	42.4
Chinese Taipei	2011	724	73.5	10.4	73.5	12.3	2.9	0.8	0.1	71.0	75.8
	2015	823	70.3	12.8	70.3	13.6	2.5	0.1	0.7	68.7	71.8
England	2011	530	59.3	15.4	59.3	19.1	3.9	0.9	1.4	58.4	60.1
	2015	681	66.9	17.3	66.9	11.9	1.9	1.2	0.8	70.4	63.6
Georgia	2011	652	42.9	17.7	42.9	17.7	15.0	4.0	2.6	44.1	42.0
	2015	574	49.0	19.3	49.0	19.5	6.8	1.8	3.5	47.5	50.3
Hong Kong SAR	2011	577	66.2	11.3	66.2	18.0	3.8	0.2	0.5	64.7	67.6
	2015	601	72.5	11.2	72.5	11.6	3.8	0.6	0.4	71.2	73.6
Hungary	2011	736	64.2	16.3	64.2	14.7	1.8	1.9	1.1	59.7	68.7
	2015	702	66.3	16.3	66.3	12.1	3.8	1.5	0.0	66.6	65.9
Iran, Islamic Rep. of	2011	873	41.3	28.5	41.3	16.0	8.5	2.5	3.3	40.8	41.8
	2015	891	40.1	28.4	40.1	17.1	9.9	2.4	2.1	37.2	42.8
Israel	2011	671	60.5	18.0	60.5	12.0	3.7	2.2	3.5	58.8	62.3
	2015	792	55.3	18.8	55.3	18.5	2.9	2.6	1.8	55.3	55.3
Italy	2011	577	54.8	23.1	54.8	13.9	4.6	1.1	2.4	48.2	61.2
	2015	640	58.1	21.0	58.1	13.7	3.3	1.8	2.2	56.4	59.9
Japan	2011	635	72.5	14.5	72.5	8.7	2.8	0.5	0.9	70.0	74.8
	2015	683	74.5	15.6	74.5	7.9	1.4	0.3	0.3	72.8	76.1
Jordan	2011	1112	41.7	23.4	41.7	20.9	10.5	1.6	2.0	41.4	42.0
	2015	1125	36.9	27.3	36.9	20.6	11.6	2.4	1.1	35.6	38.2
Kazakhstan	2011	632	54.3	17.5	54.3	18.0	6.1	3.2	0.8	50.5	58.1
	2015	701	58.9	15.6	58.9	19.0	5.2	0.9	0.4	56.2	61.7
Korea, Rep. of	2011	740	74.4	10.3	74.4	13.8	1.5	0.0	0.0	72.0	77.1
	2015	763	71.6	11.3	71.6	15.1	1.4	0.2	0.5	69.9	73.0
Lebanon	2011	570	42.6	20.6	42.6	20.5	6.3	3.4	6.7	40.5	45.2
	2015	546	40.3	20.8	40.3	17.3	8.3	5.9	7.4	40.6	39.8
Lithuania	2011	681	66.4	15.5	66.4	13.3	2.2	1.4	1.2	69.0	63.7
	2015	633	63.2	18.4	63.2	14.4	2.6	1.2	0.3	63.8	62.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_14 (M052410): Data and Chance / Applying Type: MC Key: B
Label: Students that chose History

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	42.5	26.0	42.5	18.9	6.4	1.5	4.7	41.0	44.0
	2015	1401	42.6	29.8	42.6	19.0	4.7	1.5	2.3	37.8	47.4
Morocco	2011	1295	36.4	23.9	36.4	19.4	11.1	2.8	6.3	35.8	36.9
	2015	1868	38.3	25.7	38.3	19.5	12.9	2.2	1.4	35.5	40.5
New Zealand	2011	755	59.6	21.9	59.6	13.1	2.3	1.7	1.5	59.4	59.8
	2015	1145	57.6	23.2	57.6	13.0	2.7	1.4	2.1	56.5	58.9
Oman	2011	1365	37.4	20.9	37.4	20.5	13.7	2.0	5.5	40.2	34.4
	2015	1261	34.0	27.0	34.0	26.7	9.6	1.5	1.2	37.8	30.4
Qatar	2011	633	41.8	23.2	41.8	21.5	7.9	2.1	3.5	46.3	37.0
	2015	783	47.2	24.4	47.2	18.1	6.5	2.0	1.8	45.0	49.5
Russian Federation	2011	695	64.3	13.7	64.3	12.3	3.2	1.6	4.9	66.5	62.4
	2015	683	62.6	14.9	62.6	11.4	3.7	3.6	3.8	58.2	66.8
Saudi Arabia	2011	621	46.9	23.2	46.9	19.7	8.1	1.3	0.8	46.0	47.8
	2015	536	33.4	29.0	33.4	24.0	11.3	1.6	0.6	32.4	34.5
Singapore	2011	848	69.5	8.1	69.5	17.3	3.7	0.8	0.8	68.3	70.7
	2015	875	70.7	11.3	70.7	15.3	1.8	0.5	0.3	66.4	74.5
Slovenia	2011	634	63.9	17.2	63.9	12.7	2.1	2.2	1.9	63.1	64.5
	2015	615	60.5	19.1	60.5	15.9	2.8	1.7	0.0	56.9	63.4
South Africa	2011	1732	34.8	27.6	34.8	15.8	16.0	2.1	3.7	34.8	34.6
	2015	1794	35.1	34.7	35.1	14.8	12.5	0.9	1.9	33.0	37.4
Sweden	2011	805	59.9	20.2	59.9	10.3	2.0	3.3	4.3	58.9	61.1
	2015	583	53.7	22.3	53.7	10.6	2.1	4.7	6.6	50.9	56.0
Thailand	2011	874	49.3	17.3	49.3	20.9	7.0	2.2	3.2	49.5	49.1
	2015	931	47.2	20.7	47.2	22.0	5.8	2.3	1.8	48.5	45.8
Turkey	2011	992	47.0	24.3	47.0	19.6	6.4	1.4	1.4	44.4	49.3
	2015	875	40.1	29.7	40.1	21.6	6.9	1.0	0.6	40.2	40.1
United Arab Emirates	2011	2007	46.1	23.4	46.1	19.8	7.1	1.5	2.1	45.4	46.8
	2015	2563	44.4	25.2	44.4	19.3	7.1	2.5	1.4	44.7	44.2
United States	2011	1490	51.7	26.4	51.7	13.6	3.2	1.9	3.1	49.6	53.8
	2015	1454	52.2	28.5	52.2	13.0	2.8	1.5	2.0	50.4	54.0
International Avg (n=33)	2011	28612	53.0	20.2	53.0	16.3	5.9	1.8	2.8	52.0	54.0
	2015	31247	52.2	22.2	52.2	16.5	5.5	1.8	1.8	51.2	53.2
Ontario, Canada	2011	682	56.4	22.5	56.4	12.5	3.2	2.3	3.2	53.9	58.9
	2015	639	59.2	23.7	59.2	10.6	1.1	2.2	3.2	60.0	58.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_14 (M052410): Data and Chance / Applying Type: MC Key: B
Label: Students that chose History

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	66.1	12.5	66.1	12.8	3.0	2.9	2.6	67.1	64.9
	2015	558	60.3	16.1	60.3	15.9	2.1	3.4	2.3	62.4	57.8
Norway (8)	2011	546	58.3	20.9	58.3	14.2	2.3	1.9	2.4	56.1	60.8
	2015	681	58.3	21.0	58.3	16.6	1.6	1.1	1.4	62.4	53.4
Abu Dhabi, UAE	2011	613	42.3	28.7	42.3	19.2	6.7	1.1	1.9	39.7	44.7
	2015	686	42.3	27.4	42.3	19.1	7.9	2.0	1.5	40.7	43.7
Dubai, UAE	2011	793	52.1	21.3	52.1	16.2	6.9	1.3	2.2	52.7	51.6
	2015	880	48.8	24.0	48.8	17.6	6.1	1.7	1.7	47.7	50.0
Florida, US	2011	247	56.7	29.8	56.7	9.5	3.0	0.6	0.4	50.8	62.2
	2015	296	45.1	31.4	45.1	17.0	2.8	1.2	2.5	38.3	50.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_15 (M052170): Data and Chance / Applying Type: MC Key: B
Label: List with specified mean and range

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1068	42.9	13.0	42.9	23.0	16.6	3.5	0.9	41.8	43.9
	2015	1465	42.9	13.4	42.9	23.2	16.0	3.1	1.4	39.7	46.3
Bahrain	2011	664	38.3	11.2	38.3	25.3	19.2	2.4	3.6	39.3	37.4
	2015	705	44.4	11.8	44.4	25.1	13.0	2.4	3.4	45.6	43.3
Botswana	2011	768	25.8	12.6	25.8	23.5	26.2	2.0	9.8	26.0	25.6
	2015	860	27.6	13.9	27.6	31.3	22.4	2.8	2.0	27.9	27.2
Chile	2011	841	23.0	11.5	23.0	31.4	22.3	5.9	5.9	23.8	22.2
	2015	695	23.5	10.5	23.5	38.6	20.6	3.9	2.9	24.1	23.0
Chinese Taipei	2011	724	55.8	8.3	55.8	20.6	14.6	0.5	0.1	52.9	58.5
	2015	823	52.6	9.8	52.6	21.5	14.9	0.5	0.7	51.0	54.2
England	2011	530	47.2	9.3	47.2	25.3	12.7	3.9	1.6	48.9	45.7
	2015	681	50.8	10.7	50.8	22.2	11.8	3.7	0.9	52.7	49.0
Georgia	2011	652	36.2	9.8	36.2	28.3	15.8	7.2	2.6	34.9	37.3
	2015	574	38.8	10.6	38.8	28.3	15.8	3.1	3.5	39.5	38.1
Hong Kong SAR	2011	576	55.2	9.4	55.2	20.5	13.8	0.5	0.5	60.2	50.5
	2015	601	55.8	12.5	55.8	19.6	10.3	1.2	0.5	58.8	53.0
Hungary	2011	736	35.5	11.8	35.5	29.2	18.1	4.1	1.3	36.2	34.7
	2015	702	41.3	12.5	41.3	26.9	16.8	2.5	0.0	39.6	42.9
Iran, Islamic Rep. of	2011	873	28.8	10.5	28.8	30.1	23.0	4.0	3.6	26.7	30.7
	2015	891	35.3	12.3	35.3	26.8	18.5	4.4	2.6	35.7	34.8
Israel	2011	671	48.6	12.5	48.6	19.8	9.2	5.8	4.2	51.2	45.8
	2015	792	47.3	9.7	47.3	24.4	11.0	5.5	2.1	49.9	44.7
Italy	2011	576	33.9	9.7	33.9	28.1	21.1	4.8	2.5	32.2	35.5
	2015	640	35.3	9.6	35.3	27.0	22.2	3.4	2.6	32.2	38.6
Japan	2011	635	49.7	9.9	49.7	19.5	18.2	1.5	1.2	49.8	49.7
	2015	683	62.5	9.5	62.5	15.5	10.7	1.6	0.3	62.8	62.2
Jordan	2011	1112	34.3	10.9	34.3	26.7	22.7	3.3	2.2	36.8	32.1
	2015	1125	37.3	10.3	37.3	20.6	28.2	2.3	1.3	38.4	36.2
Kazakhstan	2011	632	37.6	14.9	37.6	25.9	17.2	3.5	0.9	37.9	37.3
	2015	701	44.9	14.0	44.9	22.5	16.1	1.9	0.6	43.4	46.4
Korea, Rep. of	2011	740	61.5	10.0	61.5	14.8	13.5	0.2	0.0	58.4	65.0
	2015	763	58.3	9.3	58.3	17.6	13.1	1.2	0.5	54.9	61.2
Lebanon	2011	533	26.5	8.6	26.5	24.6	21.0	11.9	7.5	26.4	26.7
	2015	499	20.0	13.7	20.0	22.4	18.6	17.0	8.3	19.9	20.1
Lithuania	2011	681	40.1	8.8	40.1	26.8	18.7	4.2	1.4	41.7	38.5
	2015	633	40.2	11.6	40.2	23.4	20.8	3.4	0.7	42.7	37.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_15 (M052170): Data and Chance / Applying Type: MC Key: B
Label: List with specified mean and range

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	816	25.9	9.9	25.9	32.3	25.4	1.6	4.9	27.1	24.6
	2015	1401	32.5	9.8	32.5	30.1	22.3	2.5	2.8	31.1	33.8
Morocco	2011	1264	30.3	10.0	30.3	26.0	22.5	4.6	6.6	29.9	30.6
	2015	1868	33.7	12.7	33.7	23.5	23.9	4.8	1.4	34.1	33.4
New Zealand	2011	755	41.6	12.4	41.6	23.9	16.1	4.1	1.9	37.5	45.6
	2015	1145	42.2	12.8	42.2	23.9	15.6	3.2	2.3	43.4	40.9
Oman	2011	1365	30.1	12.6	30.1	25.3	23.3	3.0	5.7	28.3	32.0
	2015	1261	34.5	12.6	34.5	28.9	21.4	1.3	1.3	33.6	35.4
Qatar	2011	633	31.6	12.8	31.6	25.0	22.9	3.9	3.8	33.2	29.9
	2015	783	37.4	13.1	37.4	23.0	21.0	3.5	2.1	36.6	38.1
Russian Federation	2011	695	37.5	16.7	37.5	17.8	16.3	6.7	5.0	39.1	36.3
	2015	683	42.1	16.6	42.1	16.4	15.5	4.4	5.0	41.9	42.4
Saudi Arabia	2011	621	38.2	16.6	38.2	24.9	18.1	1.2	1.1	36.1	40.1
	2015	536	31.1	15.4	31.1	29.6	22.2	1.1	0.6	34.7	27.1
Singapore	2011	848	58.7	10.1	58.7	18.7	10.8	0.8	0.9	59.0	58.3
	2015	875	59.1	8.1	59.1	20.9	10.9	0.4	0.5	58.3	59.8
Slovenia	2011	634	30.2	10.6	30.2	24.9	26.8	4.9	2.5	26.3	33.9
	2015	615	38.5	12.8	38.5	22.5	21.9	4.1	0.2	39.9	37.5
South Africa	2011	1732	25.9	12.7	25.9	25.4	27.3	5.0	3.8	23.7	27.9
	2015	1794	25.1	9.7	25.1	32.2	27.8	3.2	2.0	23.8	26.7
Sweden	2011	805	37.5	12.1	37.5	22.3	14.6	8.7	4.7	37.5	37.4
	2015	583	36.5	9.1	36.5	25.2	14.3	7.7	7.3	35.8	36.7
Thailand	2011	874	28.2	15.8	28.2	20.8	28.0	4.0	3.2	26.2	30.8
	2015	931	29.3	17.3	29.3	20.8	29.5	1.3	1.8	29.3	29.2
Turkey	2011	993	39.1	11.1	39.1	29.1	17.3	2.1	1.4	41.7	36.9
	2015	875	40.2	15.0	40.2	26.2	16.4	1.1	1.1	38.5	41.7
United Arab Emirates	2011	2007	35.8	13.8	35.8	21.4	23.2	3.6	2.2	36.3	35.4
	2015	2563	39.3	13.7	39.3	25.2	18.0	2.4	1.5	39.1	39.5
United States	2011	1490	50.4	13.4	50.4	18.4	12.6	1.7	3.6	48.8	51.9
	2015	1454	50.5	12.4	50.5	19.6	13.5	1.5	2.5	48.1	52.8
International Avg (n=33)	2011	28544	38.2	11.6	38.2	24.2	19.1	3.8	3.1	38.1	38.4
	2015	31200	40.3	12.0	40.3	24.4	18.0	3.2	2.0	40.2	40.4
Ontario, Canada	2011	682	46.7	10.4	46.7	20.0	16.0	2.5	4.4	41.3	52.2
	2015	639	48.7	9.2	48.7	21.6	14.2	2.7	3.7	45.8	52.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M03_15 (M052170): Data and Chance / Applying Type: MC Key: B
Label: List with specified mean and range

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	865	42.1	11.3	42.1	21.7	14.4	6.8	3.6	41.9	42.3
	2015	547	42.6	14.8	42.6	24.4	11.4	4.1	2.8	43.8	41.1
Norway (8)	2011	546	48.9	7.7	48.9	22.2	13.8	4.6	2.9	51.4	46.3
	2015	681	44.5	11.4	44.5	24.0	12.4	6.1	1.6	47.7	40.8
Abu Dhabi, UAE	2011	613	36.5	14.1	36.5	23.0	20.6	3.8	1.9	36.7	36.4
	2015	686	39.2	15.4	39.2	24.8	16.7	2.4	1.5	40.3	38.2
Dubai, UAE	2011	793	38.7	10.9	38.7	21.1	22.4	4.4	2.5	39.6	37.9
	2015	880	43.5	9.6	43.5	23.1	19.1	2.9	1.9	40.1	47.1
Florida, US	2011	247	57.6	11.2	57.6	18.7	10.5	1.3	0.7	53.4	61.5
	2015	296	42.0	11.3	42.0	24.3	18.1	1.8	2.5	39.7	43.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_01 (M042183): Number / Knowing Type: MC Key: D
Label: Find the number

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	69.2	9.7	11.3	8.3	69.2	1.4	0.1	69.6	68.7
	2015	1453	69.2	9.0	9.5	10.7	69.2	1.1	0.5	72.4	65.8
Bahrain	2011	650	41.7	19.9	17.2	16.0	41.7	4.9	0.3	44.9	38.3
	2015	707	61.4	12.5	15.2	10.9	61.4	0.0	0.0	61.7	61.1
Botswana	2011	761	48.1	17.0	15.7	17.4	48.1	1.8	0.0	49.8	46.3
	2015	839	62.1	12.1	14.8	9.9	62.1	1.2	0.0	62.7	61.3
Chile	2011	831	33.8	27.8	17.3	14.6	33.8	6.1	0.3	32.2	35.6
	2015	673	33.8	28.1	15.8	18.1	33.8	4.0	0.3	31.3	36.5
Chinese Taipei	2011	719	61.3	28.0	4.7	5.7	61.3	0.3	0.0	61.5	61.2
	2015	804	65.2	26.8	4.4	3.2	65.2	0.4	0.0	65.3	65.1
England	2011	548	73.4	11.4	6.6	7.9	73.4	0.3	0.3	74.4	72.5
	2015	697	75.5	7.5	7.1	9.2	75.5	0.4	0.3	76.2	74.8
Georgia	2011	649	53.2	14.4	17.7	12.8	53.2	1.3	0.6	50.5	55.4
	2015	574	52.5	19.4	16.2	9.9	52.5	1.6	0.4	48.9	55.7
Hong Kong SAR	2011	574	80.4	9.5	4.7	5.0	80.4	0.4	0.0	81.4	79.4
	2015	587	82.1	11.0	3.0	3.6	82.1	0.2	0.1	85.7	78.9
Hungary	2011	730	70.9	11.0	9.7	7.0	70.9	1.2	0.2	71.9	70.0
	2015	704	67.2	12.0	12.5	8.1	67.2	0.3	0.0	64.7	69.8
Iran, Islamic Rep. of	2011	870	29.4	28.3	20.0	19.0	29.4	3.1	0.2	24.2	33.8
	2015	883	44.2	21.5	19.4	11.9	44.2	2.8	0.2	42.4	45.9
Israel	2011	674	62.6	8.8	20.0	6.4	62.6	1.6	0.6	63.3	62.0
	2015	782	59.9	9.0	22.6	7.0	59.9	1.3	0.2	58.5	61.5
Italy	2011	555	71.1	12.0	11.0	5.0	71.1	0.9	0.0	66.3	75.7
	2015	627	68.3	12.6	12.7	5.5	68.3	0.9	0.0	65.8	70.5
Japan	2011	634	63.2	20.7	6.2	9.2	63.2	0.5	0.2	66.3	60.4
	2015	673	69.3	21.8	3.7	4.8	69.3	0.4	0.0	68.2	70.5
Jordan	2011	1091	37.7	17.6	23.0	18.6	37.7	2.9	0.1	34.7	40.8
	2015	1120	36.5	19.3	16.9	23.9	36.5	3.2	0.2	37.5	35.5
Kazakhstan	2011	625	63.1	18.2	11.5	5.8	63.1	1.2	0.1	68.7	57.0
	2015	688	66.4	20.1	8.5	4.2	66.4	0.7	0.1	70.2	62.4
Korea, Rep. of	2011	741	51.0	41.3	1.9	5.7	51.0	0.1	0.0	47.2	55.0
	2015	759	57.0	36.2	2.1	3.9	57.0	0.8	0.0	53.4	60.3
Lebanon	2011	549	52.9	11.1	26.3	6.1	52.9	3.4	0.2	49.2	56.9
	2015	553	62.5	8.8	19.3	4.1	62.5	3.2	2.2	60.7	64.5
Lithuania	2011	671	72.8	11.7	10.8	3.6	72.8	0.9	0.1	77.1	68.5
	2015	628	65.1	12.7	16.1	5.4	65.1	0.6	0.0	65.8	64.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_01 (M042183): Number / Knowing Type: MC Key: D
Label: Find the number

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	58.8	12.1	22.2	5.4	58.8	0.6	0.9	63.8	53.4
	2015	1377	63.6	8.6	24.1	3.2	63.6	0.5	0.0	67.1	60.4
Morocco	2011	1318	50.4	18.9	16.7	11.7	50.4	2.1	0.4	50.5	50.2
	2015	1867	46.5	22.5	16.2	11.7	46.5	3.0	0.1	47.4	45.8
New Zealand	2011	764	58.6	9.7	16.5	12.2	58.6	2.5	0.6	56.2	60.5
	2015	1125	60.4	9.5	13.1	15.5	60.4	1.3	0.1	60.2	60.6
Oman	2011	1359	33.4	15.3	30.5	15.8	33.4	4.6	0.5	34.0	32.7
	2015	1264	43.6	12.9	32.1	10.4	43.6	0.9	0.1	45.0	42.3
Qatar	2011	626	52.1	11.5	21.5	12.8	52.1	1.8	0.4	57.6	47.0
	2015	767	65.1	13.6	12.8	6.5	65.1	1.3	0.7	65.7	64.4
Russian Federation	2011	709	78.7	5.9	10.4	3.6	78.7	0.8	0.5	78.9	78.6
	2015	681	68.9	12.4	13.2	4.3	68.9	0.8	0.4	66.4	71.2
Saudi Arabia	2011	616	44.7	13.0	26.0	14.6	44.7	1.7	0.0	48.1	41.5
	2015	525	34.8	20.4	26.6	16.0	34.8	1.9	0.2	35.1	34.5
Singapore	2011	844	88.2	5.4	2.2	4.0	88.2	0.2	0.0	88.9	87.4
	2015	871	90.5	5.0	1.1	3.0	90.5	0.4	0.1	89.4	91.5
Slovenia	2011	632	64.9	12.1	13.7	8.2	64.9	1.0	0.0	66.1	63.8
	2015	602	69.3	11.5	11.9	5.6	69.3	1.7	0.0	73.4	65.2
South Africa	2011	1688	46.1	16.1	23.1	11.1	46.1	2.7	0.8	50.2	42.6
	2015	1785	44.7	18.5	22.4	12.6	44.7	1.6	0.3	44.9	44.4
Sweden	2011	798	71.2	9.3	9.4	7.8	71.2	2.1	0.3	74.4	68.1
	2015	596	64.0	13.5	12.7	7.3	64.0	1.4	1.1	67.8	60.6
Thailand	2011	868	47.0	22.4	16.1	12.4	47.0	1.9	0.2	53.5	39.2
	2015	927	40.7	25.2	16.6	16.3	40.7	1.0	0.1	43.9	36.9
Turkey	2011	996	41.2	19.0	18.6	17.7	41.2	3.5	0.0	40.6	42.0
	2015	879	40.9	25.5	19.6	13.1	40.9	0.9	0.0	37.9	43.6
United Arab Emirates	2011	2008	63.1	11.7	16.1	7.8	63.1	1.2	0.1	65.4	60.8
	2015	2573	65.4	12.0	14.8	6.6	65.4	1.0	0.1	69.0	61.9
United States	2011	1482	70.2	12.6	9.3	6.9	70.2	0.8	0.2	71.5	68.9
	2015	1476	72.2	12.9	7.6	6.2	72.2	1.0	0.1	74.2	70.2
International Avg (n=33)	2011	28493	57.7	15.6	14.8	9.9	57.7	1.8	0.2	58.6	56.8
	2015	31066	59.7	15.9	14.1	8.9	59.7	1.3	0.2	60.0	59.3
Ontario, Canada	2011	663	79.2	7.3	7.6	5.1	79.2	0.3	0.5	83.0	75.9
	2015	654	77.6	7.5	7.9	5.6	77.6	1.0	0.6	76.8	78.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_01 (M042183): Number / Knowing Type: MC Key: D
Label: Find the number

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	84.9	4.8	4.5	5.3	84.9	0.4	0.1	84.1	85.8
	2015	573	83.5	5.2	7.5	2.8	83.5	0.7	0.2	83.1	84.1
Norway (8)	2011	543	70.2	7.4	11.1	10.4	70.2	0.7	0.2	67.8	72.4
	2015	686	68.3	6.9	10.7	12.2	68.3	2.0	0.0	66.7	70.1
Abu Dhabi, UAE	2011	624	61.5	11.4	18.3	8.3	61.5	0.5	0.0	64.0	59.2
	2015	687	65.4	12.6	15.2	5.5	65.4	0.9	0.3	69.6	61.5
Dubai, UAE	2011	798	67.3	11.9	11.8	6.7	67.3	1.9	0.4	69.8	64.8
	2015	884	70.6	11.4	11.2	6.3	70.6	0.3	0.1	72.7	68.5
Florida, US	2011	245	79.7	8.2	6.3	4.9	79.7	0.9	0.0	77.3	82.1
	2015	296	75.8	10.6	5.6	6.3	75.8	1.4	0.3	77.5	74.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_02 (M042060): Number / Knowing Type: MC Key: B
Label: Fraction by which price reduced by

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	73.5	13.6	73.5	9.8	0.6	2.4	0.1	70.0	77.1
	2015	1453	71.8	13.8	71.8	10.3	1.3	2.1	0.7	71.4	72.3
Bahrain	2011	650	40.5	35.4	40.5	15.7	6.0	2.0	0.3	37.7	43.5
	2015	707	62.0	21.7	62.0	10.8	5.0	0.5	0.0	59.5	64.2
Botswana	2011	761	42.0	30.9	42.0	15.6	9.8	1.6	0.0	49.2	34.7
	2015	839	46.8	29.9	46.8	11.7	9.1	2.5	0.0	50.0	43.2
Chile	2011	831	31.6	49.1	31.6	9.5	6.4	2.9	0.5	27.9	35.6
	2015	673	28.7	48.8	28.7	11.0	7.4	3.8	0.3	22.7	34.9
Chinese Taipei	2011	719	74.3	17.8	74.3	4.8	2.7	0.5	0.0	71.6	76.8
	2015	804	74.3	17.1	74.3	5.0	3.1	0.5	0.0	72.6	76.0
England	2011	548	71.3	16.6	71.3	8.9	2.0	0.8	0.3	66.4	76.2
	2015	697	70.6	18.9	70.6	9.6	0.4	0.1	0.3	67.8	73.6
Georgia	2011	649	46.9	36.7	46.9	8.0	5.4	2.5	0.6	41.8	50.8
	2015	574	51.8	29.5	51.8	10.8	3.5	3.9	0.4	46.6	56.5
Hong Kong SAR	2011	574	80.6	9.6	80.6	8.0	1.6	0.2	0.0	81.8	79.5
	2015	587	82.8	8.1	82.8	7.4	1.2	0.4	0.1	80.6	84.8
Hungary	2011	730	54.3	31.8	54.3	7.8	3.9	1.6	0.6	47.4	60.5
	2015	704	51.8	34.5	51.8	8.7	4.5	0.5	0.0	49.2	54.6
Iran, Islamic Rep. of	2011	870	47.4	25.8	47.4	12.1	12.3	2.1	0.3	40.9	53.1
	2015	883	51.5	27.6	51.5	10.3	7.7	2.7	0.2	47.8	55.1
Israel	2011	674	65.2	18.4	65.2	10.8	3.8	1.1	0.6	62.4	67.7
	2015	782	71.6	16.2	71.6	7.6	2.6	1.7	0.2	68.9	74.6
Italy	2011	555	50.3	33.6	50.3	7.7	5.1	3.3	0.0	45.9	54.5
	2015	627	49.9	30.3	49.9	10.0	7.2	2.8	0.0	44.1	55.3
Japan	2011	634	63.3	25.0	63.3	5.6	5.3	0.7	0.2	55.5	70.8
	2015	673	67.9	21.3	67.9	5.4	4.8	0.6	0.0	64.5	71.7
Jordan	2011	1091	37.7	38.6	37.7	12.1	9.6	1.9	0.1	35.0	40.5
	2015	1120	30.8	47.4	30.8	11.7	7.8	2.1	0.2	29.8	31.8
Kazakhstan	2011	625	44.6	28.8	44.6	10.0	12.0	4.5	0.1	44.7	44.5
	2015	688	61.5	19.4	61.5	8.9	7.6	2.5	0.1	58.9	64.3
Korea, Rep. of	2011	741	86.8	8.4	86.8	3.3	1.3	0.2	0.0	86.3	87.2
	2015	759	83.5	11.1	83.5	3.5	1.6	0.3	0.0	82.8	84.1
Lebanon	2011	553	28.3	44.4	28.3	15.8	4.8	6.3	0.5	22.7	34.4
	2015	553	31.0	37.3	31.0	13.4	5.4	10.5	2.3	32.3	29.6
Lithuania	2011	671	62.6	20.9	62.6	10.4	5.5	0.5	0.1	56.9	68.1
	2015	628	62.8	20.6	62.8	8.3	7.4	0.9	0.0	57.0	68.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_02 (M042060): Number / Knowing Type: MC Key: B
Label: Fraction by which price reduced by

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	57.7	20.3	57.7	10.6	8.7	1.7	1.0	59.3	55.9
	2015	1377	63.7	20.1	63.7	8.0	7.2	1.0	0.0	64.8	62.6
Morocco	2011	1320	25.4	50.2	25.4	10.5	9.5	4.1	0.4	22.2	28.3
	2015	1867	26.1	50.3	26.1	9.4	11.4	2.6	0.2	25.7	26.5
New Zealand	2011	764	64.2	22.6	64.2	10.0	1.4	1.3	0.6	62.1	65.9
	2015	1125	65.4	20.6	65.4	10.5	2.1	1.2	0.1	63.5	67.4
Oman	2011	1359	25.4	50.6	25.4	9.6	9.8	3.9	0.8	25.4	25.3
	2015	1264	32.8	43.5	32.8	11.8	9.6	2.2	0.1	31.0	34.6
Qatar	2011	626	38.7	34.7	38.7	16.7	7.0	2.2	0.7	34.1	42.9
	2015	767	43.3	28.0	43.3	14.2	11.8	1.7	1.0	43.8	42.8
Russian Federation	2011	709	69.3	14.6	69.3	8.5	6.5	0.5	0.5	67.8	70.8
	2015	681	69.6	13.9	69.6	7.7	6.6	1.8	0.4	66.6	72.4
Saudi Arabia	2011	616	38.7	35.4	38.7	14.3	10.5	1.1	0.0	35.4	41.7
	2015	525	28.8	44.5	28.8	16.8	8.4	1.3	0.2	23.4	34.3
Singapore	2011	844	91.3	4.7	91.3	3.1	0.6	0.3	0.0	92.2	90.4
	2015	871	89.9	4.6	89.9	4.5	0.6	0.4	0.1	91.7	88.3
Slovenia	2011	632	59.8	28.7	59.8	9.7	1.3	0.4	0.0	53.6	65.6
	2015	602	59.8	30.9	59.8	7.7	0.7	0.9	0.0	59.2	60.4
South Africa	2011	1688	21.3	55.2	21.3	9.0	10.8	2.8	1.0	18.7	23.6
	2015	1785	31.4	49.1	31.4	10.1	7.6	1.4	0.3	32.0	30.9
Sweden	2011	798	78.1	8.2	78.1	10.2	1.5	1.7	0.3	77.4	78.8
	2015	596	76.7	9.5	76.7	10.1	2.0	0.5	1.1	78.1	75.4
Thailand	2011	868	34.8	39.8	34.8	9.8	12.6	2.6	0.4	32.2	37.9
	2015	927	33.9	39.8	33.9	10.4	13.9	1.8	0.1	35.2	32.3
Turkey	2011	996	47.4	33.3	47.4	10.0	8.0	1.3	0.0	44.5	50.4
	2015	879	48.4	33.1	48.4	11.2	6.1	1.3	0.0	50.8	46.3
United Arab Emirates	2011	2008	54.4	29.2	54.4	9.8	4.6	1.9	0.1	56.4	52.5
	2015	2572	56.7	26.5	56.7	9.9	4.5	2.2	0.2	55.6	57.9
United States	2011	1482	71.0	14.9	71.0	11.0	2.1	0.8	0.2	68.4	73.6
	2015	1476	72.9	15.3	72.9	7.3	3.1	1.3	0.2	68.2	77.1
International Avg (n=33)	2011	28499	53.9	28.1	53.9	10.0	5.9	1.9	0.3	51.3	56.3
	2015	31065	56.1	26.8	56.1	9.5	5.6	1.8	0.3	54.4	57.7
Ontario, Canada	2011	663	75.0	13.7	75.0	7.8	1.6	1.3	0.5	73.7	76.2
	2015	654	69.4	19.0	69.4	8.8	1.0	1.2	0.6	65.0	73.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_02 (M042060): Number / Knowing Type: MC Key: B
Label: Fraction by which price reduced by

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	76.8	15.7	76.8	5.7	0.8	0.9	0.1	75.2	78.5
	2015	573	80.1	11.8	80.1	5.4	1.8	0.6	0.2	74.0	87.2
Norway (8)	2011	543	74.2	13.3	74.2	10.8	0.4	1.0	0.2	70.5	77.7
	2015	686	74.3	12.7	74.3	9.9	2.1	1.0	0.0	72.2	76.7
Abu Dhabi, UAE	2011	624	50.4	30.7	50.4	11.7	5.1	2.1	0.0	53.1	48.0
	2015	686	50.2	29.2	50.2	11.2	6.3	2.8	0.3	46.7	53.5
Dubai, UAE	2011	798	56.8	27.4	56.8	8.6	4.1	2.7	0.4	57.2	56.4
	2015	884	66.1	20.3	66.1	9.1	2.8	1.4	0.2	69.5	62.7
Florida, US	2011	245	70.1	17.0	70.1	10.1	1.9	0.9	0.0	65.1	74.8
	2015	296	62.3	21.2	62.3	13.4	1.2	1.6	0.3	58.8	65.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_03 (M042019): Number / Knowing Type: CR 1 Point
Label: Approximate the sum

COUNTRY	Year	N	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	65.1	4.4	2.7	25.2	2.4	0.1	65.1	62.8	67.5
	2015	1453	64.0	5.8	1.3	26.3	2.0	0.7	64.0	62.5	65.6
Bahrain	2011	650	20.2	1.1	1.8	55.8	20.8	0.3	20.2	25.1	15.0
	2015	707	27.1	1.6	0.6	59.8	10.9	0.0	27.1	28.9	25.4
Botswana	2011	761	32.6	3.5	0.3	61.5	2.0	0.0	32.6	38.5	26.6
	2015	839	37.9	4.0	0.2	56.6	1.3	0.0	37.9	40.0	35.5
Chile	2011	831	13.1	1.8	0.7	57.8	26.0	0.5	13.1	14.0	12.2
	2015	673	15.4	2.4	0.9	45.9	35.1	0.3	15.4	11.7	19.3
Chinese Taipei	2011	719	22.2	1.1	0.7	68.6	7.4	0.0	22.2	21.3	23.0
	2015	804	23.1	2.5	1.1	66.2	7.1	0.0	23.1	25.1	21.2
England	2011	548	69.4	5.7	1.7	21.2	1.7	0.3	69.4	71.0	67.8
	2015	697	72.8	5.9	1.0	18.4	1.7	0.3	72.8	69.8	76.1
Georgia	2011	649	28.5	4.3	0.7	44.6	21.4	0.6	28.5	27.2	29.5
	2015	574	42.2	2.5	1.3	40.5	13.1	0.4	42.2	36.0	47.7
Hong Kong SAR	2011	574	71.9	3.8	1.6	20.6	2.1	0.0	71.9	73.3	70.5
	2015	587	76.5	4.0	1.5	16.1	1.7	0.1	76.5	77.7	75.3
Hungary	2011	730	69.3	4.1	0.3	21.6	4.1	0.6	69.3	72.1	66.9
	2015	704	67.6	2.5	1.1	22.0	6.8	0.0	67.6	65.4	70.1
Iran, Islamic Rep. of	2011	870	1.4	2.3	0.7	66.1	29.2	0.3	1.4	1.4	1.4
	2015	883	13.7	3.7	1.9	59.7	20.6	0.4	13.7	14.7	12.6
Israel	2011	674	52.2	2.2	1.4	36.1	7.4	0.8	52.2	50.3	53.9
	2015	782	46.3	2.2	1.0	40.8	9.3	0.3	46.3	42.4	50.4
Italy	2011	555	27.8	1.1	0.4	48.4	22.3	0.0	27.8	25.8	29.7
	2015	627	26.7	2.2	1.7	48.1	21.3	0.0	26.7	24.2	29.0
Japan	2011	634	43.6	6.0	1.9	44.0	4.4	0.2	43.6	44.5	42.7
	2015	673	44.5	4.7	2.2	44.1	4.6	0.0	44.5	47.3	41.2
Jordan	2011	1091	11.0	1.2	1.0	69.6	17.0	0.1	11.0	11.4	10.6
	2015	1120	12.0	0.3	0.7	68.0	18.9	0.2	12.0	10.7	13.3
Kazakhstan	2011	625	32.7	1.7	0.4	51.1	14.0	0.1	32.7	35.2	29.9
	2015	688	36.7	1.0	0.0	56.4	5.9	0.1	36.7	41.3	31.8
Korea, Rep. of	2011	741	62.8	1.2	0.4	34.6	1.0	0.0	62.8	59.8	65.9
	2015	759	51.4	0.7	0.3	46.1	1.5	0.0	51.4	41.6	60.1
Lebanon	2011	555	9.4	0.6	0.5	69.0	20.0	0.5	9.4	6.1	13.0
	2015	553	12.3	0.7	0.0	65.4	19.2	2.4	12.3	11.2	13.6
Lithuania	2011	671	32.4	1.8	0.5	63.9	1.3	0.1	32.4	35.5	29.4
	2015	628	37.0	2.6	0.4	59.1	1.0	0.0	37.0	37.8	36.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_03 (M042019): Number / Knowing Type: CR 1 Point
Label: Approximate the sum

COUNTRY	Year	N	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	38.0	1.1	0.3	56.3	3.2	1.1	38.0	40.9	34.9
	2015	1377	40.2	1.8	0.2	52.7	5.0	0.0	40.2	43.4	37.1
Morocco	2011	1322	1.0	0.4	0.0	65.5	32.6	0.5	1.0	0.9	1.0
	2015	1867	0.8	0.4	0.3	77.4	20.9	0.2	0.8	1.0	0.7
New Zealand	2011	764	57.5	6.8	1.6	29.1	4.3	0.6	57.5	56.5	58.4
	2015	1125	61.1	5.8	2.2	28.0	2.9	0.1	61.1	56.9	65.3
Oman	2011	1359	7.4	0.8	0.0	77.0	14.0	0.9	7.4	7.1	7.6
	2015	1256	11.2	0.8	0.0	79.4	8.5	0.1	11.2	10.3	12.1
Qatar	2011	626	28.7	0.5	0.6	57.9	11.6	0.7	28.7	25.3	31.8
	2015	767	36.7	0.8	0.7	55.3	5.5	1.0	36.7	33.1	40.5
Russian Federation	2011	709	38.1	2.1	0.4	49.1	9.9	0.5	38.1	35.2	40.8
	2015	681	36.4	1.6	0.7	52.7	8.3	0.4	36.4	32.1	40.4
Saudi Arabia	2011	616	8.5	0.9	0.3	80.9	9.4	0.0	8.5	4.5	12.2
	2015	525	12.4	0.6	0.4	74.1	12.4	0.2	12.4	10.4	14.6
Singapore	2011	844	79.6	2.3	0.5	17.1	0.5	0.0	79.6	81.9	77.4
	2015	871	83.8	2.2	0.2	13.2	0.5	0.1	83.8	84.1	83.6
Slovenia	2011	632	31.9	6.4	1.9	55.3	4.5	0.0	31.9	31.3	32.5
	2015	601	41.1	6.1	2.4	47.0	3.4	0.0	41.1	37.7	44.6
South Africa	2011	1688	10.4	0.7	0.4	80.9	6.6	1.0	10.4	9.7	11.1
	2015	1785	17.0	2.9	0.6	73.2	6.0	0.3	17.0	17.4	16.6
Sweden	2011	798	61.6	6.0	1.2	26.0	5.0	0.3	61.6	61.6	61.6
	2015	594	55.1	7.9	2.3	26.9	6.7	1.1	55.1	53.2	57.0
Thailand	2011	868	31.5	1.3	0.3	56.5	9.9	0.5	31.5	33.0	29.6
	2015	927	28.0	1.2	0.5	62.5	7.4	0.3	28.0	31.8	23.3
Turkey	2011	993	38.8	2.5	0.7	45.8	12.2	0.0	38.8	37.5	40.1
	2015	879	44.9	3.5	1.3	42.4	7.9	0.0	44.9	46.9	43.1
United Arab Emirates	2011	2008	41.5	1.5	0.7	50.3	6.0	0.1	41.5	41.2	41.8
	2015	2573	42.8	2.4	1.0	50.1	3.4	0.3	42.8	42.5	43.1
United States	2011	1482	49.4	3.3	0.7	44.8	1.5	0.2	49.4	46.0	53.0
	2015	1476	49.5	2.0	0.8	46.2	1.3	0.3	49.5	47.8	51.0
International Avg (n=33)	2011	28500	36.0	2.6	0.8	50.1	10.2	0.3	36.0	36.0	36.0
	2015	31055	38.4	2.7	0.9	49.1	8.5	0.3	38.4	37.5	39.3
Ontario, Canada	2011	663	62.8	4.9	0.8	29.0	2.0	0.5	62.8	59.3	66.0
	2015	654	64.0	3.5	2.0	27.8	2.1	0.7	64.0	61.4	66.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_03 (M042019): Number / Knowing Type: CR 1 Point
Label: Approximate the sum

COUNTRY	Year	N	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	50.2	7.1	3.5	36.5	2.7	0.1	50.2	49.4	50.9
	2015	573	46.3	8.8	2.9	38.0	3.7	0.2	46.3	39.5	54.3
Norway (8)	2011	543	65.9	4.2	0.5	23.9	5.3	0.2	65.9	65.3	66.4
	2015	686	70.1	4.4	1.4	18.7	5.5	0.0	70.1	68.6	71.7
Abu Dhabi, UAE	2011	624	41.7	0.7	0.4	52.4	4.8	0.0	41.7	43.2	40.3
	2015	687	37.7	2.2	0.2	55.6	4.1	0.3	37.7	40.4	35.2
Dubai, UAE	2011	798	42.8	2.0	1.0	46.8	7.0	0.4	42.8	43.0	42.6
	2015	884	56.0	1.7	1.9	37.8	2.4	0.2	56.0	55.1	56.9
Florida, US	2011	245	50.0	0.5	0.2	45.3	4.1	0.0	50.0	43.5	56.1
	2015	296	48.8	1.6	0.5	44.8	4.0	0.3	48.8	39.9	57.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_04 (M042023): Number / Applying Type: CR 1 Point
Label: Which is larger 7/12 or 2/3

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	35.7	59.1	5.0	0.1	35.7	33.5	38.0
	2015	1453	30.6	66.0	2.7	0.7	30.6	29.2	31.9
Bahrain	2011	650	29.9	54.3	15.1	0.6	29.9	38.2	21.1
	2015	707	33.8	57.9	8.4	0.0	33.8	41.8	26.3
Botswana	2011	761	12.0	83.3	4.7	0.0	12.0	14.1	9.8
	2015	836	11.0	84.7	4.3	0.0	11.0	13.8	7.9
Chile	2011	831	7.8	70.4	21.1	0.7	7.8	7.7	8.0
	2015	673	7.5	70.9	21.4	0.3	7.5	7.0	8.0
Chinese Taipei	2011	719	74.9	22.2	2.9	0.0	74.9	78.2	72.0
	2015	804	76.2	22.0	1.8	0.0	76.2	76.7	75.6
England	2011	548	36.1	58.3	5.3	0.3	36.1	33.2	38.9
	2015	697	40.6	53.4	5.8	0.3	40.6	43.1	37.9
Georgia	2011	648	19.7	62.6	17.2	0.6	19.7	17.5	21.4
	2015	574	20.8	67.7	11.1	0.4	20.8	18.8	22.6
Hong Kong SAR	2011	574	69.3	27.4	3.3	0.0	69.3	71.5	67.3
	2015	587	74.9	23.6	1.4	0.1	74.9	74.7	75.2
Hungary	2011	730	34.2	55.3	10.0	0.6	34.2	37.7	31.0
	2015	704	38.4	49.4	12.2	0.0	38.4	38.8	37.9
Iran, Islamic Rep. of	2011	870	9.3	80.1	10.4	0.3	9.3	8.9	9.6
	2015	882	33.9	57.4	8.2	0.4	33.9	41.2	27.0
Israel	2011	674	41.5	53.2	4.5	0.8	41.5	41.6	41.4
	2015	782	38.5	53.9	7.2	0.4	38.5	32.9	44.4
Italy	2011	555	18.2	70.5	11.1	0.1	18.2	10.4	25.8
	2015	627	16.1	73.0	10.9	0.0	16.1	15.6	16.5
Japan	2011	634	62.2	32.8	4.9	0.2	62.2	63.0	61.4
	2015	673	59.7	34.8	5.4	0.1	59.7	64.1	54.6
Jordan	2011	1091	23.0	70.2	6.6	0.2	23.0	25.5	20.5
	2015	1120	24.9	65.7	9.1	0.2	24.9	32.2	17.5
Kazakhstan	2011	624	37.5	49.0	13.3	0.1	37.5	39.7	35.2
	2015	688	41.6	50.7	7.6	0.1	41.6	46.3	36.6
Korea, Rep. of	2011	741	80.8	18.3	0.8	0.0	80.8	85.3	76.2
	2015	759	83.0	15.6	1.4	0.0	83.0	84.3	81.8
Lebanon	2011	555	38.5	51.9	9.1	0.5	38.5	43.6	33.1
	2015	553	35.7	49.1	12.4	2.8	35.7	38.6	32.3
Lithuania	2011	671	23.4	69.8	6.7	0.1	23.4	24.0	22.8
	2015	628	31.9	60.6	7.5	0.0	31.9	31.5	32.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_04 (M042023): Number / Applying Type: CR 1 Point
Label: Which is larger 7/12 or 2/3

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	24.5	64.6	9.8	1.1	24.5	27.2	21.7
	2015	1377	37.4	53.4	9.1	0.0	37.4	39.7	35.2
Morocco	2011	1322	32.8	52.6	14.0	0.7	32.8	33.9	31.8
	2015	1866	24.7	65.6	9.5	0.2	24.7	28.4	21.6
New Zealand	2011	764	28.7	65.5	5.3	0.6	28.7	25.9	30.9
	2015	1125	32.3	64.4	3.2	0.1	32.3	32.1	32.6
Oman	2011	1359	8.7	77.8	12.6	0.9	8.7	10.0	7.2
	2015	1264	23.1	68.5	8.3	0.1	23.1	27.6	18.9
Qatar	2011	626	26.0	62.5	10.8	0.7	26.0	28.2	23.9
	2015	767	37.8	53.2	7.8	1.2	37.8	39.1	36.5
Russian Federation	2011	709	47.1	42.6	9.8	0.5	47.1	47.9	46.3
	2015	681	48.5	44.7	6.4	0.4	48.5	48.9	48.3
Saudi Arabia	2011	617	19.5	72.5	8.0	0.0	19.5	24.3	15.0
	2015	525	13.7	78.5	7.7	0.2	13.7	17.3	9.9
Singapore	2011	844	76.3	23.3	0.3	0.0	76.3	79.0	73.8
	2015	871	78.1	21.2	0.6	0.1	78.1	80.1	76.4
Slovenia	2011	632	35.4	60.2	4.3	0.1	35.4	35.8	35.1
	2015	601	43.8	52.1	4.1	0.0	43.8	45.8	41.7
South Africa	2011	1688	15.2	74.6	8.9	1.2	15.2	13.8	16.5
	2015	1785	7.4	87.3	4.9	0.4	7.4	8.5	6.3
Sweden	2011	798	25.4	70.1	4.1	0.3	25.4	25.5	25.3
	2015	593	31.1	63.3	4.5	1.1	31.1	27.8	33.8
Thailand	2011	868	18.6	48.7	32.2	0.5	18.6	20.7	16.1
	2015	927	19.5	55.2	25.0	0.3	19.5	23.9	14.1
Turkey	2011	993	21.5	66.5	12.0	0.0	21.5	23.5	19.4
	2015	879	28.9	62.7	8.4	0.1	28.9	32.6	25.5
United Arab Emirates	2011	2008	40.9	52.6	6.3	0.1	40.9	47.8	34.3
	2015	2573	42.1	52.7	4.9	0.3	42.1	45.9	38.5
United States	2011	1482	43.7	54.1	2.0	0.2	43.7	44.6	42.7
	2015	1476	45.9	52.6	1.2	0.3	45.9	45.6	46.0
International Avg (n=33)	2011	28499	33.9	56.9	8.9	0.4	33.9	35.2	32.5
	2015	31057	36.8	55.5	7.4	0.3	36.8	38.6	34.9
Ontario, Canada	2011	663	58.7	38.0	2.8	0.5	58.7	60.1	57.4
	2015	654	55.5	40.8	3.0	0.7	55.5	54.0	56.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_04 (M042023): Number / Applying Type: CR 1 Point
Label: Which is larger 7/12 or 2/3

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	65.4	31.2	3.0	0.4	65.4	67.4	63.2
	2015	573	70.8	26.2	2.6	0.5	70.8	70.3	71.3
Norway (8)	2011	543	28.4	68.2	3.2	0.2	28.4	28.1	28.8
	2015	686	29.7	64.8	5.5	0.0	29.7	29.2	30.2
Abu Dhabi, UAE	2011	624	39.0	55.1	5.8	0.0	39.0	44.0	34.7
	2015	687	31.8	62.9	5.0	0.3	31.8	35.1	28.7
Dubai, UAE	2011	798	38.8	53.1	7.5	0.5	38.8	46.5	31.5
	2015	884	54.5	42.3	3.1	0.2	54.5	53.7	55.3
Florida, US	2011	245	42.0	57.3	0.7	0.0	42.0	44.4	39.8
	2015	296	38.2	58.5	3.0	0.3	38.2	33.1	43.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_05 (M042197): Algebra / Reasoning Type: CR 1 Point
Label: Rule to get terms in the pattern

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	28.8	1.2	50.9	19.0	0.2	28.8	23.9	33.8
	2015	1453	28.7	0.8	51.8	17.9	0.7	28.7	28.4	29.1
Bahrain	2011	650	12.7	0.6	55.5	30.4	0.8	12.7	12.0	13.6
	2015	707	24.1	1.1	57.4	17.4	0.0	24.1	25.1	23.1
Botswana	2011	761	4.0	0.0	86.3	9.7	0.0	4.0	5.0	3.0
	2015	836	5.0	0.0	84.4	10.6	0.0	5.0	5.8	4.2
Chile	2011	831	5.2	0.3	51.3	42.0	1.2	5.2	5.1	5.2
	2015	673	7.1	0.3	51.6	40.7	0.4	7.1	6.2	8.0
Chinese Taipei	2011	719	48.4	5.4	35.4	10.9	0.0	48.4	48.8	48.0
	2015	804	43.7	4.0	41.2	11.1	0.0	43.7	42.5	44.9
England	2011	548	19.8	0.3	66.5	13.1	0.3	19.8	16.3	23.3
	2015	697	21.0	0.3	61.4	17.0	0.4	21.0	18.5	23.6
Georgia	2011	648	14.3	1.6	22.7	60.9	0.6	14.3	11.7	16.4
	2015	574	19.0	0.2	33.5	46.8	0.4	19.0	18.9	19.2
Hong Kong SAR	2011	574	42.5	2.7	39.4	15.4	0.0	42.5	43.1	42.0
	2015	587	48.2	2.0	39.7	10.0	0.1	48.2	44.7	51.3
Hungary	2011	730	41.1	1.8	35.5	21.0	0.6	41.1	42.2	40.2
	2015	704	39.4	1.0	39.7	19.9	0.0	39.4	43.1	35.5
Iran, Islamic Rep. of	2011	870	20.4	0.7	55.4	23.3	0.3	20.4	22.1	18.8
	2015	882	21.1	1.0	56.9	20.6	0.4	21.1	21.6	20.5
Israel	2011	674	37.8	0.7	36.7	23.9	0.8	37.8	36.4	39.0
	2015	782	27.0	0.6	42.8	28.9	0.6	27.0	25.4	28.8
Italy	2011	555	17.4	2.3	43.3	36.7	0.3	17.4	18.7	16.2
	2015	625	16.6	0.6	48.9	33.9	0.0	16.6	14.8	18.3
Japan	2011	634	44.0	5.4	38.0	12.4	0.2	44.0	41.3	46.6
	2015	673	47.8	3.3	39.1	9.7	0.1	47.8	45.5	50.4
Jordan	2011	1091	24.8	0.3	55.7	19.0	0.2	24.8	23.2	26.3
	2015	1120	21.3	0.4	55.6	22.5	0.2	21.3	24.6	17.8
Kazakhstan	2011	625	37.0	0.8	26.8	35.3	0.1	37.0	38.4	35.5
	2015	688	38.2	1.5	38.3	21.8	0.2	38.2	42.1	34.1
Korea, Rep. of	2011	741	59.4	4.0	33.1	3.5	0.0	59.4	57.6	61.3
	2015	759	57.6	5.9	31.0	5.5	0.0	57.6	56.9	58.1
Lebanon	2011	555	14.5	2.2	35.2	47.6	0.6	14.5	14.0	15.0
	2015	553	19.7	1.1	32.9	43.3	2.9	19.7	23.8	15.1
Lithuania	2011	671	25.4	2.8	42.1	29.6	0.1	25.4	28.4	22.4
	2015	628	26.1	3.2	38.0	32.7	0.0	26.1	21.7	30.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_05 (M042197): Algebra / Reasoning Type: CR 1 Point
Label: Rule to get terms in the pattern

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	7.5	1.4	71.8	18.0	1.3	7.5	8.3	6.6
	2015	1377	9.9	0.3	66.9	22.8	0.0	9.9	10.3	9.6
Morocco	2011	1322	4.8	0.3	38.3	55.7	0.9	4.8	4.3	5.2
	2015	1866	8.2	0.2	46.8	44.6	0.2	8.2	7.1	9.1
New Zealand	2011	764	24.8	0.7	55.7	18.3	0.6	24.8	23.1	26.2
	2015	1125	24.8	1.0	57.9	16.2	0.1	24.8	23.2	26.3
Oman	2011	1359	11.9	0.3	54.9	32.0	0.9	11.9	15.6	8.0
	2015	1264	17.0	1.3	61.2	20.4	0.1	17.0	19.8	14.3
Qatar	2011	626	7.8	0.2	62.1	29.2	0.7	7.8	6.5	9.0
	2015	767	16.0	1.3	61.4	20.1	1.2	16.0	14.5	17.5
Russian Federation	2011	709	42.8	1.7	24.2	30.7	0.5	42.8	41.9	43.7
	2015	681	36.3	1.1	32.5	29.6	0.4	36.3	33.8	38.8
Saudi Arabia	2011	617	11.0	0.3	64.5	24.3	0.0	11.0	12.9	9.2
	2015	525	10.9	0.4	64.6	23.9	0.2	10.9	11.4	10.3
Singapore	2011	844	47.0	3.7	44.8	4.6	0.0	47.0	45.9	48.0
	2015	871	42.7	3.7	47.9	5.5	0.2	42.7	46.8	39.3
Slovenia	2011	632	18.8	2.1	49.1	30.0	0.1	18.8	17.6	19.8
	2015	601	25.5	2.3	45.9	26.4	0.0	25.5	25.1	25.9
South Africa	2011	1688	3.1	1.3	75.2	19.0	1.4	3.1	2.8	3.4
	2015	1785	8.0	0.0	81.9	9.6	0.4	8.0	8.3	7.8
Sweden	2011	798	17.1	1.3	56.7	24.5	0.4	17.1	14.6	19.4
	2015	595	23.5	1.7	49.8	23.9	1.1	23.5	23.2	23.8
Thailand	2011	868	8.1	0.0	53.2	38.1	0.5	8.1	8.4	7.8
	2015	927	18.8	0.4	50.7	29.5	0.5	18.8	17.5	20.4
Turkey	2011	993	15.4	8.8	50.0	25.7	0.0	15.4	16.5	14.4
	2015	879	21.7	0.3	60.5	17.4	0.1	21.7	23.9	19.7
United Arab Emirates	2011	2008	28.5	0.7	56.1	14.5	0.3	28.5	29.3	27.7
	2015	2573	29.0	2.0	54.4	14.3	0.3	29.0	30.9	27.2
United States	2011	1482	45.1	0.2	48.3	6.2	0.2	45.1	42.6	47.6
	2015	1476	44.0	1.5	48.9	5.2	0.3	44.0	43.6	44.3
International Avg (n=33)	2011	28500	24.0	1.7	48.9	25.0	0.4	24.0	23.6	24.3
	2015	31057	25.7	1.4	50.8	21.8	0.4	25.7	25.7	25.7
Ontario, Canada	2011	663	31.7	1.5	54.9	11.3	0.5	31.7	29.6	33.7
	2015	654	32.3	3.8	50.3	12.6	1.0	32.3	31.2	33.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_05 (M042197): Algebra / Reasoning Type: CR 1 Point
Label: Rule to get terms in the pattern

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	17.9	1.0	54.3	26.5	0.4	17.9	16.2	19.7
	2015	573	15.7	3.5	56.5	23.9	0.5	15.7	12.2	19.7
Norway (8)	2011	543	21.3	0.0	54.3	24.1	0.2	21.3	24.0	19.0
	2015	686	24.8	1.3	50.7	23.2	0.0	24.8	25.5	24.0
Abu Dhabi, UAE	2011	624	26.5	0.4	60.1	12.8	0.2	26.5	28.1	25.2
	2015	687	23.9	1.2	60.4	14.2	0.3	23.9	23.6	24.1
Dubai, UAE	2011	798	29.6	1.1	51.8	17.0	0.5	29.6	30.1	29.0
	2015	884	37.6	2.5	46.9	12.7	0.2	37.6	40.0	35.2
Florida, US	2011	245	43.3	0.0	49.7	7.0	0.0	43.3	43.5	43.1
	2015	296	42.2	1.1	49.5	6.9	0.3	42.2	36.6	47.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_06 (M042234): Algebra / Knowing Type: MC Key: C
Label: What is the value of x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	59.2	11.3	8.1	59.2	17.7	3.2	0.5	57.0	61.4
	2015	1453	56.3	14.2	8.7	56.3	17.5	2.6	0.7	55.6	57.0
Bahrain	2011	650	41.1	15.4	9.2	41.1	29.1	4.0	1.2	42.4	39.7
	2015	707	62.7	9.9	8.0	62.7	18.6	0.8	0.0	62.2	63.1
Botswana	2011	761	35.0	19.5	27.3	35.0	16.3	1.8	0.1	39.0	30.8
	2015	838	29.1	24.7	24.0	29.1	19.0	3.1	0.0	26.6	31.9
Chile	2011	831	31.1	18.7	17.9	31.1	23.8	7.0	1.5	29.3	33.1
	2015	673	30.5	17.4	18.7	30.5	25.7	7.2	0.6	30.1	30.8
Chinese Taipei	2011	719	73.4	6.3	3.3	73.4	16.7	0.3	0.0	74.5	72.3
	2015	804	72.1	9.2	2.2	72.1	16.1	0.4	0.0	75.7	68.5
England	2011	548	56.3	14.4	7.5	56.3	18.4	2.6	0.9	48.3	64.3
	2015	697	57.8	12.4	5.2	57.8	20.2	4.0	0.4	57.7	57.8
Georgia	2011	649	49.4	21.9	6.6	49.4	18.3	3.0	0.8	42.9	54.6
	2015	574	54.7	15.6	5.7	54.7	22.0	1.6	0.4	51.6	57.5
Hong Kong SAR	2011	574	82.6	3.5	2.0	82.6	11.5	0.4	0.0	84.4	80.9
	2015	587	86.0	2.9	1.0	86.0	9.8	0.2	0.1	83.8	87.9
Hungary	2011	730	53.6	13.0	5.9	53.6	24.5	2.5	0.6	55.1	52.2
	2015	704	52.6	16.7	4.6	52.6	25.5	0.6	0.0	54.6	50.6
Iran, Islamic Rep. of	2011	870	37.1	25.2	12.1	37.1	22.3	2.9	0.4	35.7	38.4
	2015	882	40.1	23.6	12.3	40.1	19.8	3.9	0.4	40.5	39.7
Israel	2011	674	73.2	7.5	5.3	73.2	11.3	1.7	0.9	75.3	71.4
	2015	782	67.1	9.1	5.1	67.1	14.9	3.1	0.6	66.6	67.7
Italy	2011	555	39.3	22.5	5.9	39.3	27.0	5.0	0.3	33.0	45.3
	2015	627	30.4	22.1	7.1	30.4	35.6	4.7	0.0	25.9	34.6
Japan	2011	634	65.6	9.7	3.9	65.6	19.6	0.9	0.3	66.0	65.2
	2015	673	65.2	9.0	3.5	65.2	21.1	1.1	0.1	65.8	64.5
Jordan	2011	1091	44.1	10.5	12.5	44.1	29.8	2.8	0.2	41.6	46.7
	2015	1120	36.1	12.5	10.0	36.1	38.0	3.1	0.4	36.3	35.8
Kazakhstan	2011	625	53.5	25.4	6.9	53.5	11.5	2.6	0.1	53.3	53.7
	2015	687	68.6	15.7	5.0	68.6	10.1	0.4	0.2	71.3	65.7
Korea, Rep. of	2011	741	74.4	4.9	1.6	74.4	18.9	0.1	0.0	76.0	72.8
	2015	759	76.7	5.0	1.4	76.7	16.8	0.2	0.0	77.6	75.9
Lebanon	2011	554	33.3	11.9	6.5	33.3	41.2	6.0	1.0	31.5	35.2
	2015	553	33.8	9.5	3.1	33.8	39.9	10.6	3.1	34.0	33.6
Lithuania	2011	671	51.7	17.9	6.6	51.7	21.7	1.9	0.1	54.4	49.1
	2015	628	53.6	19.3	4.1	53.6	21.9	1.1	0.0	52.5	54.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_06 (M042234): Algebra / Knowing Type: MC Key: C
Label: What is the value of x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	38.4	24.9	17.8	38.4	15.8	1.6	1.5	35.1	42.0
	2015	1377	48.6	18.1	13.1	48.6	17.7	2.5	0.1	50.5	46.7
Morocco	2011	1319	28.5	18.6	9.2	28.5	38.0	4.3	1.3	26.4	30.4
	2015	1852	25.6	18.3	9.6	25.6	42.4	3.8	0.2	23.2	27.5
New Zealand	2011	764	52.7	18.1	8.2	52.7	15.7	4.8	0.6	47.6	56.8
	2015	1125	50.1	19.4	8.3	50.1	18.4	3.6	0.3	47.2	52.9
Oman	2011	1359	29.0	19.0	16.5	29.0	31.2	3.0	1.2	30.1	27.9
	2015	1262	35.8	17.8	17.2	35.8	26.0	3.0	0.1	39.4	32.4
Qatar	2011	626	38.1	19.5	11.3	38.1	27.2	2.9	1.0	39.8	36.5
	2015	767	45.3	18.1	11.7	45.3	21.0	2.5	1.5	43.7	47.0
Russian Federation	2011	709	73.6	8.3	4.1	73.6	12.3	1.1	0.6	76.1	71.3
	2015	681	73.1	11.9	2.7	73.1	9.6	2.3	0.4	77.0	69.4
Saudi Arabia	2011	617	36.0	21.5	15.2	36.0	25.3	1.9	0.1	35.9	36.0
	2015	525	30.8	22.1	18.3	30.8	26.1	2.4	0.2	29.3	32.5
Singapore	2011	844	85.2	4.4	3.5	85.2	6.7	0.2	0.0	89.0	81.6
	2015	872	88.2	2.3	2.6	88.2	6.1	0.6	0.2	90.6	86.1
Slovenia	2011	632	49.6	15.6	7.1	49.6	22.1	5.6	0.1	51.5	47.8
	2015	602	57.7	17.6	3.5	57.7	17.0	4.2	0.0	54.2	61.3
South Africa	2011	1688	22.1	21.8	19.9	22.1	31.7	3.1	1.5	19.7	23.9
	2015	1785	28.7	22.4	19.5	28.7	26.6	2.4	0.4	27.7	29.7
Sweden	2011	798	51.2	14.2	7.1	51.2	21.7	5.0	0.9	52.9	49.6
	2015	596	53.5	12.2	4.7	53.5	20.5	7.8	1.2	49.3	57.0
Thailand	2011	868	44.3	20.3	12.8	44.3	18.6	3.4	0.5	46.1	42.2
	2015	927	41.1	22.3	12.5	41.1	20.9	2.8	0.5	44.0	37.5
Turkey	2011	996	34.1	28.4	9.5	34.1	23.7	4.3	0.0	34.8	33.5
	2015	879	36.1	23.4	10.1	36.1	28.6	1.8	0.1	36.7	35.5
United Arab Emirates	2011	2008	57.1	16.4	7.8	57.1	16.8	1.7	0.3	61.5	52.8
	2015	2573	56.5	14.8	7.1	56.5	19.1	2.0	0.4	57.6	55.4
United States	2011	1482	69.4	10.9	3.3	69.4	14.9	1.1	0.4	70.1	68.6
	2015	1476	72.8	10.8	3.7	72.8	10.6	1.7	0.4	73.2	72.3
International Avg (n=33)	2011	28500	50.4	15.8	9.2	50.4	21.3	2.8	0.6	50.2	50.6
	2015	31047	52.0	15.2	8.3	52.0	21.3	2.8	0.4	51.9	52.1
Ontario, Canada	2011	663	58.5	11.0	5.7	58.5	20.1	3.4	1.2	60.6	56.7
	2015	654	62.4	12.6	6.3	62.4	15.9	1.6	1.3	58.3	66.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_06 (M042234): Algebra / Knowing Type: MC Key: C
Label: What is the value of x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	63.6	9.5	2.0	63.6	20.7	3.8	0.4	63.7	63.5
	2015	573	69.5	6.4	5.1	69.5	14.9	3.6	0.5	70.2	68.8
Norway (8)	2011	543	39.2	13.4	14.5	39.2	27.0	5.6	0.4	37.9	40.3
	2015	686	36.6	20.4	13.0	36.6	23.9	6.0	0.1	35.6	37.7
Abu Dhabi, UAE	2011	624	52.4	17.2	9.8	52.4	18.5	2.0	0.2	54.6	50.4
	2015	687	50.3	15.9	9.2	50.3	21.3	2.9	0.5	49.9	50.6
Dubai, UAE	2011	798	61.8	14.0	5.6	61.8	15.6	2.6	0.5	65.7	58.0
	2015	884	67.5	9.4	4.8	67.5	16.9	1.2	0.2	69.0	66.0
Florida, US	2011	245	67.8	14.1	4.4	67.8	11.7	2.0	0.0	67.3	68.3
	2015	296	65.4	14.0	5.6	65.4	13.1	1.7	0.3	61.8	68.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_07 (M042066): Algebra / Reasoning Type: CR 1 Point
Label: Missing term in the sequence

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	51.6	6.9	32.9	8.0	0.5	51.6	49.1	54.2
	2015	1453	53.5	5.8	32.1	8.0	0.7	53.5	52.4	54.6
Bahrain	2011	650	26.6	7.7	50.9	13.7	1.2	26.6	27.8	25.3
	2015	707	32.8	7.8	51.6	7.8	0.0	32.8	31.8	33.7
Botswana	2011	761	35.6	9.6	51.8	2.6	0.4	35.6	37.9	33.3
	2015	836	37.8	8.7	50.1	3.3	0.1	37.8	40.5	34.8
Chile	2011	831	31.0	4.8	40.4	22.1	1.7	31.0	30.5	31.5
	2015	673	30.4	4.2	37.3	27.4	0.8	30.4	27.8	33.1
Chinese Taipei	2011	719	71.0	3.7	20.9	4.3	0.0	71.0	69.6	72.4
	2015	804	70.9	3.9	20.3	4.8	0.0	70.9	70.9	71.0
England	2011	548	48.6	6.4	37.4	6.7	0.9	48.6	48.4	48.8
	2015	697	49.6	6.4	33.9	9.4	0.6	49.6	48.4	50.9
Georgia	2011	649	29.1	2.7	43.8	23.4	1.0	29.1	32.1	26.7
	2015	574	43.3	0.9	35.2	19.9	0.7	43.3	42.8	43.7
Hong Kong SAR	2011	574	64.0	7.3	23.6	5.1	0.0	64.0	62.4	65.6
	2015	587	68.0	6.8	21.6	3.5	0.1	68.0	66.8	69.1
Hungary	2011	729	54.2	4.1	26.7	14.5	0.6	54.2	58.2	50.6
	2015	704	57.4	3.5	25.1	14.0	0.0	57.4	59.9	54.7
Iran, Islamic Rep. of	2011	870	29.1	7.1	51.0	12.1	0.7	29.1	28.1	30.0
	2015	882	29.8	5.4	45.6	18.7	0.5	29.8	31.9	27.7
Israel	2011	674	50.6	4.9	32.1	11.3	0.9	50.6	52.8	48.7
	2015	782	48.6	4.5	30.0	16.0	0.8	48.6	47.9	49.4
Italy	2011	555	46.6	3.4	28.8	20.9	0.3	46.6	48.0	45.3
	2015	627	46.6	4.4	30.6	18.3	0.0	46.6	43.2	49.8
Japan	2011	634	60.9	3.9	26.6	8.4	0.3	60.9	59.3	62.3
	2015	673	62.7	1.4	24.6	11.2	0.1	62.7	61.7	63.7
Jordan	2011	1091	24.1	7.0	56.8	11.8	0.3	24.1	23.4	24.9
	2015	1120	26.1	4.3	55.7	13.4	0.5	26.1	25.3	27.0
Kazakhstan	2011	625	39.0	3.9	42.5	14.5	0.1	39.0	39.8	38.0
	2015	687	61.8	1.2	29.5	7.3	0.2	61.8	66.4	56.9
Korea, Rep. of	2011	741	72.6	4.5	20.8	2.0	0.0	72.6	69.7	75.7
	2015	759	71.4	4.5	18.9	5.2	0.0	71.4	68.4	74.1
Lebanon	2011	555	25.8	2.2	40.4	30.5	1.0	25.8	24.9	26.8
	2015	553	25.9	3.3	31.5	36.0	3.4	25.9	23.8	28.3
Lithuania	2011	671	47.5	5.5	34.8	12.1	0.1	47.5	47.5	47.5
	2015	628	54.5	3.5	29.5	12.6	0.0	54.5	55.9	53.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_07 (M042066): Algebra / Reasoning Type: CR 1 Point
Label: Missing term in the sequence

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	34.8	4.4	51.6	7.7	1.5	34.8	35.3	34.2
	2015	1377	43.6	5.7	43.4	7.2	0.1	43.6	43.7	43.4
Morocco	2011	1322	14.7	1.4	50.3	32.1	1.4	14.7	12.2	17.0
	2015	1851	21.2	6.3	51.3	20.9	0.2	21.2	21.8	20.7
New Zealand	2011	764	46.1	4.6	35.1	13.6	0.6	46.1	49.1	43.6
	2015	1125	49.3	7.0	33.6	9.7	0.5	49.3	47.9	50.7
Oman	2011	1359	22.9	4.4	59.1	12.3	1.3	22.9	24.3	21.4
	2015	1216	29.5	6.8	57.1	6.4	0.1	29.5	27.9	30.9
Qatar	2011	626	31.1	6.1	46.9	14.9	1.0	31.1	32.2	30.0
	2015	767	33.1	8.0	44.8	12.7	1.5	33.1	32.1	34.2
Russian Federation	2011	709	53.2	4.3	25.3	16.6	0.6	53.2	54.5	51.9
	2015	681	55.4	3.0	27.2	14.0	0.4	55.4	54.3	56.5
Saudi Arabia	2011	617	29.1	6.2	56.7	7.9	0.1	29.1	28.6	29.6
	2015	525	20.6	7.7	65.1	6.3	0.2	20.6	21.9	19.4
Singapore	2011	844	60.7	8.5	28.1	2.8	0.0	60.7	60.8	60.6
	2015	872	61.8	8.5	27.6	2.0	0.2	61.8	59.0	64.2
Slovenia	2011	632	40.1	5.8	36.2	17.7	0.1	40.1	38.9	41.3
	2015	601	47.6	3.2	35.4	13.8	0.1	47.6	48.1	47.0
South Africa	2011	1688	25.2	6.3	60.8	5.7	2.0	25.2	24.4	25.9
	2015	1785	30.1	10.0	54.3	5.2	0.4	30.1	29.6	30.5
Sweden	2011	798	44.5	5.2	34.8	14.5	1.0	44.5	46.5	42.6
	2015	596	51.2	5.5	31.0	11.1	1.2	51.2	54.3	48.6
Thailand	2011	868	34.9	5.0	46.1	13.4	0.5	34.9	34.4	35.6
	2015	927	37.8	8.6	48.2	4.9	0.5	37.8	37.3	38.3
Turkey	2011	993	59.0	3.9	29.6	7.6	0.0	59.0	60.4	57.5
	2015	879	67.4	4.7	24.2	3.6	0.1	67.4	72.8	62.5
United Arab Emirates	2011	2008	37.1	8.9	43.5	10.2	0.4	37.1	39.2	35.1
	2015	2573	44.2	7.4	40.5	7.5	0.4	44.2	44.4	43.9
United States	2011	1482	42.9	9.0	41.7	5.9	0.5	42.9	44.9	40.9
	2015	1476	46.5	9.1	39.4	4.5	0.5	46.5	44.9	47.9
International Avg (n=33)	2011	28500	41.9	5.5	39.6	12.3	0.6	41.9	42.3	41.7
	2015	30997	45.8	5.5	37.2	11.1	0.5	45.8	45.6	45.9
Ontario, Canada	2011	663	52.4	5.1	31.6	9.7	1.2	52.4	51.8	53.0
	2015	654	50.8	7.8	31.7	8.2	1.5	50.8	49.1	52.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_07 (M042066): Algebra / Reasoning Type: CR 1 Point
Label: Missing term in the sequence

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	48.9	5.5	32.7	12.5	0.4	48.9	47.1	50.9
	2015	573	43.1	6.7	37.4	12.4	0.5	43.1	41.8	44.6
Norway (8)	2011	543	49.4	4.2	36.2	9.7	0.4	49.4	48.0	50.7
	2015	686	49.0	5.5	31.6	13.8	0.1	49.0	47.1	51.1
Abu Dhabi, UAE	2011	624	34.5	10.8	45.4	9.0	0.4	34.5	38.8	30.7
	2015	687	39.1	7.6	46.0	6.8	0.5	39.1	39.2	39.0
Dubai, UAE	2011	798	42.8	6.2	37.9	12.6	0.6	42.8	43.8	41.8
	2015	884	53.9	6.9	32.7	6.3	0.2	53.9	51.7	56.1
Florida, US	2011	245	44.4	10.6	38.7	6.3	0.0	44.4	44.0	44.8
	2015	296	42.4	6.6	44.6	6.1	0.3	42.4	44.7	40.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_08 (M042243): Algebra / Knowing Type: MC Key: A
Label: Which equation is satisfied

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	48.3	48.3	10.1	16.9	19.9	4.3	0.5	51.5	45.0
	2015	1453	51.1	51.1	13.6	13.0	18.8	2.8	0.8	54.3	47.6
Bahrain	2011	650	26.9	26.9	25.1	16.7	27.0	3.0	1.3	28.2	25.4
	2015	707	51.9	51.9	12.5	13.2	21.0	1.3	0.0	54.7	49.3
Botswana	2011	761	15.2	15.2	18.0	19.2	45.3	1.9	0.4	14.5	16.0
	2015	836	16.7	16.7	20.4	18.0	42.6	2.2	0.1	16.2	17.2
Chile	2011	831	18.4	18.4	18.5	22.0	31.0	8.3	1.8	17.0	19.9
	2015	673	18.3	18.3	22.3	21.9	28.6	7.8	1.0	17.2	19.5
Chinese Taipei	2011	719	84.3	84.3	7.1	4.2	4.1	0.3	0.0	86.2	82.5
	2015	804	79.9	79.9	6.4	6.4	6.4	0.8	0.0	79.6	80.3
England	2011	548	52.4	52.4	11.2	14.9	16.3	4.4	0.9	50.5	54.3
	2015	697	53.9	53.9	10.2	15.0	14.5	5.8	0.6	54.9	52.8
Georgia	2011	649	42.4	42.4	11.2	15.7	26.6	2.6	1.4	40.4	43.9
	2015	574	48.8	48.8	11.7	12.4	24.9	1.3	0.9	45.5	51.8
Hong Kong SAR	2011	574	79.7	79.7	5.2	6.9	6.1	2.1	0.0	83.3	76.2
	2015	587	84.4	84.4	4.6	5.5	5.3	0.0	0.1	85.0	83.8
Hungary	2011	730	47.4	47.4	12.0	17.7	19.6	2.7	0.6	51.1	44.1
	2015	704	46.8	46.8	9.8	16.5	24.8	2.0	0.0	48.7	44.8
Iran, Islamic Rep. of	2011	870	24.6	24.6	12.3	23.3	37.4	1.6	0.8	21.1	27.6
	2015	882	36.9	36.9	12.2	19.6	27.3	3.2	0.8	36.9	36.9
Israel	2011	674	53.5	53.5	12.2	10.5	20.4	2.5	1.0	58.1	49.3
	2015	782	50.1	50.1	12.8	11.3	20.7	4.3	0.8	49.2	51.1
Italy	2011	555	30.0	30.0	14.2	18.6	31.6	5.2	0.4	26.5	33.5
	2015	627	30.6	30.6	13.1	19.1	29.8	7.0	0.3	27.8	33.3
Japan	2011	634	66.1	66.1	10.0	13.7	7.8	1.9	0.5	69.9	62.4
	2015	673	68.5	68.5	10.2	11.8	7.5	1.9	0.1	73.7	62.6
Jordan	2011	1091	40.0	40.0	18.0	16.6	22.9	2.2	0.3	39.7	40.2
	2015	1120	35.7	35.7	20.9	16.6	23.2	3.1	0.5	39.2	32.0
Kazakhstan	2011	625	47.9	47.9	17.4	12.9	18.9	2.8	0.1	48.0	47.8
	2015	687	57.2	57.2	19.0	7.9	14.3	1.5	0.2	59.0	55.2
Korea, Rep. of	2011	741	81.6	81.6	5.0	5.3	8.1	0.0	0.0	81.4	81.8
	2015	759	81.5	81.5	5.1	5.8	7.5	0.0	0.0	81.4	81.6
Lebanon	2011	546	38.2	38.2	26.2	10.6	19.0	4.6	1.4	33.7	43.2
	2015	553	29.9	29.9	26.3	11.0	15.1	13.9	3.7	32.8	26.4
Lithuania	2011	671	43.0	43.0	20.3	9.8	24.0	2.7	0.1	44.1	42.0
	2015	628	43.1	43.1	16.1	14.9	23.7	2.0	0.2	40.1	46.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_08 (M042243): Algebra / Knowing Type: MC Key: A
Label: Which equation is satisfied

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	26.8	26.8	17.4	18.5	33.2	2.6	1.6	25.5	28.1
	2015	1377	35.0	35.0	16.5	15.3	29.7	3.1	0.4	38.1	32.1
Morocco	2011	1317	11.3	11.3	28.3	23.9	29.0	5.9	1.7	11.4	11.2
	2015	1853	17.1	17.1	27.3	21.7	29.4	4.3	0.2	17.6	16.7
New Zealand	2011	764	47.2	47.2	8.7	17.5	21.3	4.7	0.6	45.9	48.3
	2015	1125	52.7	52.7	8.8	15.1	19.4	3.5	0.5	55.4	50.0
Oman	2011	1359	24.9	24.9	14.9	21.3	34.6	3.0	1.3	31.9	17.5
	2015	1263	32.9	32.9	12.5	18.9	32.7	2.8	0.2	38.7	27.3
Qatar	2011	626	34.0	34.0	15.7	18.1	27.5	3.4	1.3	35.1	32.9
	2015	767	34.3	34.3	18.4	16.7	25.1	3.8	1.8	31.2	37.5
Russian Federation	2011	709	65.4	65.4	9.9	8.9	13.3	1.7	0.8	65.9	64.8
	2015	681	63.2	63.2	12.9	8.0	12.9	2.6	0.4	62.8	63.6
Saudi Arabia	2011	614	23.7	23.7	16.8	28.9	29.0	1.3	0.4	22.2	25.0
	2015	525	17.1	17.1	17.3	27.2	35.6	2.5	0.3	17.9	16.3
Singapore	2011	844	76.0	76.0	9.6	7.0	6.8	0.6	0.0	79.3	72.9
	2015	872	77.2	77.2	7.4	8.2	6.2	0.8	0.2	77.4	77.1
Slovenia	2011	632	49.1	49.1	9.6	17.3	16.5	7.4	0.1	53.2	45.4
	2015	602	49.8	49.8	8.7	10.3	20.1	11.0	0.1	53.9	45.6
South Africa	2011	1688	12.6	12.6	26.7	24.0	30.9	3.5	2.2	12.7	12.4
	2015	1785	17.8	17.8	27.3	20.6	31.8	1.9	0.5	18.4	17.3
Sweden	2011	798	43.6	43.6	9.1	17.3	19.9	8.9	1.2	46.5	40.8
	2015	596	54.1	54.1	8.4	12.5	18.0	5.9	1.2	59.0	49.6
Thailand	2011	868	21.6	21.6	18.6	22.8	32.1	4.1	0.8	23.9	18.8
	2015	927	24.4	24.4	18.0	22.3	31.2	3.6	0.5	26.0	22.5
Turkey	2011	996	35.3	35.3	11.7	22.7	27.2	3.2	0.0	35.8	34.8
	2015	879	39.6	39.6	13.0	19.3	27.1	1.0	0.1	43.3	36.2
United Arab Emirates	2011	2008	46.1	46.1	14.4	16.2	20.6	2.3	0.4	49.8	42.5
	2015	2573	46.8	46.8	14.6	14.5	21.3	2.4	0.6	50.3	43.3
United States	2011	1482	58.0	58.0	11.7	12.9	16.0	1.0	0.5	58.3	57.6
	2015	1476	57.1	57.1	10.4	13.2	17.1	1.7	0.5	59.5	54.8
International Avg (n=33)	2011	28487	42.9	42.9	14.5	16.1	22.5	3.2	0.7	43.7	42.1
	2015	31047	45.6	45.6	14.2	14.7	21.6	3.4	0.5	46.8	44.3
Ontario, Canada	2011	663	56.0	56.0	8.0	17.5	14.7	2.3	1.6	62.1	50.5
	2015	653	58.3	58.3	8.0	15.6	13.3	3.1	1.7	56.2	60.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_08 (M042243): Algebra / Knowing Type: MC Key: A
Label: Which equation is satisfied

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	53.8	53.8	12.0	13.4	16.9	3.3	0.6	57.4	49.9
	2015	571	48.9	48.9	12.8	14.7	18.7	3.9	1.0	48.4	49.5
Norway (8)	2011	543	25.3	25.3	14.3	20.3	31.5	8.0	0.7	24.2	26.3
	2015	686	27.3	27.3	19.9	19.5	23.2	9.9	0.2	25.1	29.8
Abu Dhabi, UAE	2011	624	42.4	42.4	13.4	17.5	23.3	3.0	0.4	44.4	40.7
	2015	687	40.2	40.2	14.1	17.1	26.3	1.8	0.5	44.5	36.3
Dubai, UAE	2011	798	51.1	51.1	14.6	14.6	16.2	2.7	0.7	55.6	46.8
	2015	884	59.6	59.6	13.6	9.5	15.2	1.8	0.2	62.3	56.9
Florida, US	2011	245	58.2	58.2	13.6	12.1	14.9	1.1	0.0	54.5	61.7
	2015	296	45.7	45.7	17.7	16.8	18.8	0.8	0.3	43.3	47.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_09 (M042248): Algebra / Knowing Type: CR 1 Point
Label: What is the value of n

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	29.9	7.5	49.9	12.2	0.5	29.9	29.4	30.5
	2015	1453	30.9	8.0	50.3	9.9	0.9	30.9	32.5	29.2
Bahrain	2011	650	18.2	2.2	59.7	18.0	1.9	18.2	23.4	12.8
	2015	707	20.3	4.9	63.9	10.9	0.0	20.3	23.6	17.3
Botswana	2011	761	4.6	2.3	87.6	4.7	0.8	4.6	5.4	3.7
	2015	839	6.2	3.2	84.7	5.9	0.1	6.2	6.0	6.5
Chile	2011	830	6.4	5.5	58.9	27.1	2.0	6.4	6.8	6.0
	2015	673	6.3	6.6	53.5	32.4	1.2	6.3	5.7	6.8
Chinese Taipei	2011	719	67.3	2.3	24.6	5.8	0.0	67.3	69.0	65.6
	2015	804	65.3	2.5	25.1	7.1	0.0	65.3	65.4	65.1
England	2011	548	32.0	10.5	48.2	8.2	1.1	32.0	31.3	32.8
	2015	697	36.4	8.7	44.5	9.6	0.9	36.4	36.7	36.0
Georgia	2011	649	19.7	1.4	50.7	26.6	1.6	19.7	19.2	20.1
	2015	574	24.8	2.9	49.8	21.4	1.0	24.8	26.2	23.6
Hong Kong SAR	2011	574	60.5	3.0	32.9	3.6	0.0	60.5	61.3	59.6
	2015	587	68.6	3.1	25.9	2.3	0.1	68.6	66.2	70.7
Hungary	2011	729	24.1	9.8	48.1	17.3	0.7	24.1	24.7	23.7
	2015	704	24.4	8.9	52.6	14.2	0.0	24.4	26.0	22.6
Iran, Islamic Rep. of	2011	870	12.6	5.2	62.4	19.0	0.8	12.6	12.7	12.5
	2015	883	22.5	9.4	53.1	14.0	1.0	22.5	23.3	21.7
Israel	2011	674	39.7	7.5	37.6	13.9	1.3	39.7	42.1	37.6
	2015	782	38.7	8.6	36.2	15.7	0.8	38.7	40.1	37.2
Italy	2011	555	18.2	8.5	51.0	21.8	0.4	18.2	16.2	20.2
	2015	627	17.4	9.6	53.0	19.6	0.3	17.4	17.8	17.0
Japan	2011	634	37.4	1.3	51.7	9.2	0.5	37.4	37.0	37.7
	2015	673	41.3	2.5	47.4	8.7	0.1	41.3	42.1	40.4
Jordan	2011	1091	14.9	2.8	72.3	9.7	0.3	14.9	15.5	14.3
	2015	1120	12.4	0.9	75.1	10.9	0.6	12.4	15.1	9.7
Kazakhstan	2011	625	42.6	2.4	41.8	13.0	0.2	42.6	49.1	35.6
	2015	688	60.8	1.9	31.1	6.0	0.2	60.8	63.4	58.0
Korea, Rep. of	2011	741	68.6	3.3	26.8	1.3	0.0	68.6	70.1	67.0
	2015	759	68.0	3.0	26.2	2.9	0.0	68.0	69.4	66.7
Lebanon	2011	555	33.3	3.3	46.7	15.4	1.4	33.3	31.6	35.0
	2015	553	27.5	4.6	41.2	22.7	4.0	27.5	27.5	27.5
Lithuania	2011	671	17.3	3.2	63.5	15.8	0.1	17.3	17.4	17.3
	2015	628	19.7	3.7	59.2	17.3	0.2	19.7	18.9	20.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_09 (M042248): Algebra / Knowing Type: CR 1 Point
Label: What is the value of n

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	18.0	4.4	62.1	13.8	1.7	18.0	17.3	18.8
	2015	1376	20.7	6.9	57.9	14.1	0.4	20.7	22.5	18.9
Morocco	2011	1322	6.8	2.9	54.8	33.6	1.8	6.8	8.0	5.7
	2015	1874	9.0	5.7	62.3	22.7	0.3	9.0	10.4	7.9
New Zealand	2011	764	23.2	7.3	55.5	13.4	0.6	23.2	21.9	24.4
	2015	1125	31.3	8.3	49.3	10.6	0.5	31.3	31.4	31.2
Oman	2011	1359	13.8	1.8	69.8	12.8	1.8	13.8	18.6	8.6
	2015	1264	20.6	2.9	66.8	9.5	0.2	20.6	25.5	15.8
Qatar	2011	626	19.5	6.0	59.1	14.1	1.3	19.5	19.9	19.2
	2015	767	27.1	5.8	54.1	11.1	2.0	27.1	28.5	25.5
Russian Federation	2011	709	48.7	3.6	32.3	14.6	0.8	48.7	51.3	46.2
	2015	681	46.1	4.4	36.0	13.0	0.4	46.1	47.6	44.7
Saudi Arabia	2011	617	16.9	4.8	68.4	9.6	0.4	16.9	19.4	14.5
	2015	524	11.9	4.1	73.1	10.5	0.3	11.9	15.5	8.3
Singapore	2011	844	73.6	5.9	18.7	1.7	0.1	73.6	77.7	69.6
	2015	872	75.8	6.2	16.7	1.1	0.2	75.8	75.6	76.0
Slovenia	2011	632	20.6	10.6	56.2	12.5	0.1	20.6	21.8	19.5
	2015	601	29.5	9.9	50.5	10.1	0.1	29.5	31.7	27.2
South Africa	2011	1688	3.8	1.2	86.4	6.2	2.3	3.8	3.7	3.9
	2015	1785	4.6	2.1	87.8	4.9	0.5	4.6	5.8	3.4
Sweden	2011	798	20.1	10.5	49.7	17.9	1.8	20.1	22.8	17.6
	2015	596	28.3	8.1	48.4	13.7	1.5	28.3	24.8	31.4
Thailand	2011	868	12.7	2.1	65.2	19.1	1.0	12.7	13.6	11.7
	2015	927	13.5	2.0	71.1	12.6	0.9	13.5	14.7	12.0
Turkey	2011	993	25.5	3.2	55.2	16.2	0.0	25.5	27.1	23.7
	2015	879	29.2	4.8	56.1	9.9	0.1	29.2	33.0	25.7
United Arab Emirates	2011	2008	27.9	10.0	52.0	9.7	0.5	27.9	30.1	25.8
	2015	2573	32.9	6.6	53.4	6.4	0.7	32.9	36.9	29.1
United States	2011	1482	37.9	8.9	48.6	4.0	0.5	37.9	40.2	35.6
	2015	1476	42.0	8.8	46.0	2.7	0.5	42.0	43.6	40.7
International Avg (n=33)	2011	28499	27.8	5.0	53.0	13.4	0.9	27.8	29.0	26.6
	2015	31071	30.7	5.4	51.6	11.7	0.6	30.7	31.9	29.5
Ontario, Canada	2011	663	33.9	11.3	43.8	9.3	1.7	33.9	39.8	28.6
	2015	654	36.0	11.5	43.4	7.3	1.7	36.0	37.0	35.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_09 (M042248): Algebra / Knowing Type: CR 1 Point
Label: What is the value of n

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	41.6	13.4	33.0	11.2	0.8	41.6	42.4	40.7
	2015	573	47.0	13.5	30.0	8.3	1.1	47.0	48.4	45.4
Norway (8)	2011	543	10.5	11.6	62.5	14.7	0.7	10.5	9.0	11.9
	2015	686	13.3	14.7	56.3	15.5	0.2	13.3	11.5	15.4
Abu Dhabi, UAE	2011	624	23.6	7.6	58.1	10.2	0.5	23.6	22.7	24.4
	2015	687	26.5	4.9	61.6	6.5	0.5	26.5	32.0	21.4
Dubai, UAE	2011	798	36.2	8.5	44.9	9.7	0.7	36.2	36.8	35.6
	2015	884	45.8	7.6	41.8	4.5	0.3	45.8	47.3	44.4
Florida, US	2011	245	46.9	5.8	42.4	4.8	0.0	46.9	49.5	44.6
	2015	296	40.0	5.1	51.0	3.5	0.3	40.0	34.6	45.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_10Z (M042229Z): Algebra / Applying Type: CR 2 Points
Label: Write an equation to find x (DERIVED)

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	11.4	2.5	63.8	21.6	0.7	14.0	11.4	8.9	14.1
	2015	1453	10.6	18.6	47.7	22.0	1.2	29.1	10.6	10.4	10.8
Bahrain	2011	650	6.2	2.0	65.4	24.3	2.1	8.2	6.2	6.8	5.6
	2015	707	9.8	9.7	63.7	16.6	0.1	19.6	9.8	10.7	9.0
Botswana	2011	761	1.0	2.5	92.2	3.4	0.9	3.5	1.0	1.7	0.2
	2015	839	1.0	7.3	86.4	5.0	0.3	8.2	1.0	1.0	0.9
Chile	2011	830	7.1	4.7	52.5	33.1	2.7	11.8	7.1	9.0	4.9
	2015	673	6.2	7.3	44.0	40.6	1.9	13.5	6.2	5.3	7.2
Chinese Taipei	2011	719	61.4	6.9	21.3	10.3	0.0	68.3	61.4	61.0	61.7
	2015	804	67.2	7.1	16.5	9.2	0.1	74.3	67.2	68.7	65.7
England	2011	548	11.4	2.5	62.1	22.4	1.6	13.9	11.4	10.3	12.5
	2015	697	14.9	16.4	45.5	22.4	0.9	31.3	14.9	17.3	12.3
Georgia	2011	649	17.7	10.3	32.0	37.5	2.5	28.0	17.7	18.4	17.1
	2015	574	28.6	12.2	31.0	25.9	2.4	40.7	28.6	28.9	28.3
Hong Kong SAR	2011	574	55.7	17.5	18.4	8.4	0.0	73.2	55.7	56.4	55.0
	2015	587	61.8	17.2	15.1	5.8	0.1	79.0	61.8	60.2	63.2
Hungary	2011	730	33.0	8.7	38.0	19.6	0.7	41.7	33.0	38.0	28.6
	2015	704	38.1	13.7	31.0	17.3	0.0	51.7	38.1	41.2	34.7
Iran, Islamic Rep. of	2011	870	5.3	2.6	62.3	28.7	1.1	7.9	5.3	4.9	5.6
	2015	883	16.1	10.3	47.4	24.8	1.4	26.4	16.1	17.3	15.0
Israel	2011	674	40.8	10.7	33.6	12.9	1.9	51.5	40.8	42.2	39.6
	2015	782	43.3	13.2	26.3	16.0	1.3	56.4	43.3	45.6	40.8
Italy	2011	555	13.0	5.0	47.0	34.6	0.4	18.0	13.0	12.8	13.1
	2015	627	10.1	13.8	39.3	36.5	0.3	23.9	10.1	12.0	8.3
Japan	2011	634	33.6	9.5	42.3	14.1	0.5	43.1	33.6	31.3	35.8
	2015	673	40.7	17.2	30.7	11.3	0.1	57.9	40.7	45.0	35.7
Jordan	2011	1091	7.5	6.9	72.3	12.9	0.3	14.4	7.5	9.4	5.6
	2015	1120	7.2	7.7	72.2	12.2	0.7	14.9	7.2	10.3	4.0
Kazakhstan	2011	625	24.7	12.6	37.5	24.7	0.5	37.3	24.7	27.1	22.2
	2015	688	40.8	19.9	30.4	8.3	0.6	60.7	40.8	44.1	37.4
Korea, Rep. of	2011	741	64.0	7.6	22.0	6.3	0.1	71.6	64.0	66.0	62.0
	2015	759	68.8	13.6	13.1	4.5	0.0	82.4	68.8	73.1	65.0
Lebanon	2011	555	12.2	14.3	48.4	23.4	1.6	26.6	12.2	12.2	12.2
	2015	553	14.8	17.3	36.2	27.6	4.1	32.1	14.8	18.0	11.1
Lithuania	2011	671	26.4	16.1	38.6	18.6	0.3	42.5	26.4	26.1	26.7
	2015	628	31.5	18.5	31.3	18.4	0.3	50.0	31.5	31.9	31.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

Trend Achievement Data Almanac for Mathematics Items (Weighted)

M05_10Z (M042229Z): Algebra / Applying Type: CR 2 Points
Label: Write an equation to find x (DERIVED)

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	4.5	1.8	76.7	15.1	1.9	6.2	4.5	5.3	3.6
	2015	1377	9.4	11.0	62.5	16.6	0.5	20.4	9.4	9.8	9.1
Morocco	2011	1322	3.3	5.2	64.3	24.9	2.4	8.5	3.3	3.3	3.3
	2015	1874	4.3	9.8	61.6	23.8	0.5	14.1	4.3	5.4	3.5
New Zealand	2011	764	8.6	1.0	65.6	24.2	0.6	9.6	8.6	7.0	9.8
	2015	1125	8.4	19.9	51.2	19.8	0.7	28.2	8.4	7.8	8.9
Oman	2011	1359	5.7	7.4	69.3	15.5	2.1	13.1	5.7	8.3	3.1
	2015	1264	11.0	13.2	65.4	10.2	0.3	24.1	11.0	14.2	7.8
Qatar	2011	626	7.8	2.6	70.9	17.0	1.6	10.4	7.8	7.9	7.6
	2015	767	15.1	8.9	57.4	16.3	2.2	24.0	15.1	14.0	16.3
Russian Federation	2011	709	41.8	15.6	21.0	20.4	1.2	57.4	41.8	44.9	38.9
	2015	681	47.4	16.2	20.2	15.5	0.5	63.7	47.4	50.2	44.9
Saudi Arabia	2011	616	3.7	3.6	76.0	16.2	0.4	7.3	3.7	2.6	4.8
	2015	523	1.8	3.4	78.2	16.4	0.3	5.2	1.8	1.7	1.8
Singapore	2011	844	59.4	8.8	28.7	3.0	0.1	68.2	59.4	63.6	55.4
	2015	872	64.6	16.0	16.8	2.5	0.2	80.5	64.6	69.8	60.1
Slovenia	2011	632	5.4	3.0	64.6	26.8	0.2	8.4	5.4	3.2	7.4
	2015	601	9.3	16.6	53.6	20.4	0.1	25.9	9.3	11.8	6.8
South Africa	2011	1688	1.9	1.5	87.3	6.4	2.8	3.4	1.9	1.2	2.5
	2015	1785	2.3	3.1	88.2	5.8	0.6	5.4	2.3	3.2	1.4
Sweden	2011	798	12.7	4.1	52.9	28.1	2.2	16.8	12.7	15.1	10.4
	2015	596	27.4	16.4	33.3	20.4	2.4	43.9	27.4	28.3	26.8
Thailand	2011	868	0.6	7.7	60.3	30.1	1.3	8.3	0.6	0.5	0.6
	2015	927	7.9	7.7	62.9	20.5	1.0	15.6	7.9	8.5	7.2
Turkey	2011	993	17.7	5.6	51.8	24.8	0.1	23.3	17.7	21.1	14.2
	2015	879	17.6	9.4	56.2	16.8	0.1	27.0	17.6	20.5	14.9
United Arab Emirates	2011	2008	12.7	6.6	66.2	13.6	0.9	19.3	12.7	13.9	11.6
	2015	2569	13.2	16.4	57.3	12.2	0.9	29.7	13.2	13.5	12.9
United States	2011	1482	17.7	5.0	66.7	10.2	0.6	22.6	17.7	18.6	16.7
	2015	1476	25.3	15.4	52.4	6.4	0.6	40.6	25.3	26.6	23.9
International Avg (n=33)	2011	28499	19.3	6.7	53.7	19.2	1.1	26.0	19.3	20.0	18.6
	2015	31067	23.5	12.8	46.2	16.6	0.8	36.4	23.5	25.0	22.0
Ontario, Canada	2011	663	8.1	3.4	63.6	23.0	1.8	11.5	8.1	9.1	7.2
	2015	654	15.1	22.6	42.1	18.4	1.9	37.6	15.1	12.5	17.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_10Z (M042229Z): Algebra / Applying Type: CR 2 Points
Label: Write an equation to find x (DERIVED)

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	28.6	10.6	43.3	16.6	0.8	39.3	28.6	33.8	23.0
	2015	573	44.1	17.8	26.0	10.8	1.2	61.9	44.1	45.1	43.0
Norway (8)	2011	543	4.4	1.6	58.1	34.8	1.1	6.0	4.4	4.2	4.6
	2015	686	5.0	11.2	50.1	33.5	0.3	16.2	5.0	3.7	6.4
Abu Dhabi, UAE	2011	624	10.1	5.5	69.7	13.5	1.2	15.6	10.1	8.5	11.5
	2015	685	7.2	16.1	61.3	14.9	0.6	23.3	7.2	5.3	8.9
Dubai, UAE	2011	798	18.9	8.8	57.0	14.5	0.8	27.7	18.9	20.8	17.2
	2015	884	22.7	21.8	45.8	9.4	0.5	44.4	22.7	23.5	21.8
Florida, US	2011	245	16.9	4.7	67.6	10.8	0.0	21.6	16.9	18.2	15.6
	2015	296	22.4	14.2	52.7	10.0	0.8	36.6	22.4	17.2	27.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_11A (M042080A): Algebra / Knowing Type: CR 1 Point
Label: What is a+b

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	35.4	0.4	51.3	12.0	1.0	35.4	34.9	35.8
	2015	1453	31.3	0.4	54.8	12.2	1.3	31.3	29.5	33.2
Bahrain	2011	650	26.5	1.5	42.5	27.2	2.3	26.5	30.6	22.0
	2015	707	34.5	1.2	49.7	14.5	0.1	34.5	39.5	29.8
Botswana	2011	761	22.6	0.1	73.8	2.2	1.3	22.6	22.4	22.8
	2015	839	27.0	0.5	69.4	2.2	0.8	27.0	30.0	23.7
Chile	2011	830	34.0	0.1	33.7	28.8	3.4	34.0	33.2	34.9
	2015	673	29.2	0.2	37.1	30.8	2.7	29.2	31.3	27.0
Chinese Taipei	2011	719	69.3	0.1	21.8	8.8	0.0	69.3	71.5	67.3
	2015	804	73.0	0.2	17.3	9.2	0.3	73.0	75.5	70.5
England	2011	548	42.8	0.6	44.3	9.9	2.4	42.8	39.8	45.9
	2015	697	38.1	0.1	49.1	11.7	1.0	38.1	39.0	37.1
Georgia	2011	649	24.4	0.2	43.6	29.4	2.5	24.4	22.4	25.9
	2015	574	31.1	0.1	40.8	25.6	2.4	31.1	33.6	28.9
Hong Kong SAR	2011	574	63.9	0.2	28.4	7.4	0.0	63.9	63.6	64.3
	2015	587	70.7	0.4	25.8	3.0	0.1	70.7	69.0	72.2
Hungary	2011	730	39.5	0.5	40.9	18.3	0.7	39.5	41.2	38.1
	2015	704	44.0	0.5	36.4	19.1	0.0	44.0	42.8	45.2
Iran, Islamic Rep. of	2011	870	20.5	0.2	51.9	26.0	1.4	20.5	20.6	20.3
	2015	883	24.5	0.2	46.1	27.1	2.1	24.5	28.3	20.8
Israel	2011	674	35.6	0.7	42.8	18.4	2.5	35.6	36.6	34.7
	2015	782	32.5	0.6	43.6	21.6	1.7	32.5	33.9	30.9
Italy	2011	555	27.0	0.0	38.6	33.5	0.8	27.0	23.1	30.9
	2015	627	26.6	0.1	38.2	34.6	0.4	26.6	28.6	24.8
Japan	2011	634	62.6	0.2	25.0	11.6	0.6	62.6	64.8	60.5
	2015	673	67.3	0.1	20.4	11.8	0.3	67.3	70.4	63.9
Jordan	2011	1091	22.3	0.7	59.7	16.2	1.1	22.3	24.6	20.1
	2015	1120	25.0	0.2	59.5	14.1	1.2	25.0	28.8	21.0
Kazakhstan	2011	625	50.0	1.0	29.8	18.3	0.9	50.0	47.5	52.8
	2015	687	58.7	0.0	30.9	9.2	1.1	58.7	60.4	57.0
Korea, Rep. of	2011	741	71.9	0.2	22.3	5.5	0.1	71.9	73.7	70.0
	2015	759	67.7	0.0	23.5	8.8	0.0	67.7	70.6	65.1
Lebanon	2011	555	46.6	0.7	41.9	8.8	2.0	46.6	49.1	44.0
	2015	553	42.0	0.5	39.0	14.2	4.3	42.0	43.4	40.4
Lithuania	2011	671	28.2	0.4	54.0	17.0	0.3	28.2	27.3	29.1
	2015	628	26.6	0.1	57.4	15.4	0.5	26.6	26.1	27.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_11A (M042080A): Algebra / Knowing Type: CR 1 Point
Label: What is a+b

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	28.9	0.5	54.1	14.4	2.2	28.9	27.6	30.4
	2015	1377	24.5	0.2	58.3	16.3	0.7	24.5	23.2	25.7
Morocco	2011	1322	11.8	0.4	55.7	28.9	3.2	11.8	11.6	11.8
	2015	1843	17.1	0.1	62.9	19.3	0.6	17.1	20.8	14.1
New Zealand	2011	764	38.7	0.1	46.0	14.1	1.0	38.7	37.6	39.7
	2015	1125	34.3	0.0	51.5	13.3	0.9	34.3	33.0	35.5
Oman	2011	1359	17.2	1.3	59.1	20.0	2.4	17.2	21.1	13.0
	2015	1263	25.4	2.8	58.9	12.5	0.5	25.4	29.2	21.8
Qatar	2011	626	23.5	0.6	53.3	20.5	2.0	23.5	28.9	18.6
	2015	767	33.9	2.6	51.2	9.9	2.5	33.9	34.0	33.7
Russian Federation	2011	709	57.8	0.4	24.6	15.9	1.4	57.8	58.6	57.0
	2015	681	55.8	0.8	28.6	13.9	0.9	55.8	57.6	54.0
Saudi Arabia	2011	617	29.8	0.0	53.4	16.3	0.6	29.8	31.6	28.0
	2015	525	30.5	0.4	50.5	18.3	0.3	30.5	37.1	23.6
Singapore	2011	844	71.3	0.7	25.4	2.3	0.2	71.3	74.7	68.0
	2015	872	76.3	0.5	21.5	1.4	0.2	76.3	78.8	74.2
Slovenia	2011	632	29.7	0.4	53.0	16.2	0.7	29.7	29.5	29.9
	2015	601	35.9	0.4	51.7	11.8	0.2	35.9	37.2	34.6
South Africa	2011	1688	15.4	0.2	75.6	5.3	3.4	15.4	15.3	15.6
	2015	1785	15.1	0.1	80.5	3.2	1.0	15.1	15.2	15.1
Sweden	2011	798	33.2	0.1	44.6	19.5	2.6	33.2	34.1	32.3
	2015	595	39.3	0.4	44.9	12.9	2.6	39.3	37.2	41.1
Thailand	2011	868	27.6	0.0	48.3	22.6	1.5	27.6	26.6	28.7
	2015	927	27.9	0.0	54.6	16.4	1.0	27.9	27.5	28.5
Turkey	2011	993	31.8	0.2	42.2	25.8	0.1	31.8	34.7	28.7
	2015	879	32.8	0.7	47.5	18.9	0.2	32.8	35.9	30.0
United Arab Emirates	2011	2008	39.5	0.4	46.1	12.6	1.3	39.5	44.7	34.5
	2015	2573	41.8	1.0	47.1	9.2	0.9	41.8	45.7	37.9
United States	2011	1482	41.8	0.5	49.6	7.4	0.7	41.8	41.5	42.2
	2015	1476	46.2	0.7	47.1	5.1	0.9	46.2	46.2	46.1
International Avg (n=33)	2011	28500	37.0	0.4	44.8	16.4	1.4	37.0	37.7	36.3
	2015	31039	39.0	0.5	45.3	14.2	1.0	39.0	40.6	37.4
Ontario, Canada	2011	663	31.3	0.5	45.2	19.9	3.0	31.3	35.4	27.6
	2015	654	34.4	0.0	43.2	20.1	2.3	34.4	29.9	38.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_11A (M042080A): Algebra / Knowing Type: CR 1 Point
Label: What is a+b

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	36.9	1.2	44.9	16.0	1.0	36.9	42.6	30.7
	2015	573	44.2	1.8	39.5	12.4	2.1	44.2	45.4	42.8
Norway (8)	2011	543	32.8	0.8	45.9	18.9	1.6	32.8	33.3	32.4
	2015	686	25.9	0.4	44.7	28.4	0.6	25.9	23.6	28.5
Abu Dhabi, UAE	2011	624	37.7	0.0	49.0	11.5	1.8	37.7	42.1	33.8
	2015	687	34.3	1.0	52.6	11.4	0.7	34.3	37.4	31.5
Dubai, UAE	2011	798	38.9	0.4	44.5	15.0	1.0	38.9	38.6	39.3
	2015	884	51.3	0.9	42.1	5.3	0.5	51.3	53.9	48.7
Florida, US	2011	245	45.9	1.0	44.0	9.1	0.0	45.9	50.9	41.2
	2015	296	44.7	0.0	47.1	7.0	1.2	44.7	43.9	45.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_11B (M042080B): Algebra / Knowing Type: CR 1 Point
Label: What is a-b

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	4.0	31.2	49.4	14.3	1.0	4.0	3.4	4.7
	2015	1453	4.0	31.8	48.2	14.8	1.3	4.0	3.4	4.7
Bahrain	2011	650	5.4	21.0	39.8	31.1	2.7	5.4	8.0	2.7
	2015	707	8.7	26.7	49.8	14.6	0.1	8.7	11.6	6.1
Botswana	2011	761	8.9	18.7	67.9	3.2	1.3	8.9	8.4	9.4
	2015	839	2.5	30.4	62.4	3.9	0.8	2.5	3.0	2.1
Chile	2011	830	1.1	31.7	31.6	31.9	3.6	1.1	0.9	1.3
	2015	673	1.9	27.6	33.3	34.5	2.7	1.9	1.7	2.1
Chinese Taipei	2011	719	57.7	16.0	16.7	9.6	0.0	57.7	58.9	56.6
	2015	804	58.8	14.3	17.2	9.3	0.3	58.8	61.0	56.7
England	2011	548	6.1	33.8	45.8	11.7	2.5	6.1	4.5	7.8
	2015	696	7.4	31.9	44.2	15.4	1.0	7.4	6.5	8.3
Georgia	2011	649	8.7	16.1	40.5	31.9	2.8	8.7	6.0	10.9
	2015	574	11.3	21.2	36.4	28.7	2.4	11.3	11.0	11.5
Hong Kong SAR	2011	574	38.3	26.3	26.9	8.5	0.0	38.3	41.1	35.6
	2015	587	40.0	26.5	28.9	4.4	0.1	40.0	39.6	40.3
Hungary	2011	730	9.2	39.2	29.3	21.5	0.7	9.2	8.8	9.7
	2015	704	12.3	36.9	29.8	21.0	0.0	12.3	11.8	12.9
Iran, Islamic Rep. of	2011	870	3.4	25.3	40.9	29.0	1.4	3.4	4.0	2.8
	2015	883	6.6	21.1	37.9	32.1	2.3	6.6	7.3	6.0
Israel	2011	674	5.2	33.4	37.7	20.7	2.9	5.2	5.1	5.4
	2015	782	6.8	27.7	39.6	24.3	1.7	6.8	4.7	9.1
Italy	2011	555	5.5	21.2	35.8	36.5	0.9	5.5	5.4	5.6
	2015	625	7.2	22.1	32.2	38.1	0.4	7.2	8.7	5.9
Japan	2011	634	40.2	17.3	28.9	12.7	0.8	40.2	41.2	39.4
	2015	673	46.7	15.3	25.2	12.5	0.3	46.7	49.0	44.1
Jordan	2011	1091	4.2	22.8	53.2	18.7	1.2	4.2	4.1	4.3
	2015	1120	7.9	20.1	53.8	16.9	1.4	7.9	8.2	7.6
Kazakhstan	2011	625	32.1	10.9	35.4	20.1	1.4	32.1	32.4	31.8
	2015	687	45.2	10.7	32.4	10.6	1.1	45.2	47.8	42.3
Korea, Rep. of	2011	741	52.4	20.4	21.3	5.7	0.1	52.4	53.8	51.0
	2015	759	51.3	19.3	19.8	9.6	0.0	51.3	51.6	51.0
Lebanon	2011	555	22.3	26.4	38.2	10.9	2.2	22.3	22.4	22.2
	2015	553	24.9	21.4	33.5	15.4	4.9	24.9	28.3	20.9
Lithuania	2011	671	5.3	29.2	45.1	19.8	0.5	5.3	5.9	4.8
	2015	628	5.7	31.2	41.2	21.4	0.5	5.7	5.4	6.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_11B (M042080B): Algebra / Knowing Type: CR 1 Point
Label: What is a-b

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	6.9	14.4	61.4	15.0	2.4	6.9	7.5	6.1
	2015	1377	6.1	18.3	55.9	18.9	0.8	6.1	6.2	6.0
Morocco	2011	1322	6.1	7.4	50.0	33.0	3.5	6.1	5.9	6.3
	2015	1843	3.9	14.2	59.4	21.8	0.7	3.9	4.4	3.5
New Zealand	2011	764	4.2	35.7	43.3	15.6	1.2	4.2	1.9	6.1
	2015	1125	5.5	33.2	44.7	15.4	1.1	5.5	4.2	6.8
Oman	2011	1359	5.1	16.0	53.2	23.0	2.7	5.1	6.5	3.6
	2015	1264	6.4	24.2	53.2	15.6	0.6	6.4	7.2	5.7
Qatar	2011	626	6.2	16.1	52.6	21.9	3.1	6.2	6.0	6.4
	2015	767	11.0	26.3	47.9	11.9	2.8	11.0	10.7	11.4
Russian Federation	2011	709	37.4	21.2	22.6	17.5	1.4	37.4	39.1	35.8
	2015	681	37.0	17.7	28.8	15.5	1.0	37.0	40.6	33.7
Saudi Arabia	2011	617	4.3	22.7	54.7	17.6	0.7	4.3	5.6	3.1
	2015	525	2.9	23.9	53.2	19.7	0.3	2.9	2.8	3.0
Singapore	2011	844	49.1	21.5	25.9	3.2	0.2	49.1	54.2	44.2
	2015	872	56.8	18.7	22.7	1.6	0.2	56.8	61.3	53.0
Slovenia	2011	632	5.4	34.0	42.2	17.8	0.7	5.4	6.0	4.8
	2015	601	7.9	39.5	37.9	14.4	0.2	7.9	9.6	6.1
South Africa	2011	1688	2.3	15.3	72.7	5.9	3.9	2.3	2.2	2.4
	2015	1785	1.4	14.9	78.5	4.0	1.0	1.4	1.2	1.7
Sweden	2011	798	1.9	33.7	40.4	21.3	2.6	1.9	1.2	2.6
	2015	596	6.1	35.4	39.2	15.8	3.5	6.1	3.6	8.4
Thailand	2011	868	4.3	26.8	43.6	23.7	1.6	4.3	5.3	3.2
	2015	927	7.1	25.2	49.5	16.8	1.3	7.1	8.3	5.7
Turkey	2011	993	8.4	24.7	37.4	29.5	0.1	8.4	10.1	6.5
	2015	879	7.2	27.6	44.6	20.4	0.2	7.2	8.4	6.2
United Arab Emirates	2011	2008	7.0	35.0	42.3	14.2	1.4	7.0	7.1	7.0
	2015	2573	14.2	28.4	45.7	10.8	0.9	14.2	15.6	12.8
United States	2011	1482	8.1	39.4	43.5	8.3	0.7	8.1	7.0	9.3
	2015	1476	10.0	39.7	44.3	4.9	1.1	10.0	8.7	11.3
International Avg (n=33)	2011	28500	14.1	24.4	41.5	18.3	1.6	14.1	14.5	13.7
	2015	31038	16.2	25.0	41.6	16.2	1.1	16.2	16.8	15.5
Ontario, Canada	2011	663	3.9	27.7	43.2	21.9	3.2	3.9	4.3	3.6
	2015	654	2.8	28.6	44.8	21.4	2.4	2.8	1.4	4.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_11B (M042080B): Algebra / Knowing Type: CR 1 Point
Label: What is a-b

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	7.7	30.5	43.4	17.1	1.3	7.7	8.9	6.4
	2015	573	12.2	35.2	35.6	14.8	2.2	12.2	10.9	13.7
Norway (8)	2011	543	1.1	29.8	45.9	21.2	1.9	1.1	0.5	1.8
	2015	686	1.5	23.6	42.6	31.8	0.6	1.5	1.1	1.9
Abu Dhabi, UAE	2011	624	7.7	34.1	43.5	12.6	2.0	7.7	6.0	9.3
	2015	687	7.6	25.8	52.8	13.1	0.7	7.6	6.5	8.6
Dubai, UAE	2011	798	8.6	33.5	40.2	16.5	1.2	8.6	11.3	6.1
	2015	884	23.4	28.9	39.9	7.3	0.5	23.4	26.2	20.5
Florida, US	2011	245	9.8	40.0	40.6	9.7	0.0	9.8	9.9	9.8
	2015	296	8.6	38.5	44.7	7.0	1.2	8.6	4.7	12.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_12 (M042120): Geometry / Knowing Type: MC Key: A
Label: Statement about Lines L and M

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	68.5	68.5	19.7	5.7	1.8	3.2	1.0	71.9	65.1
	2015	1453	68.7	68.7	16.9	6.5	2.9	3.8	1.3	73.0	64.1
Bahrain	2011	650	56.9	56.9	23.3	10.7	3.1	2.9	3.0	68.5	44.6
	2015	707	69.8	69.8	18.0	8.1	3.5	0.5	0.1	74.1	65.8
Botswana	2011	761	48.8	48.8	34.7	9.3	3.9	2.0	1.3	49.7	47.8
	2015	839	46.7	46.7	33.1	10.6	5.2	3.3	1.0	45.0	48.6
Chile	2011	830	56.3	56.3	23.8	7.9	2.4	6.1	3.6	53.4	59.3
	2015	673	52.1	52.1	24.3	12.7	2.0	5.9	2.8	53.0	51.2
Chinese Taipei	2011	719	74.9	74.9	18.2	4.7	0.9	1.2	0.0	77.7	72.4
	2015	804	78.7	78.7	13.6	5.0	1.8	0.6	0.3	82.9	74.5
England	2011	548	72.0	72.0	15.1	5.0	0.8	4.6	2.5	72.7	71.3
	2015	697	71.2	71.2	15.6	4.0	2.6	5.4	1.1	74.7	67.6
Georgia	2011	649	50.8	50.8	27.1	10.6	2.9	5.8	2.8	56.0	46.7
	2015	574	47.8	47.8	27.6	12.8	2.9	6.3	2.5	53.1	43.1
Hong Kong SAR	2011	574	74.8	74.8	13.9	5.0	2.2	4.1	0.0	78.5	71.3
	2015	587	78.2	78.2	12.6	5.7	2.6	0.7	0.1	81.3	75.5
Hungary	2011	730	72.5	72.5	18.7	2.9	0.5	4.8	0.7	78.8	66.9
	2015	704	75.4	75.4	15.5	4.5	0.5	4.1	0.0	78.7	71.8
Iran, Islamic Rep. of	2011	870	66.3	66.3	17.4	8.8	2.7	3.3	1.4	66.4	66.3
	2015	883	64.8	64.8	16.4	8.1	3.5	4.7	2.5	70.6	59.3
Israel	2011	674	74.4	74.4	13.7	4.4	0.7	3.9	2.9	76.0	72.9
	2015	782	70.9	70.9	16.0	6.1	1.6	3.9	1.7	74.4	67.1
Italy	2011	554	72.7	72.7	18.9	4.3	1.0	1.9	1.1	69.3	75.9
	2015	627	72.3	72.3	17.8	5.5	1.3	2.7	0.4	76.0	68.9
Japan	2011	634	81.5	81.5	10.1	4.1	1.5	2.0	0.8	83.8	79.2
	2015	673	81.5	81.5	10.5	4.0	1.7	1.9	0.3	84.9	77.6
Jordan	2011	1091	47.2	47.2	33.9	11.1	3.3	3.2	1.3	51.1	43.3
	2015	1120	47.5	47.5	30.3	13.0	3.2	4.7	1.4	51.1	43.7
Kazakhstan	2011	625	56.3	56.3	23.0	11.7	2.4	4.7	1.9	56.4	56.2
	2015	687	73.3	73.3	14.6	6.6	2.5	2.0	1.1	76.7	69.6
Korea, Rep. of	2011	741	87.3	87.3	6.4	4.7	1.1	0.3	0.1	89.1	85.5
	2015	759	86.3	86.3	7.2	4.2	1.4	0.9	0.0	90.5	82.5
Lebanon	2011	550	72.9	72.9	15.0	3.6	1.3	5.0	2.2	76.2	69.3
	2015	553	65.7	65.7	10.6	5.8	2.3	10.7	4.9	67.8	63.3
Lithuania	2011	671	62.1	62.1	30.7	4.6	0.5	1.5	0.5	60.8	63.5
	2015	628	57.2	57.2	33.3	6.6	1.0	1.4	0.5	53.8	60.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_12 (M042120): Geometry / Knowing Type: MC Key: A
Label: Statement about Lines L and M

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	55.6	55.6	26.5	11.3	2.8	1.3	2.5	61.0	49.8
	2015	1377	56.5	56.5	27.9	8.0	3.5	3.3	0.8	57.7	55.5
Morocco	2011	1317	60.8	60.8	21.6	6.2	1.8	6.1	3.5	61.0	60.7
	2015	1843	59.3	59.3	25.0	8.0	3.3	3.6	0.7	62.0	57.1
New Zealand	2011	764	66.0	66.0	20.4	5.3	1.3	5.8	1.2	65.4	66.4
	2015	1125	61.5	61.5	22.4	6.2	1.9	6.9	1.1	64.7	58.2
Oman	2011	1359	49.7	49.7	31.1	8.8	2.9	4.7	2.7	58.7	40.3
	2015	1264	55.8	55.8	27.6	9.2	3.8	3.1	0.6	59.3	52.5
Qatar	2011	626	47.8	47.8	30.9	11.1	2.3	4.3	3.5	50.8	45.0
	2015	767	48.8	48.8	32.0	7.9	5.3	2.7	3.2	50.5	47.1
Russian Federation	2011	709	77.4	77.4	15.1	2.6	0.2	3.3	1.4	79.6	75.3
	2015	681	78.3	78.3	13.6	2.3	0.1	4.7	1.0	82.4	74.5
Saudi Arabia	2011	615	52.8	52.8	35.3	6.3	4.0	1.0	0.7	54.8	50.8
	2015	524	36.0	36.0	39.9	12.6	7.3	3.9	0.3	39.3	32.5
Singapore	2011	844	84.4	84.4	11.5	2.2	0.2	1.3	0.2	85.5	83.4
	2015	872	86.5	86.5	8.7	2.7	0.7	1.2	0.2	88.5	84.7
Slovenia	2011	632	81.6	81.6	7.3	5.7	1.6	3.1	0.7	85.6	78.0
	2015	602	84.7	84.7	7.7	3.5	0.4	3.5	0.2	87.3	82.0
South Africa	2011	1688	45.4	45.4	26.6	13.1	6.9	4.2	3.9	48.1	42.8
	2015	1785	51.0	51.0	30.8	10.5	4.2	2.4	1.0	52.5	49.5
Sweden	2011	798	41.7	41.7	30.2	6.0	2.5	17.0	2.6	43.9	39.5
	2015	596	44.4	44.4	22.8	3.7	2.4	23.0	3.7	41.7	47.0
Thailand	2011	868	46.1	46.1	38.8	7.5	3.1	2.9	1.6	50.7	40.6
	2015	927	49.8	49.8	34.1	8.8	2.5	3.4	1.3	53.4	45.5
Turkey	2011	996	53.5	53.5	30.1	9.6	4.4	2.2	0.1	58.5	48.3
	2015	879	51.9	51.9	30.4	9.8	6.8	1.0	0.2	58.9	45.5
United Arab Emirates	2011	2008	57.3	57.3	27.4	8.1	2.9	2.9	1.4	62.1	52.6
	2015	2573	60.9	60.9	25.1	7.5	2.6	3.0	0.9	64.9	57.0
United States	2011	1482	75.5	75.5	13.1	6.8	1.8	2.0	0.7	77.9	73.2
	2015	1476	73.6	73.6	14.6	6.3	2.3	2.0	1.1	75.1	72.1
International Avg (n=33)	2011	28490	63.4	63.4	22.1	7.0	2.2	3.7	1.6	66.1	60.7
	2015	31041	63.9	63.9	21.1	7.2	2.7	4.0	1.2	66.7	61.1
Ontario, Canada	2011	663	74.3	74.3	14.4	5.3	0.8	1.8	3.4	77.2	71.7
	2015	654	72.0	72.0	15.1	5.1	1.2	4.1	2.4	74.3	70.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_12 (M042120): Geometry / Knowing Type: MC Key: A
Label: Statement about Lines L and M

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	79.4	79.4	12.0	1.9	0.9	4.5	1.4	82.3	76.3
	2015	570	76.3	76.3	11.0	4.2	0.7	5.7	2.2	79.6	72.4
Norway (8)	2011	543	64.3	64.3	19.7	6.8	1.7	5.6	1.9	67.8	61.1
	2015	686	61.2	61.2	20.9	8.7	1.6	7.0	0.6	62.4	59.9
Abu Dhabi, UAE	2011	624	51.5	51.5	30.0	10.5	3.7	2.2	2.2	55.8	47.7
	2015	687	53.7	53.7	29.3	8.8	3.2	4.3	0.7	61.4	46.6
Dubai, UAE	2011	798	64.8	64.8	21.5	6.9	1.6	4.0	1.2	72.3	57.6
	2015	884	71.0	71.0	20.4	5.0	1.5	1.7	0.5	68.5	73.7
Florida, US	2011	245	73.6	73.6	14.7	7.4	2.8	1.5	0.0	78.2	69.4
	2015	296	62.4	62.4	17.2	12.2	2.9	4.1	1.2	63.5	61.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_13 (M042203): Geometry / Applying Type: MC Key: C
Label: What is the value of x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	58.3	8.8	22.2	58.3	7.8	1.8	1.0	55.7	61.1
	2015	1453	51.4	9.6	25.7	51.4	9.5	2.3	1.5	51.7	51.1
Bahrain	2011	650	32.3	29.6	22.1	32.3	10.5	2.5	3.0	31.9	32.6
	2015	707	56.6	18.4	16.0	56.6	8.3	0.5	0.2	56.8	56.4
Botswana	2011	761	30.3	17.5	36.5	30.3	13.1	1.2	1.4	33.6	26.9
	2015	839	33.9	13.4	36.4	33.9	13.0	2.1	1.2	36.6	30.9
Chile	2011	830	32.9	18.7	28.5	32.9	11.2	4.9	3.8	32.9	32.8
	2015	672	30.8	19.6	33.4	30.8	9.0	3.8	3.4	28.1	33.7
Chinese Taipei	2011	719	85.0	2.5	5.3	85.0	6.9	0.3	0.0	87.5	82.8
	2015	804	84.0	3.0	6.7	84.0	5.4	0.4	0.3	84.9	83.2
England	2011	548	56.6	8.7	19.6	56.6	10.4	2.1	2.5	57.3	55.9
	2015	697	61.7	9.3	18.9	61.7	7.6	1.3	1.2	60.3	63.1
Georgia	2011	649	43.4	18.1	19.4	43.4	15.1	0.9	3.0	41.7	44.7
	2015	574	53.6	17.2	15.6	53.6	9.0	1.7	3.0	48.9	57.8
Hong Kong SAR	2011	574	84.5	4.9	5.3	84.5	4.6	0.7	0.0	84.6	84.4
	2015	587	87.6	5.8	3.1	87.6	3.0	0.4	0.1	87.1	88.1
Hungary	2011	730	58.0	8.9	21.4	58.0	10.7	0.4	0.7	62.1	54.4
	2015	704	61.2	9.8	20.7	61.2	7.3	0.9	0.0	63.8	58.5
Iran, Islamic Rep. of	2011	870	50.6	16.9	20.2	50.6	9.3	1.4	1.6	50.8	50.4
	2015	883	57.0	15.4	13.5	57.0	9.1	2.2	2.8	62.0	52.3
Israel	2011	674	66.9	12.9	10.1	66.9	4.7	2.5	2.9	66.7	67.1
	2015	782	58.9	17.9	12.2	58.9	6.8	2.6	1.7	61.0	56.7
Italy	2011	555	63.5	5.0	23.6	63.5	6.0	0.8	1.1	59.7	67.1
	2015	627	55.3	8.0	27.4	55.3	6.7	2.2	0.4	50.9	59.4
Japan	2011	634	88.4	2.8	2.7	88.4	5.0	0.3	0.8	90.7	86.2
	2015	673	91.6	1.1	3.3	91.6	2.8	0.6	0.5	91.9	91.2
Jordan	2011	1091	40.1	23.9	22.6	40.1	10.1	1.7	1.6	37.2	42.9
	2015	1120	35.0	35.0	18.3	35.0	7.8	2.4	1.5	35.3	34.7
Kazakhstan	2011	625	53.4	18.7	14.3	53.4	8.7	3.0	2.0	55.4	51.1
	2015	688	61.9	12.2	13.6	61.9	9.4	1.2	1.6	63.6	60.2
Korea, Rep. of	2011	741	91.7	1.8	1.9	91.7	4.4	0.1	0.1	94.1	89.2
	2015	759	94.3	1.0	2.1	94.3	2.4	0.2	0.0	95.8	93.1
Lebanon	2011	555	61.2	21.9	7.1	61.2	5.7	1.6	2.6	56.5	66.2
	2015	553	56.5	20.7	8.4	56.5	5.0	4.1	5.3	55.7	57.5
Lithuania	2011	671	64.3	10.8	15.0	64.3	8.1	1.3	0.5	64.6	63.9
	2015	628	68.6	8.5	14.8	68.6	7.5	0.1	0.5	65.0	72.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_13 (M042203): Geometry / Applying Type: MC Key: C
Label: What is the value of x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	41.7	14.0	31.0	41.7	9.6	1.2	2.6	39.5	44.0
	2015	1377	47.4	11.9	32.6	47.4	4.7	2.4	0.9	46.6	48.2
Morocco	2011	1320	27.9	32.8	24.2	27.9	8.4	3.1	3.7	22.5	32.6
	2015	1873	37.9	23.5	27.2	37.9	9.1	1.5	0.8	36.5	39.0
New Zealand	2011	764	47.9	13.8	25.6	47.9	7.8	3.7	1.2	44.6	50.6
	2015	1125	50.8	11.4	25.3	50.8	8.3	2.9	1.2	48.4	53.3
Oman	2011	1359	28.4	31.0	24.7	28.4	10.1	2.8	3.0	31.2	25.5
	2015	1262	37.1	27.8	24.2	37.1	8.6	1.7	0.6	39.3	35.0
Qatar	2011	626	38.5	26.3	18.1	38.5	11.9	1.6	3.5	38.1	39.0
	2015	767	38.3	27.8	20.7	38.3	7.5	2.4	3.3	32.5	44.3
Russian Federation	2011	709	70.6	7.2	12.7	70.6	6.4	1.6	1.4	69.1	72.0
	2015	681	67.9	9.4	13.0	67.9	6.7	1.9	1.1	71.7	64.5
Saudi Arabia	2011	616	28.3	33.5	27.0	28.3	9.6	0.8	0.7	24.1	32.3
	2015	525	23.1	36.8	28.1	23.1	10.9	0.8	0.3	23.0	23.2
Singapore	2011	844	90.9	3.8	1.7	90.9	3.0	0.3	0.2	92.6	89.2
	2015	872	93.8	3.3	1.2	93.8	1.4	0.1	0.2	93.9	93.7
Slovenia	2011	632	55.3	12.2	22.0	55.3	7.8	1.9	0.7	53.2	57.3
	2015	602	58.8	11.9	17.9	58.8	11.0	0.3	0.2	62.6	55.0
South Africa	2011	1688	19.5	39.6	22.9	19.5	10.8	3.1	4.0	17.0	21.8
	2015	1785	24.7	38.3	24.0	24.7	10.7	1.3	1.0	27.3	22.2
Sweden	2011	798	45.3	7.0	26.4	45.3	14.4	3.7	3.2	45.6	45.0
	2015	596	46.0	9.5	22.2	46.0	11.1	7.4	3.7	48.8	43.8
Thailand	2011	868	37.6	15.1	31.7	37.6	12.2	1.7	1.6	38.1	37.0
	2015	927	36.1	17.2	31.4	36.1	11.9	2.0	1.4	38.9	32.7
Turkey	2011	996	52.8	20.6	15.0	52.8	10.3	1.1	0.1	53.3	52.3
	2015	879	54.1	19.2	17.3	54.1	8.6	0.7	0.2	55.0	53.4
United Arab Emirates	2011	2008	44.6	25.9	17.1	44.6	9.5	1.5	1.4	46.5	42.8
	2015	2573	45.3	21.8	19.9	45.3	9.3	2.5	1.1	45.1	45.4
United States	2011	1482	52.8	10.6	25.2	52.8	9.1	1.4	0.8	54.1	51.5
	2015	1476	53.8	11.0	25.1	53.8	7.3	1.4	1.4	53.5	54.0
International Avg (n=33)	2011	28500	52.8	15.9	18.9	52.8	8.9	1.7	1.7	52.5	53.1
	2015	31070	55.0	15.3	18.8	55.0	7.8	1.8	1.3	55.2	54.8
Ontario, Canada	2011	663	59.2	9.9	18.3	59.2	7.4	1.6	3.5	59.0	59.4
	2015	654	59.0	7.9	21.3	59.0	6.4	2.3	3.1	60.4	57.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_13 (M042203): Geometry / Applying Type: MC Key: C
Label: What is the value of x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	75.7	4.3	11.8	75.7	4.9	1.8	1.6	75.4	75.9
	2015	573	76.0	3.9	12.3	76.0	4.0	1.4	2.3	74.1	78.2
Norway (8)	2011	543	47.1	12.2	24.9	47.1	10.9	2.9	1.9	50.5	43.9
	2015	686	54.4	7.2	25.0	54.4	9.4	2.7	1.3	54.7	54.1
Abu Dhabi, UAE	2011	624	42.3	24.6	20.8	42.3	8.6	1.6	2.2	42.9	41.8
	2015	687	40.9	20.3	24.4	40.9	9.9	3.6	1.1	41.0	40.8
Dubai, UAE	2011	798	48.7	26.2	13.0	48.7	9.4	1.5	1.2	48.4	49.0
	2015	884	56.9	17.9	13.9	56.9	9.1	1.7	0.6	58.6	55.1
Florida, US	2011	245	62.7	8.6	20.0	62.7	7.7	0.9	0.0	61.6	63.7
	2015	296	40.9	8.6	35.4	40.9	13.6	0.0	1.5	35.3	46.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_14 (M042264): Geometry / Reasoning Type: CR 1 Point
Label: Conditions for similar triangles

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	19.4	66.6	13.0	1.0	19.4	19.8	19.0
	2015	1453	18.9	66.6	13.0	1.6	18.9	18.6	19.2
Bahrain	2011	650	14.1	63.2	19.7	3.0	14.1	16.2	11.9
	2015	707	28.2	57.0	14.6	0.2	28.2	30.9	25.7
Botswana	2011	761	6.0	86.2	6.3	1.5	6.0	6.4	5.5
	2015	839	7.4	86.0	5.2	1.3	7.4	6.5	8.5
Chile	2011	830	10.2	56.4	28.7	4.6	10.2	10.8	9.6
	2015	673	8.3	49.1	38.9	3.7	8.3	7.1	9.5
Chinese Taipei	2011	719	45.7	46.9	7.4	0.0	45.7	45.3	46.2
	2015	804	22.5	69.4	7.7	0.3	22.5	19.8	25.2
England	2011	548	26.0	57.6	13.9	2.5	26.0	27.4	24.7
	2015	697	28.8	57.2	12.6	1.4	28.8	33.6	23.6
Georgia	2011	649	12.2	44.4	40.4	3.0	12.2	11.6	12.6
	2015	574	14.9	46.0	36.0	3.2	14.9	13.3	16.3
Hong Kong SAR	2011	574	33.1	59.9	6.8	0.2	33.1	38.2	28.1
	2015	587	38.8	58.1	2.8	0.3	38.8	39.5	38.2
Hungary	2011	730	31.9	50.0	17.4	0.7	31.9	31.7	32.1
	2015	704	35.7	49.1	15.2	0.0	35.7	34.7	36.7
Iran, Islamic Rep. of	2011	870	15.9	68.2	14.0	1.9	15.9	15.1	16.7
	2015	882	10.2	69.0	17.3	3.5	10.2	9.3	11.1
Israel	2011	674	18.7	62.9	15.0	3.4	18.7	19.5	18.0
	2015	782	32.6	48.5	16.7	2.1	32.6	35.6	29.4
Italy	2011	555	19.5	57.7	21.5	1.3	19.5	19.2	19.8
	2015	627	16.2	67.3	16.0	0.4	16.2	15.9	16.6
Japan	2011	634	24.1	66.7	8.4	0.8	24.1	20.8	27.2
	2015	673	21.1	73.6	4.9	0.5	21.1	23.1	18.7
Jordan	2011	1091	7.5	76.7	14.0	1.7	7.5	7.0	8.1
	2015	1120	5.3	79.3	13.6	1.9	5.3	6.8	3.8
Kazakhstan	2011	625	21.0	55.7	21.2	2.1	21.0	19.5	22.8
	2015	688	23.1	63.1	12.0	1.7	23.1	26.3	19.8
Korea, Rep. of	2011	741	54.5	41.6	3.7	0.1	54.5	58.6	50.2
	2015	759	53.4	44.1	2.5	0.0	53.4	54.3	52.7
Lebanon	2011	555	17.3	62.9	16.7	3.1	17.3	18.9	15.5
	2015	553	16.2	62.3	16.2	5.3	16.2	17.0	15.2
Lithuania	2011	671	12.8	73.5	13.2	0.5	12.8	13.5	12.1
	2015	628	15.6	71.3	12.6	0.5	15.6	14.9	16.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

Trend Achievement Data Almanac for Mathematics Items (Weighted)

M05_14 (M042264): Geometry / Reasoning Type: CR 1 Point
Label: Conditions for similar triangles

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	6.5	75.2	15.5	2.9	6.5	8.2	4.6
	2015	1377	11.9	66.6	20.0	1.4	11.9	10.9	12.9
Morocco	2011	1322	3.9	56.1	36.0	4.0	3.9	3.6	4.2
	2015	1873	9.5	61.9	27.4	1.2	9.5	10.5	8.8
New Zealand	2011	764	17.4	66.4	15.0	1.2	17.4	17.8	17.0
	2015	1125	17.3	65.4	15.9	1.4	17.3	16.1	18.6
Oman	2011	1359	12.6	65.3	19.1	3.1	12.6	15.8	9.2
	2015	1264	18.7	69.3	11.2	0.7	18.7	21.7	15.8
Qatar	2011	626	9.8	67.0	19.7	3.5	9.8	8.8	10.6
	2015	767	14.3	70.8	11.3	3.5	14.3	14.1	14.6
Russian Federation	2011	709	46.5	42.0	10.1	1.4	46.5	48.4	44.7
	2015	681	56.0	32.5	10.4	1.1	56.0	57.6	54.5
Saudi Arabia	2011	617	4.6	84.4	9.8	1.2	4.6	4.2	5.0
	2015	525	4.5	78.8	16.3	0.4	4.5	4.7	4.3
Singapore	2011	844	47.3	50.6	1.8	0.3	47.3	50.3	44.3
	2015	872	53.6	44.9	1.3	0.2	53.6	55.9	51.5
Slovenia	2011	632	28.0	49.9	21.5	0.7	28.0	27.0	28.8
	2015	601	35.6	48.4	15.7	0.2	35.6	34.3	37.0
South Africa	2011	1688	2.8	85.1	7.8	4.3	2.8	2.7	2.9
	2015	1785	5.8	87.5	5.4	1.3	5.8	7.3	4.3
Sweden	2011	798	8.5	63.0	25.1	3.3	8.5	8.5	8.5
	2015	595	17.6	55.8	22.7	3.9	17.6	17.3	18.0
Thailand	2011	868	9.9	72.3	16.2	1.6	9.9	10.6	9.1
	2015	927	10.1	74.9	13.4	1.6	10.1	11.1	8.9
Turkey	2011	993	10.3	73.3	16.2	0.2	10.3	11.0	9.6
	2015	879	33.5	54.2	12.1	0.2	33.5	36.8	30.6
United Arab Emirates	2011	2008	16.2	70.6	11.7	1.5	16.2	18.2	14.3
	2015	2573	18.8	69.5	10.0	1.7	18.8	21.2	16.5
United States	2011	1482	18.2	75.7	5.3	0.8	18.2	17.6	18.9
	2015	1476	18.2	75.4	4.7	1.7	18.2	15.9	20.5
International Avg (n=33)	2011	28500	19.2	63.5	15.5	1.9	19.2	19.8	18.5
	2015	31070	21.9	62.8	13.8	1.5	21.9	22.5	21.3
Ontario, Canada	2011	663	19.3	66.6	10.4	3.7	19.3	20.6	18.1
	2015	654	23.0	64.0	9.6	3.4	23.0	23.2	22.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_14 (M042264): Geometry / Reasoning Type: CR 1 Point
Label: Conditions for similar triangles

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	872	20.3	67.8	10.2	1.7	20.3	21.7	18.8
	2015	573	29.3	54.3	13.7	2.6	29.3	29.4	29.3
Norway (8)	2011	543	8.0	60.3	29.7	1.9	8.0	7.3	8.7
	2015	686	9.4	58.1	31.2	1.3	9.4	7.7	11.3
Abu Dhabi, UAE	2011	624	13.8	72.7	11.2	2.4	13.8	14.3	13.3
	2015	687	17.0	70.6	10.9	1.5	17.0	21.9	12.5
Dubai, UAE	2011	798	21.9	64.1	12.8	1.2	21.9	27.6	16.5
	2015	884	26.8	64.1	7.8	1.2	26.8	29.7	23.9
Florida, US	2011	245	18.8	75.4	5.6	0.3	18.8	17.9	19.5
	2015	296	16.5	76.2	5.8	1.5	16.5	13.4	19.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_15 (M042255): Data and Chance / Applying Type: MC Key: B
Label: Representing data on a pie chart

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	71.2	10.4	71.2	7.9	8.1	1.3	1.2	70.8	71.5
	2015	1453	68.9	11.9	68.9	8.0	7.1	2.2	1.9	69.5	68.3
Bahrain	2011	650	48.9	14.1	48.9	16.0	15.0	2.3	3.7	52.2	45.4
	2015	707	70.3	8.8	70.3	10.7	9.0	0.8	0.4	69.1	71.4
Botswana	2011	761	48.7	12.2	48.7	27.7	8.4	1.1	1.9	50.1	47.2
	2015	839	46.7	16.1	46.7	25.9	7.5	2.0	1.7	48.4	44.9
Chile	2011	830	57.6	14.0	57.6	10.3	10.7	1.9	5.6	57.2	58.0
	2015	673	56.3	13.5	56.3	13.9	10.2	1.5	4.6	52.8	59.9
Chinese Taipei	2011	719	81.5	5.7	81.5	7.8	4.2	0.6	0.3	85.6	77.7
	2015	804	76.9	10.4	76.9	7.5	4.7	0.2	0.3	77.2	76.6
England	2011	548	68.2	9.6	68.2	8.3	9.7	1.2	2.9	66.5	69.9
	2015	697	70.1	10.9	70.1	6.4	8.2	2.7	1.7	71.6	68.4
Georgia	2011	649	51.9	15.3	51.9	17.6	8.4	1.6	5.2	54.3	50.0
	2015	574	49.7	17.2	49.7	19.8	7.4	1.5	4.4	47.1	52.1
Hong Kong SAR	2011	574	78.7	8.0	78.7	7.7	4.7	0.7	0.3	77.0	80.3
	2015	587	80.0	9.6	80.0	5.5	4.4	0.2	0.3	79.3	80.6
Hungary	2011	730	69.2	10.6	69.2	10.6	7.0	1.3	1.4	69.3	69.1
	2015	704	72.2	10.8	72.2	9.3	6.8	0.8	0.0	75.2	69.0
Iran, Islamic Rep. of	2011	870	49.7	10.1	49.7	18.6	15.8	1.8	3.9	45.4	53.5
	2015	882	52.5	9.6	52.5	15.5	14.6	3.5	4.2	53.2	51.9
Israel	2011	674	68.2	9.7	68.2	9.0	6.3	1.8	5.1	68.5	67.9
	2015	782	63.9	13.9	63.9	8.4	7.6	2.5	3.7	64.1	63.7
Italy	2011	555	67.2	9.9	67.2	11.0	8.4	0.5	2.9	65.2	69.1
	2015	627	69.3	11.5	69.3	9.3	7.3	2.0	0.7	69.1	69.4
Japan	2011	634	78.9	8.7	78.9	3.2	6.9	0.8	1.5	79.4	78.4
	2015	673	81.0	6.7	81.0	5.8	5.5	0.1	0.9	82.7	79.1
Jordan	2011	1091	48.5	15.7	48.5	18.0	14.1	1.1	2.7	47.4	49.5
	2015	1120	44.4	17.5	44.4	21.3	11.7	2.7	2.4	48.3	40.5
Kazakhstan	2011	625	55.3	12.5	55.3	17.4	7.2	4.7	2.9	52.5	58.4
	2015	688	63.0	11.7	63.0	15.9	6.2	0.9	2.2	62.2	63.9
Korea, Rep. of	2011	741	83.3	7.3	83.3	5.2	3.9	0.1	0.1	86.4	80.1
	2015	759	83.8	6.7	83.8	4.8	4.5	0.2	0.0	83.9	83.7
Lebanon	2011	553	50.8	10.5	50.8	16.8	12.7	5.0	4.2	49.1	52.6
	2015	553	45.3	11.9	45.3	14.3	11.8	9.6	7.1	45.3	45.4
Lithuania	2011	671	69.5	13.6	69.5	7.3	8.5	0.1	0.9	70.1	69.0
	2015	628	73.2	12.3	73.2	6.6	6.8	0.3	0.9	71.0	75.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_15 (M042255): Data and Chance / Applying Type: MC Key: B
Label: Representing data on a pie chart

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	64.0	7.9	64.0	17.9	6.4	0.4	3.3	63.8	64.3
	2015	1377	70.5	6.1	70.5	15.8	5.0	0.5	2.1	70.4	70.7
Morocco	2011	1318	38.8	15.1	38.8	23.8	11.0	4.4	6.9	37.7	39.8
	2015	1874	46.4	16.0	46.4	22.7	10.8	1.6	2.4	45.8	47.0
New Zealand	2011	764	68.4	10.9	68.4	7.3	7.7	4.2	1.5	68.3	68.5
	2015	1124	66.0	13.0	66.0	8.5	7.7	2.5	2.3	68.6	63.3
Oman	2011	1359	39.9	11.1	39.9	28.9	14.0	1.9	4.1	43.9	35.5
	2015	1264	46.0	13.6	46.0	24.6	13.3	1.3	1.3	42.8	49.0
Qatar	2011	626	51.4	15.9	51.4	15.0	11.8	1.7	4.3	46.7	55.7
	2015	766	52.1	17.9	52.1	13.6	11.4	1.1	4.0	52.4	51.9
Russian Federation	2011	709	69.6	8.8	69.6	11.8	5.1	2.2	2.6	72.4	67.0
	2015	681	72.7	8.4	72.7	11.6	3.8	1.7	1.7	73.1	72.4
Saudi Arabia	2011	616	46.8	13.3	46.8	23.9	14.2	0.2	1.6	46.7	46.9
	2015	523	38.9	18.1	38.9	26.0	15.0	1.1	1.0	40.6	37.1
Singapore	2011	844	79.2	7.6	79.2	7.5	4.7	0.5	0.5	81.3	77.1
	2015	872	84.0	6.7	84.0	4.1	4.2	0.3	0.5	85.9	82.5
Slovenia	2011	632	67.6	11.6	67.6	8.0	10.5	1.2	1.0	66.5	68.7
	2015	602	73.2	11.5	73.2	8.1	5.6	0.6	0.9	75.0	71.4
South Africa	2011	1688	31.8	15.5	31.8	33.2	8.8	5.6	5.1	29.5	33.8
	2015	1785	42.2	12.5	42.2	32.9	7.9	2.7	1.8	38.8	45.5
Sweden	2011	798	64.0	11.7	64.0	6.2	8.8	3.9	5.4	65.3	62.9
	2015	596	67.8	7.8	67.8	6.6	8.5	4.5	4.7	66.4	68.9
Thailand	2011	868	61.4	11.7	61.4	17.5	5.6	1.0	2.8	62.9	59.6
	2015	926	60.6	13.5	60.6	17.2	5.3	1.3	2.2	59.5	61.8
Turkey	2011	996	66.4	11.3	66.4	13.4	7.6	0.8	0.5	67.2	65.5
	2015	879	62.8	10.5	62.8	17.1	9.0	0.4	0.2	65.2	60.6
United Arab Emirates	2011	2008	55.4	14.1	55.4	14.4	11.8	1.7	2.6	53.9	56.8
	2015	2573	58.7	14.0	58.7	13.6	9.4	2.0	2.3	61.5	56.0
United States	2011	1482	71.9	10.1	71.9	8.1	8.2	0.7	1.1	73.5	70.3
	2015	1476	69.1	9.3	69.1	9.7	7.9	1.8	2.2	69.5	68.6
International Avg (n=33)	2011	28496	61.3	11.4	61.3	13.9	9.0	1.8	2.7	61.4	61.2
	2015	31068	63.0	11.8	63.0	13.4	8.1	1.7	2.0	63.2	62.8
Ontario, Canada	2011	663	68.4	9.7	68.4	7.9	8.4	1.4	4.3	67.4	69.2
	2015	654	70.2	10.7	70.2	6.5	6.9	2.0	3.7	68.0	72.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_15 (M042255): Data and Chance / Applying Type: MC Key: B
Label: Representing data on a pie chart

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	76.4	8.3	76.4	6.2	6.4	0.8	1.8	78.7	74.0
	2015	573	75.4	7.6	75.4	6.4	5.7	1.3	3.7	78.7	71.5
Norway (8)	2011	543	62.5	17.3	62.5	8.5	7.1	2.6	2.1	67.9	57.6
	2015	686	67.1	10.9	67.1	8.0	9.5	2.8	1.8	70.6	63.2
Abu Dhabi, UAE	2011	624	53.8	14.4	53.8	15.6	11.5	1.5	3.2	49.0	58.1
	2015	687	56.1	14.9	56.1	15.9	8.6	2.2	2.3	57.4	54.9
Dubai, UAE	2011	798	62.3	11.6	62.3	12.6	9.6	1.9	1.9	62.8	61.8
	2015	884	67.9	11.1	67.9	9.1	8.9	1.4	1.6	72.8	62.8
Florida, US	2011	245	70.8	6.7	70.8	9.3	12.2	0.2	0.7	70.5	71.1
	2015	296	66.3	10.7	66.3	10.2	8.8	2.1	1.9	65.3	67.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M05_16 (M042224): Data and Chance / Knowing Type: CR 1 Point
Label: Estimate the temperature

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1090	65.8	31.5	1.3	1.4	65.8	63.6	68.0
	2015	1453	62.9	32.7	2.1	2.3	62.9	62.3	63.5
Bahrain	2011	650	39.4	45.6	10.6	4.4	39.4	44.2	34.3
	2015	707	46.2	44.1	9.3	0.5	46.2	50.7	42.0
Botswana	2011	761	34.3	62.1	1.2	2.4	34.3	35.5	33.1
	2015	839	31.2	64.8	1.4	2.5	31.2	29.2	33.5
Chile	2011	831	39.5	41.0	13.2	6.3	39.5	36.4	42.9
	2015	673	37.0	42.5	15.9	4.6	37.0	31.6	42.6
Chinese Taipei	2011	719	73.8	23.5	2.2	0.6	73.8	75.9	71.9
	2015	804	78.0	19.6	2.0	0.3	78.0	77.3	78.7
England	2011	548	66.1	28.7	1.7	3.5	66.1	65.3	67.0
	2015	697	69.7	26.9	1.3	2.2	69.7	68.5	71.0
Georgia	2011	649	29.1	43.6	22.0	5.4	29.1	27.4	30.4
	2015	574	31.9	48.6	15.1	4.4	31.9	24.9	38.3
Hong Kong SAR	2011	574	83.5	14.9	1.3	0.3	83.5	85.0	82.0
	2015	587	85.8	13.4	0.5	0.3	85.8	85.9	85.6
Hungary	2011	730	67.3	28.1	2.7	1.8	67.3	64.1	70.1
	2015	704	70.1	27.0	2.6	0.3	70.1	69.6	70.7
Iran, Islamic Rep. of	2011	869	23.5	57.5	14.7	4.3	23.5	18.1	28.3
	2015	883	26.9	53.2	13.8	6.1	26.9	24.9	28.8
Israel	2011	674	56.1	33.5	4.8	5.6	56.1	53.9	58.0
	2015	782	56.9	33.5	5.3	4.2	56.9	54.8	59.2
Italy	2011	555	57.9	31.7	7.5	2.9	57.9	52.9	62.6
	2015	627	65.4	26.2	7.1	1.3	65.4	57.8	72.6
Japan	2011	634	75.6	19.4	3.3	1.6	75.6	77.8	73.6
	2015	673	84.1	12.5	2.6	0.9	84.1	86.5	81.3
Jordan	2011	1091	23.1	63.5	10.6	2.8	23.1	20.1	26.1
	2015	1120	21.3	63.7	11.9	3.2	21.3	20.1	22.5
Kazakhstan	2011	625	43.6	40.2	12.3	3.9	43.6	41.4	45.9
	2015	688	47.5	42.8	6.8	2.8	47.5	49.9	45.0
Korea, Rep. of	2011	741	79.3	19.7	0.7	0.3	79.3	81.9	76.6
	2015	759	79.5	20.0	0.6	0.0	79.5	85.6	74.0
Lebanon	2011	555	39.7	45.5	9.7	5.0	39.7	39.3	40.2
	2015	553	40.0	37.9	14.1	8.0	40.0	41.8	37.9
Lithuania	2011	671	68.5	27.4	3.1	0.9	68.5	68.0	69.1
	2015	628	71.5	26.2	1.4	0.9	71.5	68.1	75.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_16 (M042224): Data and Chance / Knowing Type: CR 1 Point
Label: Estimate the temperature

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	823	38.9	51.9	5.8	3.5	38.9	39.7	38.1
	2015	1377	45.3	45.8	6.7	2.3	45.3	46.9	43.7
Morocco	2011	1322	20.7	50.7	21.0	7.6	20.7	15.7	25.1
	2015	1874	22.4	62.1	12.8	2.7	22.4	18.8	25.3
New Zealand	2011	764	60.1	32.9	3.7	3.3	60.1	56.0	63.4
	2015	1124	65.3	29.8	2.3	2.6	65.3	63.4	67.2
Oman	2011	1359	17.7	66.1	11.6	4.5	17.7	21.9	13.3
	2015	1264	29.2	62.0	7.4	1.4	29.2	30.9	27.5
Qatar	2011	626	32.2	53.4	10.1	4.3	32.2	27.5	36.5
	2015	767	44.8	47.3	3.9	4.1	44.8	42.6	47.0
Russian Federation	2011	709	62.8	30.0	4.2	3.1	62.8	59.3	66.0
	2015	681	69.3	26.7	2.1	1.9	69.3	69.0	69.6
Saudi Arabia	2011	617	20.5	69.4	8.5	1.6	20.5	13.7	26.9
	2015	525	16.0	73.6	9.4	1.0	16.0	16.7	15.3
Singapore	2011	844	85.1	14.0	0.2	0.7	85.1	87.2	83.2
	2015	872	84.6	14.6	0.1	0.7	84.6	84.6	84.6
Slovenia	2011	632	67.6	28.9	2.5	1.0	67.6	65.3	69.6
	2015	601	71.1	26.9	1.0	1.0	71.1	73.0	69.1
South Africa	2011	1688	13.3	77.5	3.3	5.9	13.3	11.4	14.9
	2015	1785	21.8	73.3	2.7	2.2	21.8	21.5	22.1
Sweden	2011	798	66.5	23.2	3.9	6.3	66.5	64.6	68.4
	2015	596	65.6	23.8	4.7	5.8	65.6	65.5	65.6
Thailand	2011	868	25.7	65.3	5.9	3.1	25.7	25.2	26.3
	2015	927	24.8	66.3	6.6	2.3	24.8	27.2	21.9
Turkey	2011	993	36.7	54.8	7.7	0.8	36.7	34.6	38.9
	2015	879	40.7	53.2	5.8	0.3	40.7	38.8	42.4
United Arab Emirates	2011	2008	43.8	47.0	6.1	3.1	43.8	45.7	42.0
	2015	2573	47.3	47.4	2.8	2.5	47.3	47.8	46.9
United States	2011	1482	61.8	35.5	1.3	1.5	61.8	58.6	65.2
	2015	1476	60.9	34.2	2.3	2.6	60.9	60.3	61.4
International Avg (n=33)	2011	28500	49.1	41.1	6.6	3.1	49.1	47.8	50.2
	2015	31072	52.0	40.1	5.6	2.4	52.0	51.4	52.5
Ontario, Canada	2011	663	59.4	33.8	2.1	4.7	59.4	57.2	61.3
	2015	654	54.2	37.9	3.4	4.5	54.2	48.4	59.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M05_16 (M042224): Data and Chance / Knowing Type: CR 1 Point
Label: Estimate the temperature

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	70.6	24.8	2.6	2.0	70.6	68.4	73.1
	2015	573	67.3	23.1	5.5	4.2	67.3	64.0	71.0
Norway (8)	2011	543	59.2	35.3	3.2	2.3	59.2	56.6	61.5
	2015	686	66.9	27.3	3.5	2.3	66.9	66.9	66.9
Abu Dhabi, UAE	2011	624	39.8	48.7	7.7	3.7	39.8	41.0	38.8
	2015	687	43.6	51.9	2.1	2.4	43.6	45.3	42.0
Dubai, UAE	2011	798	51.2	40.6	5.5	2.7	51.2	52.9	49.6
	2015	884	57.3	38.7	2.4	1.6	57.3	58.0	56.6
Florida, US	2011	245	65.4	31.4	2.3	0.9	65.4	61.6	68.9
	2015	296	52.7	41.9	3.1	2.3	52.7	50.6	54.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_01 (M052017): Number / Knowing Type: MC Key: D
Label: Equivalent numeric expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	57.7	16.3	10.6	11.9	57.7	3.4	0.1	58.3	57.1
	2015	1467	57.5	17.6	12.0	10.6	57.5	2.2	0.1	59.8	55.2
Bahrain	2011	653	46.1	20.9	14.2	14.6	46.1	3.9	0.4	57.6	34.0
	2015	703	61.8	16.6	10.2	11.1	61.8	0.4	0.0	67.7	56.2
Botswana	2011	764	28.9	45.1	12.9	10.6	28.9	2.3	0.2	31.7	25.9
	2015	844	35.6	40.3	12.3	10.2	35.6	1.5	0.2	36.9	34.2
Chile	2011	832	19.9	42.3	18.4	14.4	19.9	5.1	0.0	18.8	21.1
	2015	677	25.1	38.8	18.0	15.0	25.1	3.0	0.0	23.2	27.0
Chinese Taipei	2011	718	83.1	2.6	5.4	8.4	83.1	0.3	0.2	87.4	79.4
	2015	821	82.5	4.0	4.0	9.1	82.5	0.4	0.0	84.4	80.5
England	2011	547	52.0	21.2	13.0	9.5	52.0	3.8	0.5	57.1	47.1
	2015	692	54.3	18.1	11.9	12.7	54.3	2.7	0.4	59.9	47.5
Georgia	2011	653	48.4	18.6	12.1	16.7	48.4	3.7	0.6	49.6	47.3
	2015	572	56.7	18.4	11.1	12.3	56.7	1.2	0.4	54.2	59.3
Hong Kong SAR	2011	574	85.5	1.9	3.1	8.1	85.5	1.4	0.0	87.1	83.8
	2015	596	89.4	2.1	3.2	4.8	89.4	0.4	0.0	91.0	88.0
Hungary	2011	730	61.2	11.9	10.0	14.4	61.2	2.4	0.1	64.6	58.3
	2015	704	62.8	13.3	9.5	13.5	62.8	0.9	0.0	61.8	63.9
Iran, Islamic Rep. of	2011	875	40.9	24.3	13.6	18.2	40.9	3.0	0.1	44.1	38.0
	2015	885	47.2	23.4	10.6	15.5	47.2	3.2	0.1	49.2	45.3
Israel	2011	665	73.7	8.4	5.6	10.3	73.7	1.8	0.2	78.3	69.6
	2015	786	71.8	8.8	6.0	10.1	71.8	2.8	0.5	75.0	68.4
Italy	2011	563	63.1	12.5	8.4	13.3	63.1	2.4	0.2	64.7	61.6
	2015	627	61.4	15.1	8.1	12.4	61.4	2.6	0.2	60.1	62.7
Japan	2011	626	74.2	8.7	8.0	8.3	74.2	0.8	0.0	73.3	75.0
	2015	682	77.7	6.5	6.0	8.9	77.7	0.6	0.3	79.7	75.5
Jordan	2011	1092	48.4	24.9	13.4	11.2	48.4	2.1	0.0	56.0	41.2
	2015	1134	47.0	23.2	14.8	13.7	47.0	1.3	0.0	54.3	39.3
Kazakhstan	2011	617	66.1	11.0	10.8	9.7	66.1	2.3	0.1	67.4	64.7
	2015	696	70.4	8.0	7.8	11.9	70.4	1.8	0.0	72.6	68.0
Korea, Rep. of	2011	740	79.9	6.4	6.3	7.2	79.9	0.1	0.0	80.6	79.2
	2015	757	80.8	4.4	5.0	9.1	80.8	0.7	0.0	80.5	81.0
Lebanon	2011	554	68.5	14.4	3.9	9.7	68.5	3.3	0.2	69.6	67.1
	2015	548	65.4	13.0	5.5	9.3	65.4	6.5	0.4	66.3	64.3
Lithuania	2011	673	66.7	10.0	9.1	12.2	66.7	1.9	0.0	77.3	58.3
	2015	621	65.7	9.3	7.3	16.0	65.7	1.6	0.0	74.6	56.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_01 (M052017): Number / Knowing Type: MC Key: D
Label: Equivalent numeric expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	59.3	20.5	9.6	9.5	59.3	0.9	0.1	63.3	55.6
	2015	1378	69.5	14.8	6.6	8.7	69.5	0.4	0.0	73.9	65.1
Morocco	2011	1328	40.9	27.9	11.9	14.9	40.9	4.0	0.3	46.8	35.8
	2015	1862	50.9	23.0	10.8	13.2	50.9	2.0	0.1	57.6	45.4
New Zealand	2011	761	49.0	21.4	12.9	12.0	49.0	4.7	0.0	45.7	52.0
	2015	1120	48.7	24.3	13.4	11.1	48.7	2.4	0.0	50.4	47.0
Oman	2011	1363	43.7	23.7	15.4	13.4	43.7	3.5	0.4	51.7	35.1
	2015	1255	50.5	20.9	14.9	11.9	50.5	1.8	0.0	57.0	44.6
Qatar	2011	624	40.0	25.6	17.0	15.6	40.0	1.7	0.0	44.7	35.7
	2015	771	48.6	23.5	8.5	17.2	48.6	2.0	0.1	46.7	50.4
Russian Federation	2011	709	77.6	4.5	6.1	10.3	77.6	1.6	0.0	77.7	77.5
	2015	677	75.8	7.2	4.9	10.9	75.8	1.2	0.0	74.4	77.1
Saudi Arabia	2011	625	41.5	27.3	13.0	16.7	41.5	1.1	0.3	48.0	35.5
	2015	532	33.6	31.1	18.7	14.7	33.6	1.9	0.0	39.2	27.6
Singapore	2011	849	84.0	5.4	4.4	5.2	84.0	0.8	0.1	89.3	78.9
	2015	870	88.6	4.2	2.7	4.0	88.6	0.5	0.0	90.2	87.1
Slovenia	2011	634	54.2	18.1	13.5	12.1	54.2	2.1	0.0	56.5	52.1
	2015	602	62.0	14.4	11.7	10.0	62.0	1.9	0.0	64.2	59.8
South Africa	2011	1703	29.2	33.9	17.3	15.2	29.2	4.3	0.1	28.5	29.8
	2015	1790	44.8	26.7	12.8	13.8	44.8	1.9	0.0	48.1	41.6
Sweden	2011	794	33.8	23.9	19.3	16.9	33.8	5.6	0.4	34.3	33.4
	2015	587	44.5	22.9	13.5	12.1	44.5	6.5	0.6	44.0	45.1
Thailand	2011	859	42.6	27.4	11.3	15.7	42.6	2.8	0.2	49.3	34.7
	2015	918	46.4	23.7	13.2	14.8	46.4	1.9	0.0	52.0	39.6
Turkey	2011	990	44.7	23.7	15.7	14.2	44.7	1.8	0.0	47.4	41.6
	2015	869	44.7	24.6	14.5	15.2	44.7	0.9	0.0	49.8	40.0
United Arab Emirates	2011	2001	59.0	18.4	10.3	10.9	59.0	1.4	0.0	64.2	53.8
	2015	2583	59.1	18.1	9.2	12.0	59.1	1.5	0.1	61.9	56.4
United States	2011	742	52.5	17.6	10.9	15.9	52.5	2.7	0.4	52.8	52.3
	2015	1474	63.6	14.0	7.9	12.4	63.6	1.7	0.4	66.9	60.5
International Avg (n=33)	2011	27774	55.0	18.8	11.1	12.3	55.0	2.5	0.2	58.3	51.9
	2015	31100	58.9	17.4	9.9	11.8	58.9	1.9	0.1	61.4	56.4
Ontario, Canada	2011	682	54.1	16.7	7.5	18.8	54.1	2.7	0.2	56.5	52.1
	2015	648	60.5	15.1	7.3	15.5	60.5	1.4	0.2	63.1	58.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_01 (M052017): Number / Knowing Type: MC Key: D
Label: Equivalent numeric expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	69.8	9.3	6.9	11.9	69.8	2.1	0.0	72.1	67.3
	2015	556	76.1	6.4	5.5	9.3	76.1	2.6	0.0	77.2	74.7
Norway (8)	2011	542	32.8	28.9	19.9	14.9	32.8	3.4	0.0	33.8	31.7
	2015	686	37.2	25.9	18.0	13.3	37.2	5.4	0.2	37.5	36.9
Abu Dhabi, UAE	2011	625	56.6	19.4	11.9	10.8	56.6	1.3	0.0	62.1	51.8
	2015	692	52.4	19.9	11.3	14.5	52.4	1.6	0.2	55.6	49.6
Dubai, UAE	2011	790	60.2	16.9	9.6	11.4	60.2	1.8	0.1	62.6	57.9
	2015	881	65.8	16.2	7.5	9.5	65.8	0.9	0.0	67.8	63.6
Florida, US	2011	120	56.1	14.3	6.8	18.6	56.1	4.2	0.0	54.9	57.1
	2015	298	55.9	18.6	8.1	17.1	55.9	0.3	0.0	60.9	51.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_02 (M052217): Number / Reasoning Type: CR 1 Point
Label: Who paid less for a hockey stick

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	35.6	59.6	4.6	0.2	35.6	30.8	40.6
	2015	1467	35.8	58.7	5.4	0.1	35.8	37.3	34.2
Bahrain	2011	653	13.7	67.1	18.5	0.7	13.7	14.6	12.9
	2015	703	10.6	78.0	11.4	0.0	10.6	9.6	11.7
Botswana	2011	764	2.9	93.6	3.3	0.2	2.9	3.4	2.4
	2015	844	3.9	92.6	3.1	0.4	3.9	3.9	3.8
Chile	2011	832	15.3	65.4	19.0	0.2	15.3	12.9	18.0
	2015	677	17.4	60.1	22.4	0.2	17.4	11.8	23.0
Chinese Taipei	2011	718	46.7	50.4	2.8	0.2	46.7	42.1	50.7
	2015	821	51.5	44.0	4.4	0.0	51.5	48.7	54.5
England	2011	547	38.9	56.2	4.4	0.5	38.9	38.3	39.6
	2015	692	45.8	47.1	6.7	0.4	45.8	40.9	51.6
Georgia	2011	653	10.9	59.5	29.0	0.6	10.9	8.9	12.6
	2015	572	9.8	65.2	24.6	0.4	9.8	7.7	11.9
Hong Kong SAR	2011	574	49.7	46.6	3.7	0.0	49.7	50.2	49.3
	2015	596	47.3	49.4	3.3	0.0	47.3	43.0	50.9
Hungary	2011	730	36.8	54.0	9.0	0.1	36.8	34.6	38.7
	2015	704	41.0	51.3	7.6	0.0	41.0	35.9	46.4
Iran, Islamic Rep. of	2011	873	14.1	71.8	14.0	0.1	14.1	9.4	18.1
	2015	885	16.8	68.5	14.1	0.5	16.8	13.6	19.9
Israel	2011	665	38.4	50.7	10.6	0.3	38.4	32.7	43.5
	2015	786	41.0	48.9	9.5	0.6	41.0	34.4	48.2
Italy	2011	563	17.8	66.3	15.7	0.2	17.8	12.9	22.5
	2015	626	19.4	62.5	17.9	0.2	19.4	12.4	26.3
Japan	2011	626	47.8	49.4	2.8	0.0	47.8	39.7	56.3
	2015	682	55.5	41.0	3.1	0.3	55.5	52.4	58.8
Jordan	2011	1092	5.0	85.9	9.1	0.0	5.0	2.9	6.9
	2015	1134	3.8	85.7	10.5	0.0	3.8	3.1	4.5
Kazakhstan	2011	617	23.6	59.3	16.9	0.1	23.6	22.4	24.9
	2015	696	34.8	55.9	9.3	0.0	34.8	36.0	33.6
Korea, Rep. of	2011	740	63.0	35.6	1.4	0.0	63.0	60.1	66.2
	2015	757	61.9	36.9	1.2	0.0	61.9	57.9	65.1
Lebanon	2011	557	13.9	57.0	28.9	0.2	13.9	10.3	18.2
	2015	548	13.7	55.0	30.9	0.4	13.7	12.6	14.9
Lithuania	2011	673	28.7	60.7	10.6	0.0	28.7	24.4	32.1
	2015	621	31.2	58.9	9.9	0.0	31.2	25.4	37.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

Trend Achievement Data Almanac for Mathematics Items (Weighted)

M06_02 (M052217): Number / Reasoning Type: CR 1 Point
Label: Who paid less for a hockey stick

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	18.3	70.8	10.6	0.3	18.3	19.7	17.0
	2015	1378	17.8	71.9	10.3	0.0	17.8	16.3	19.2
Morocco	2011	1328	1.8	66.1	31.8	0.4	1.8	1.5	2.0
	2015	1859	2.1	72.6	25.2	0.2	2.1	2.1	2.0
New Zealand	2011	761	41.5	53.2	5.2	0.2	41.5	36.7	45.7
	2015	1120	40.1	56.0	3.8	0.0	40.1	35.6	44.9
Oman	2011	1363	3.0	81.2	15.3	0.5	3.0	3.3	2.8
	2015	1255	6.7	84.3	8.9	0.0	6.7	6.4	7.0
Qatar	2011	624	10.0	76.0	14.0	0.0	10.0	8.3	11.6
	2015	771	17.9	71.2	10.7	0.2	17.9	12.1	23.5
Russian Federation	2011	709	28.9	54.8	16.2	0.0	28.9	23.1	34.7
	2015	677	29.6	57.0	13.3	0.1	29.6	26.4	32.3
Saudi Arabia	2011	628	1.0	88.6	10.1	0.3	1.0	1.1	1.0
	2015	532	9.8	77.6	12.6	0.0	9.8	11.0	8.5
Singapore	2011	849	66.9	30.8	2.2	0.1	66.9	68.8	65.0
	2015	870	76.5	22.5	1.1	0.0	76.5	76.7	76.3
Slovenia	2011	634	34.7	58.3	6.9	0.0	34.7	27.1	41.2
	2015	602	43.9	50.0	6.1	0.0	43.9	41.0	46.8
South Africa	2011	1703	15.9	69.9	13.8	0.4	15.9	16.6	15.3
	2015	1790	6.4	89.7	3.9	0.1	6.4	6.9	5.8
Sweden	2011	794	42.7	52.5	4.4	0.4	42.7	41.2	44.2
	2015	586	44.5	49.7	4.6	1.1	44.5	43.4	45.7
Thailand	2011	859	9.6	62.2	27.9	0.3	9.6	10.0	9.1
	2015	918	7.6	72.0	20.5	0.0	7.6	7.0	8.2
Turkey	2011	990	14.0	74.0	12.0	0.1	14.0	12.9	15.2
	2015	869	20.9	70.3	8.8	0.0	20.9	19.3	22.4
United Arab Emirates	2011	2001	13.4	77.5	9.1	0.1	13.4	11.6	15.1
	2015	2583	19.0	73.9	7.0	0.1	19.0	14.8	23.0
United States	2011	1490	34.7	61.7	3.4	0.2	34.7	28.4	40.9
	2015	1474	45.9	51.8	2.0	0.4	45.9	41.6	49.8
International Avg (n=33)	2011	28526	25.4	62.6	11.7	0.2	25.4	23.1	27.7
	2015	31095	28.2	61.5	10.1	0.2	28.2	25.7	30.7
Ontario, Canada	2011	682	51.8	44.0	4.1	0.2	51.8	44.4	57.7
	2015	649	52.8	44.1	2.9	0.2	52.8	53.2	52.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_02 (M052217): Number / Reasoning Type: CR 1 Point
Label: Who paid less for a hockey stick

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	49.6	44.3	6.1	0.0	49.6	44.5	54.9
	2015	556	52.6	42.0	5.4	0.0	52.6	45.7	60.5
Norway (8)	2011	542	26.7	68.4	4.9	0.0	26.7	26.5	26.9
	2015	686	36.0	58.7	5.1	0.2	36.0	35.9	36.0
Abu Dhabi, UAE	2011	625	13.3	77.3	9.4	0.0	13.3	10.5	15.8
	2015	692	15.7	77.4	6.7	0.2	15.7	12.2	18.9
Dubai, UAE	2011	790	18.8	73.0	7.9	0.3	18.8	17.8	19.6
	2015	881	29.6	63.6	6.7	0.0	29.6	25.1	34.6
Florida, US	2011	246	34.1	62.7	3.2	0.0	34.1	30.0	37.8
	2015	298	38.3	58.4	3.3	0.0	38.3	36.7	39.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_03 (M052021): Number / Reasoning Type: CR 2 Points
Label: Complete TV game show table

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	32.5	14.9	48.4	4.0	0.2	47.5	32.5	27.6	37.5
	2015	1467	26.6	15.9	51.5	5.9	0.1	42.4	26.6	22.8	30.4
Bahrain	2011	653	7.0	5.7	71.7	14.4	1.2	12.7	7.0	5.7	8.4
	2015	703	7.3	9.2	74.0	9.4	0.0	16.6	7.3	6.3	8.3
Botswana	2011	764	1.1	0.7	93.4	4.6	0.3	1.8	1.1	1.3	0.9
	2015	844	1.2	1.2	94.0	3.2	0.4	2.3	1.2	1.1	1.3
Chile	2011	832	13.8	12.5	63.5	9.8	0.4	26.3	13.8	10.0	18.0
	2015	677	15.7	11.1	57.7	15.2	0.2	26.9	15.7	11.7	19.8
Chinese Taipei	2011	718	62.4	19.8	15.7	1.9	0.2	82.2	62.4	59.7	64.8
	2015	821	65.1	17.1	15.4	2.4	0.0	82.2	65.1	65.1	65.0
England	2011	547	27.3	16.5	51.4	4.4	0.5	43.8	27.3	19.0	35.3
	2015	692	31.1	15.1	50.1	3.3	0.4	46.2	31.1	29.9	32.5
Georgia	2011	653	15.5	13.1	47.3	23.5	0.6	28.6	15.5	15.8	15.2
	2015	572	16.3	11.5	55.6	15.9	0.8	27.8	16.3	10.8	21.9
Hong Kong SAR	2011	574	56.0	20.2	20.8	2.9	0.2	76.1	56.0	52.3	59.9
	2015	596	57.4	20.4	20.0	1.9	0.3	77.8	57.4	50.4	63.3
Hungary	2011	729	32.1	14.1	47.1	6.6	0.1	46.2	32.1	23.8	39.2
	2015	704	36.3	17.2	41.7	4.7	0.0	53.5	36.3	33.3	39.5
Iran, Islamic Rep. of	2011	875	11.2	9.7	67.2	11.6	0.3	20.9	11.2	6.8	15.1
	2015	885	14.0	10.7	63.1	11.7	0.5	24.7	14.0	10.9	16.9
Israel	2011	665	31.3	19.7	39.5	9.3	0.3	51.0	31.3	27.7	34.4
	2015	786	32.7	16.0	43.3	7.4	0.6	48.7	32.7	25.7	40.2
Italy	2011	563	25.8	15.4	54.6	4.0	0.2	41.2	25.8	17.4	33.9
	2015	627	27.1	15.9	50.1	6.7	0.2	43.0	27.1	19.3	34.8
Japan	2011	626	56.9	15.2	25.6	2.3	0.0	72.1	56.9	46.9	67.4
	2015	682	65.2	16.0	17.0	1.5	0.3	81.2	65.2	60.9	69.7
Jordan	2011	1092	4.4	5.4	84.1	6.1	0.0	9.8	4.4	2.5	6.2
	2015	1134	2.1	4.2	85.5	8.0	0.1	6.4	2.1	1.6	2.6
Kazakhstan	2011	617	18.2	6.6	62.1	13.0	0.1	24.8	18.2	14.1	22.4
	2015	696	32.5	9.3	51.1	7.2	0.0	41.8	32.5	34.0	30.9
Korea, Rep. of	2011	740	69.3	17.8	11.4	1.5	0.0	87.1	69.3	67.9	70.8
	2015	757	69.2	14.6	14.8	1.3	0.0	83.8	69.2	66.6	71.3
Lebanon	2011	557	5.3	4.7	71.0	18.5	0.6	9.9	5.3	2.1	9.1
	2015	548	10.3	5.7	63.8	19.9	0.4	16.0	10.3	9.1	11.5
Lithuania	2011	673	29.5	17.9	45.1	7.5	0.0	47.4	29.5	26.8	31.6
	2015	621	27.4	17.7	49.0	5.9	0.0	45.2	27.4	25.3	29.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_03 (M052021): Number / Reasoning Type: CR 2 Points
Label: Complete TV game show table

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	8.7	6.7	75.4	9.0	0.3	15.3	8.7	7.1	10.1
	2015	1378	13.6	10.3	68.8	7.1	0.2	23.8	13.6	10.1	17.1
Morocco	2011	1328	1.7	4.5	73.3	19.9	0.7	6.2	1.7	1.6	1.8
	2015	1877	2.3	3.5	81.6	12.2	0.4	5.8	2.3	1.8	2.7
New Zealand	2011	761	28.6	14.6	49.9	6.7	0.2	43.2	28.6	20.6	35.7
	2015	1120	23.8	15.6	56.9	3.6	0.0	39.4	23.8	21.6	26.1
Oman	2011	1363	2.1	3.6	81.8	11.9	0.6	5.7	2.1	1.5	2.6
	2015	1255	3.1	6.1	84.1	6.7	0.0	9.2	3.1	2.1	3.9
Qatar	2011	624	7.7	8.2	72.2	11.9	0.0	15.9	7.7	5.5	9.8
	2015	771	12.1	8.0	72.1	7.6	0.2	20.1	12.1	6.9	17.1
Russian Federation	2011	709	32.7	12.5	44.6	10.2	0.1	45.2	32.7	26.6	38.7
	2015	677	35.4	12.9	43.9	7.6	0.2	48.3	35.4	24.7	44.6
Saudi Arabia	2011	628	3.3	5.6	83.8	7.0	0.3	8.9	3.3	1.2	5.3
	2015	532	2.4	3.2	82.0	12.2	0.2	5.6	2.4	0.9	4.0
Singapore	2011	849	54.2	15.3	27.7	2.6	0.1	69.5	54.2	52.4	56.0
	2015	870	61.4	17.3	20.8	0.5	0.0	78.6	61.4	58.8	63.7
Slovenia	2011	634	29.9	15.9	48.4	5.8	0.0	45.8	29.9	17.9	40.2
	2015	602	34.6	14.7	46.7	4.1	0.0	49.2	34.6	31.7	37.4
South Africa	2011	1703	3.1	2.1	85.5	8.8	0.5	5.2	3.1	1.5	4.6
	2015	1790	3.5	1.4	90.6	4.3	0.1	5.0	3.5	2.9	4.2
Sweden	2011	794	32.7	11.1	46.3	9.5	0.4	43.8	32.7	23.4	41.9
	2015	587	35.8	15.3	36.7	10.8	1.5	51.1	35.8	31.3	39.6
Thailand	2011	859	12.6	11.7	61.4	14.0	0.3	24.3	12.6	11.9	13.4
	2015	918	12.9	12.9	64.9	9.3	0.0	25.8	12.9	11.3	14.8
Turkey	2011	988	20.0	12.0	59.1	8.9	0.1	31.9	20.0	17.3	22.9
	2015	869	18.1	16.0	58.5	7.4	0.0	34.1	18.1	16.4	19.8
United Arab Emirates	2011	2001	12.4	7.5	72.6	7.3	0.3	19.9	12.4	9.5	15.4
	2015	2583	16.7	9.2	68.0	5.9	0.1	26.0	16.7	13.9	19.4
United States	2011	1490	30.6	15.8	48.4	4.8	0.3	46.4	30.6	23.5	37.6
	2015	1474	32.6	17.2	47.2	2.5	0.5	49.9	32.6	30.6	34.6
International Avg (n=33)	2011	28525	23.6	11.4	56.1	8.6	0.3	35.1	23.6	19.7	27.5
	2015	31115	25.6	11.9	55.2	7.1	0.2	37.5	25.6	22.7	28.4
Ontario, Canada	2011	682	28.6	16.9	50.0	4.4	0.2	45.4	28.6	23.8	32.5
	2015	649	31.4	20.9	43.4	3.8	0.5	52.3	31.4	25.8	36.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_03 (M052021): Number / Reasoning Type: CR 2 Points
Label: Complete TV game show table

COUNTRY	Year	N	20 %	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	V2 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	35.7	16.5	42.9	4.6	0.4	52.2	35.7	28.2	43.5
	2015	556	39.8	13.9	40.0	6.2	0.0	53.7	39.8	30.1	51.2
Norway (8)	2011	542	27.2	12.7	52.4	7.6	0.1	39.9	27.2	25.2	29.3
	2015	686	28.4	10.6	54.8	6.0	0.2	39.0	28.4	22.6	34.8
Abu Dhabi, UAE	2011	625	12.6	6.2	73.7	7.1	0.4	18.9	12.6	8.7	16.1
	2015	692	11.3	7.2	74.8	6.4	0.2	18.6	11.3	7.9	14.4
Dubai, UAE	2011	790	17.9	10.4	63.8	7.5	0.4	28.3	17.9	13.9	21.7
	2015	881	25.9	15.3	52.7	6.0	0.0	41.2	25.9	23.6	28.3
Florida, US	2011	246	26.5	19.3	47.6	6.7	0.0	45.8	26.5	20.9	31.5
	2015	298	22.1	14.8	57.0	6.1	0.0	36.9	22.1	22.5	21.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_04 (M052095): Number / Knowing Type: CR 1 Point
Label: Complete the fraction sequence

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	37.2	9.1	39.6	14.0	0.2	37.2	36.0	38.4
	2015	1467	34.4	8.1	41.5	15.8	0.2	34.4	33.7	35.1
Bahrain	2011	653	12.0	3.8	57.0	25.7	1.5	12.0	12.7	11.3
	2015	703	18.5	6.0	57.6	17.8	0.1	18.5	19.8	17.1
Botswana	2011	764	3.5	3.3	87.6	4.9	0.7	3.5	3.9	3.0
	2015	844	6.3	2.5	85.2	5.3	0.7	6.3	6.0	6.7
Chile	2011	832	8.9	4.9	51.3	34.6	0.4	8.9	7.8	10.0
	2015	677	10.7	4.8	47.4	36.8	0.2	10.7	9.8	11.7
Chinese Taipei	2011	718	80.2	6.3	8.7	4.5	0.3	80.2	81.5	79.1
	2015	821	80.8	4.0	9.8	5.4	0.0	80.8	82.2	79.3
England	2011	547	38.5	7.6	37.5	15.9	0.5	38.5	38.8	38.2
	2015	692	37.7	8.1	39.2	14.6	0.4	37.7	38.4	36.8
Georgia	2011	653	30.6	4.1	37.7	26.7	1.0	30.6	29.7	31.4
	2015	572	31.0	5.5	38.7	24.0	0.8	31.0	27.7	34.3
Hong Kong SAR	2011	574	72.2	5.4	16.6	5.7	0.2	72.2	75.3	68.8
	2015	596	76.6	5.6	12.1	5.3	0.3	76.6	76.6	76.6
Hungary	2011	730	45.8	6.2	30.6	17.2	0.1	45.8	49.4	42.7
	2015	704	48.5	7.5	29.0	15.0	0.0	48.5	50.5	46.4
Iran, Islamic Rep. of	2011	875	24.2	6.1	53.1	16.2	0.5	24.2	24.4	24.0
	2015	885	27.3	7.2	48.6	16.3	0.6	27.3	28.4	26.2
Israel	2011	665	53.3	6.6	25.2	14.4	0.6	53.3	53.5	53.1
	2015	786	47.5	8.1	29.2	14.1	1.2	47.5	44.2	51.0
Italy	2011	563	37.7	7.1	37.7	17.4	0.2	37.7	35.1	40.1
	2015	627	34.9	7.7	35.1	22.1	0.2	34.9	33.6	36.2
Japan	2011	626	66.7	6.8	20.4	6.1	0.0	66.7	64.1	69.4
	2015	682	70.8	8.0	16.3	4.6	0.3	70.8	67.1	74.7
Jordan	2011	1092	12.2	6.2	67.0	14.5	0.0	12.2	11.2	13.3
	2015	1134	7.0	4.9	72.2	15.8	0.1	7.0	8.2	5.6
Kazakhstan	2011	617	47.8	5.6	34.1	12.1	0.3	47.8	50.0	45.7
	2015	696	55.5	10.3	26.8	7.4	0.0	55.5	59.9	50.6
Korea, Rep. of	2011	740	80.3	5.7	12.6	1.4	0.0	80.3	81.5	79.0
	2015	757	81.7	5.8	11.2	1.4	0.0	81.7	83.9	79.8
Lebanon	2011	557	48.7	7.6	31.2	11.6	0.9	48.7	48.2	49.3
	2015	548	46.5	7.0	30.2	15.8	0.4	46.5	47.6	45.4
Lithuania	2011	673	39.6	6.0	38.3	16.1	0.0	39.6	43.1	36.8
	2015	621	37.3	5.0	38.0	19.6	0.0	37.3	37.9	36.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

Trend Achievement Data Almanac for Mathematics Items (Weighted)

M06_04 (M052095): Number / Knowing Type: CR 1 Point
Label: Complete the fraction sequence

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	30.1	4.0	50.6	14.7	0.5	30.1	29.5	30.7
	2015	1378	30.9	5.0	50.4	12.9	0.8	30.9	30.8	31.0
Morocco	2011	1328	12.3	4.2	52.8	29.7	0.9	12.3	12.9	11.8
	2015	1878	14.4	4.1	56.5	24.4	0.6	14.4	13.8	14.8
New Zealand	2011	761	32.3	9.1	45.5	13.0	0.2	32.3	28.4	35.8
	2015	1120	32.2	11.0	42.2	14.6	0.0	32.2	32.2	32.1
Oman	2011	1363	9.6	3.2	65.2	21.3	0.6	9.6	10.4	8.7
	2015	1255	12.5	5.2	71.1	11.1	0.0	12.5	10.0	14.8
Qatar	2011	624	21.0	5.7	56.9	16.4	0.0	21.0	22.6	19.4
	2015	771	26.2	4.0	53.9	15.5	0.4	26.2	21.3	31.0
Russian Federation	2011	709	54.2	6.2	24.7	14.8	0.1	54.2	53.2	55.1
	2015	677	51.0	5.5	28.9	13.9	0.7	51.0	53.3	49.0
Saudi Arabia	2011	628	10.3	3.8	71.7	13.9	0.3	10.3	7.7	12.7
	2015	532	7.8	2.0	75.0	15.0	0.2	7.8	5.8	9.8
Singapore	2011	849	78.9	5.9	13.4	1.6	0.2	78.9	79.5	78.2
	2015	870	82.8	6.4	9.5	1.3	0.0	82.8	82.8	82.9
Slovenia	2011	634	38.4	8.3	35.6	17.7	0.0	38.4	35.8	40.5
	2015	602	41.3	10.3	34.3	13.6	0.5	41.3	44.1	38.6
South Africa	2011	1703	5.3	2.5	81.1	10.0	1.0	5.3	4.7	5.9
	2015	1790	7.0	5.0	80.0	7.9	0.1	7.0	6.9	7.1
Sweden	2011	794	26.6	7.4	38.1	27.3	0.7	26.6	23.2	30.0
	2015	587	30.4	11.2	29.9	27.0	1.5	30.4	28.3	32.3
Thailand	2011	859	16.0	4.1	52.5	26.8	0.5	16.0	17.0	14.8
	2015	918	16.3	3.9	56.6	23.1	0.1	16.3	17.0	15.4
Turkey	2011	990	25.4	4.1	52.4	17.9	0.2	25.4	25.6	25.1
	2015	869	28.9	6.1	52.6	12.4	0.0	28.9	29.3	28.5
United Arab Emirates	2011	2001	31.4	7.3	48.1	12.6	0.5	31.4	33.9	28.9
	2015	2583	33.4	6.3	50.2	9.9	0.2	33.4	34.0	32.7
United States	2011	1490	41.4	7.7	42.9	7.6	0.4	41.4	40.2	42.7
	2015	1474	44.1	8.5	41.9	4.9	0.7	44.1	46.3	41.9
International Avg (n=33)	2011	28528	35.5	5.8	43.0	15.3	0.4	35.5	35.5	35.6
	2015	31116	36.7	6.4	42.5	14.1	0.3	36.7	36.7	36.7
Ontario, Canada	2011	682	48.0	6.5	32.5	12.6	0.4	48.0	49.9	46.5
	2015	649	52.7	7.5	29.9	8.8	1.1	52.7	55.4	50.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_04 (M052095): Number / Knowing Type: CR 1 Point
Label: Complete the fraction sequence

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	64.9	8.5	19.0	7.2	0.5	64.9	70.0	59.5
	2015	556	64.9	8.9	19.1	6.8	0.3	64.9	59.5	71.3
Norway (8)	2011	542	26.2	8.7	45.7	19.2	0.1	26.2	29.0	23.3
	2015	686	27.9	9.6	39.9	22.5	0.2	27.9	29.0	26.6
Abu Dhabi, UAE	2011	625	27.8	7.0	50.5	13.6	1.0	27.8	30.0	25.9
	2015	692	25.4	5.0	56.9	12.4	0.3	25.4	26.9	23.9
Dubai, UAE	2011	790	35.2	6.7	43.5	14.1	0.6	35.2	33.6	36.6
	2015	881	47.7	6.7	37.2	8.3	0.0	47.7	49.8	45.4
Florida, US	2011	246	47.0	1.8	42.7	8.5	0.0	47.0	51.3	43.1
	2015	298	37.9	7.2	50.3	4.6	0.0	37.9	38.0	37.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_05 (M052094): Number / Reasoning Type: CR 1 Point
Label: Who spent more for shoes

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	20.5	33.9	43.7	1.8	0.2	20.5	20.8	20.1
	2015	1467	23.5	32.5	41.6	2.2	0.2	23.5	24.1	22.9
Bahrain	2011	653	10.2	44.1	41.1	3.2	1.5	10.2	13.7	6.5
	2015	702	6.9	46.0	41.7	5.3	0.1	6.9	7.1	6.7
Botswana	2011	764	2.8	47.6	45.0	3.6	1.0	2.8	2.8	2.8
	2015	845	2.6	50.3	41.9	4.4	0.9	2.6	2.2	2.9
Chile	2011	832	12.7	52.7	27.0	6.4	1.3	12.7	13.9	11.3
	2015	677	9.2	46.5	33.7	10.0	0.5	9.2	7.5	11.0
Chinese Taipei	2011	718	42.9	14.9	41.1	0.9	0.3	42.9	43.6	42.4
	2015	821	50.4	16.2	32.5	0.9	0.0	50.4	51.8	48.8
England	2011	547	27.4	30.2	39.9	2.0	0.5	27.4	29.5	25.5
	2015	692	33.5	27.8	34.2	4.1	0.4	33.5	34.1	32.8
Georgia	2011	652	15.8	33.3	37.3	12.6	1.0	15.8	15.9	15.7
	2015	572	13.8	40.9	33.7	10.8	0.8	13.8	13.0	14.6
Hong Kong SAR	2011	574	35.4	12.8	49.0	2.6	0.2	35.4	36.8	33.9
	2015	596	38.9	12.8	46.1	1.9	0.3	38.9	39.4	38.6
Hungary	2011	730	32.8	35.1	29.4	2.6	0.1	32.8	32.5	33.0
	2015	704	27.1	30.7	39.6	2.6	0.0	27.1	25.8	28.5
Iran, Islamic Rep. of	2011	875	12.7	48.5	33.2	4.7	0.9	12.7	13.2	12.3
	2015	885	5.4	39.4	47.5	6.7	1.1	5.4	6.1	4.6
Israel	2011	665	31.3	31.4	33.4	3.3	0.6	31.3	31.4	31.1
	2015	786	26.9	30.3	37.3	3.7	1.7	26.9	21.9	32.3
Italy	2011	563	18.0	35.1	42.4	4.3	0.2	18.0	17.7	18.2
	2015	627	16.1	35.0	41.9	6.7	0.2	16.1	13.5	18.7
Japan	2011	626	44.5	14.5	39.4	1.6	0.0	44.5	44.5	44.5
	2015	682	58.2	12.9	27.1	1.1	0.7	58.2	59.0	57.3
Jordan	2011	1092	3.9	36.1	56.5	3.1	0.4	3.9	3.5	4.2
	2015	1134	2.8	44.0	48.9	4.0	0.2	2.8	3.3	2.3
Kazakhstan	2011	617	14.8	39.6	33.1	12.1	0.4	14.8	14.8	14.8
	2015	696	25.6	36.4	30.3	7.7	0.0	25.6	27.2	23.8
Korea, Rep. of	2011	740	58.1	12.2	28.4	1.4	0.0	58.1	56.1	60.2
	2015	757	48.0	15.3	35.8	0.9	0.0	48.0	46.6	49.2
Lebanon	2011	556	8.5	47.8	33.2	9.3	1.1	8.5	9.2	7.7
	2015	548	10.2	37.5	40.4	11.5	0.4	10.2	12.8	7.4
Lithuania	2011	673	13.9	39.4	43.8	2.8	0.0	13.9	13.3	14.4
	2015	621	14.6	43.8	39.4	2.0	0.2	14.6	17.6	11.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_05 (M052094): Number / Reasoning Type: CR 1 Point
Label: Who spent more for shoes

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	6.5	36.8	49.7	6.2	0.7	6.5	5.9	7.1
	2015	1378	7.2	30.5	52.2	9.2	0.9	7.2	6.3	8.2
Morocco	2011	1328	2.6	23.7	63.6	8.6	1.4	2.6	2.8	2.4
	2015	1879	1.8	25.1	67.8	4.6	0.7	1.8	2.3	1.4
New Zealand	2011	761	16.9	31.4	47.6	3.7	0.5	16.9	18.8	15.2
	2015	1120	24.3	33.8	39.4	2.2	0.3	24.3	26.4	22.1
Oman	2011	1363	3.3	38.1	52.4	5.6	0.7	3.3	3.8	2.7
	2015	1255	3.9	44.1	48.1	3.8	0.2	3.9	4.5	3.3
Qatar	2011	624	6.1	32.4	55.6	5.7	0.2	6.1	4.9	7.1
	2015	770	7.7	35.9	53.0	2.9	0.4	7.7	7.2	8.3
Russian Federation	2011	709	24.0	33.5	34.2	8.0	0.2	24.0	23.4	24.6
	2015	677	20.9	31.7	39.8	6.8	0.7	20.9	19.5	22.2
Saudi Arabia	2011	628	1.6	48.2	48.0	1.8	0.4	1.6	1.5	1.7
	2015	532	3.7	42.4	50.9	2.8	0.2	3.7	3.8	3.6
Singapore	2011	849	48.4	21.4	28.6	1.4	0.2	48.4	50.7	46.1
	2015	870	53.7	17.2	28.3	0.7	0.0	53.7	56.3	51.4
Slovenia	2011	634	24.3	35.3	38.8	1.6	0.0	24.3	19.9	28.1
	2015	602	30.3	30.4	37.0	1.5	0.7	30.3	27.2	33.4
South Africa	2011	1703	8.6	41.8	37.1	11.0	1.6	8.6	7.9	9.1
	2015	1790	4.0	50.0	43.4	2.4	0.3	4.0	4.4	3.5
Sweden	2011	794	26.0	24.1	45.3	3.4	1.2	26.0	28.1	23.9
	2015	587	22.7	21.9	47.1	5.7	2.6	22.7	26.6	19.7
Thailand	2011	859	4.2	39.7	35.0	20.2	0.8	4.2	5.2	3.0
	2015	918	4.0	40.6	42.1	13.0	0.3	4.0	4.1	3.8
Turkey	2011	990	10.4	43.4	39.6	6.4	0.2	10.4	12.8	7.6
	2015	869	20.0	43.0	33.4	3.6	0.0	20.0	19.7	20.4
United Arab Emirates	2011	2001	9.3	43.1	43.1	3.7	0.8	9.3	10.0	8.6
	2015	2583	9.7	42.7	43.7	3.8	0.2	9.7	10.9	8.5
United States	2011	1490	32.1	36.3	28.5	2.3	0.7	32.1	30.6	33.7
	2015	1474	22.5	37.1	36.9	2.7	0.9	22.5	22.7	22.2
International Avg (n=33)	2011	28526	19.1	34.5	40.7	5.1	0.6	19.1	19.4	18.8
	2015	31116	19.7	34.1	41.1	4.6	0.5	19.7	19.8	19.6
Ontario, Canada	2011	682	30.0	32.5	31.2	4.8	1.4	30.0	31.3	29.0
	2015	649	30.7	33.0	30.8	3.7	1.7	30.7	31.7	29.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_05 (M052094): Number / Reasoning Type: CR 1 Point
Label: Who spent more for shoes

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	33.8	24.8	36.6	4.2	0.7	33.8	34.0	33.5
	2015	556	35.4	29.0	29.3	5.8	0.6	35.4	34.5	36.4
Norway (8)	2011	542	18.9	35.5	42.5	2.9	0.1	18.9	20.3	17.4
	2015	686	34.0	31.0	30.3	3.9	0.8	34.0	33.2	34.9
Abu Dhabi, UAE	2011	625	8.6	42.3	44.1	3.6	1.3	8.6	7.4	9.7
	2015	692	8.7	41.8	44.5	4.7	0.3	8.7	8.5	9.0
Dubai, UAE	2011	790	13.3	40.8	42.8	2.6	0.6	13.3	15.1	11.7
	2015	881	14.3	40.5	41.8	3.4	0.0	14.3	15.5	12.9
Florida, US	2011	246	30.0	36.1	31.2	2.3	0.3	30.0	31.5	28.7
	2015	298	15.9	40.6	40.6	2.9	0.0	15.9	17.3	14.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_06 (M052131): Algebra / Applying Type: MC Key: A
Label: Step in solving the equation

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	29.8	29.8	19.6	31.7	14.0	4.7	0.2	28.9	30.7
	2015	1467	29.4	29.4	20.7	31.2	14.9	3.6	0.3	29.1	29.6
Bahrain	2011	653	33.8	33.8	19.6	28.6	14.1	2.4	1.5	30.2	37.5
	2015	701	44.7	44.7	19.5	22.0	12.5	1.2	0.1	46.8	42.6
Botswana	2011	763	28.5	28.5	20.5	29.2	18.1	2.3	1.4	29.7	27.2
	2015	845	24.4	24.4	22.2	31.3	18.2	2.1	1.9	23.9	25.0
Chile	2011	832	27.5	27.5	26.2	24.9	14.8	5.0	1.5	27.3	27.7
	2015	677	28.5	28.5	21.0	30.9	13.9	4.7	1.1	31.5	25.3
Chinese Taipei	2011	718	72.9	72.9	8.8	12.2	5.7	0.2	0.3	75.7	70.5
	2015	821	75.7	75.7	8.5	12.0	3.7	0.0	0.0	78.1	73.2
England	2011	547	31.1	31.1	21.0	29.3	13.0	4.7	0.8	30.9	31.3
	2015	692	29.8	29.8	20.4	30.4	14.3	4.2	0.9	29.7	29.8
Georgia	2011	653	39.3	39.3	16.1	22.5	17.6	3.2	1.3	42.1	36.9
	2015	572	50.0	50.0	15.8	17.0	14.7	1.6	0.9	45.9	54.1
Hong Kong SAR	2011	574	65.4	65.4	10.7	16.3	6.0	1.2	0.3	69.5	61.0
	2015	596	70.0	70.0	10.4	12.0	6.6	0.5	0.5	71.1	69.1
Hungary	2011	730	34.0	34.0	19.5	31.0	11.7	3.7	0.1	33.9	34.0
	2015	704	34.8	34.8	19.6	31.1	10.5	4.0	0.0	35.9	33.6
Iran, Islamic Rep. of	2011	875	42.1	42.1	20.3	23.1	10.7	2.3	1.5	43.2	41.1
	2015	885	49.1	49.1	18.7	20.8	7.0	2.8	1.5	57.2	41.5
Israel	2011	665	62.2	62.2	11.7	16.7	6.3	2.4	0.7	65.9	59.0
	2015	786	54.6	54.6	12.5	19.0	7.9	3.6	2.4	55.6	53.5
Italy	2011	563	59.5	59.5	14.6	16.2	5.5	3.8	0.4	58.8	60.1
	2015	627	53.0	53.0	18.4	16.2	7.2	4.4	0.8	58.7	47.5
Japan	2011	626	80.3	80.3	6.1	9.7	3.5	0.4	0.0	80.0	80.5
	2015	682	82.9	82.9	6.2	7.8	2.1	0.3	0.8	85.8	79.8
Jordan	2011	1092	36.5	36.5	21.4	27.2	12.1	2.3	0.5	42.3	31.0
	2015	1134	37.4	37.4	22.0	25.3	12.2	2.5	0.6	41.1	33.4
Kazakhstan	2011	617	52.6	52.6	15.4	21.0	8.0	2.6	0.4	50.1	55.2
	2015	696	61.4	61.4	12.1	12.2	12.3	1.8	0.2	62.5	60.1
Korea, Rep. of	2011	740	81.3	81.3	4.9	10.7	2.7	0.5	0.0	82.2	80.4
	2015	757	82.9	82.9	4.4	8.6	3.4	0.7	0.0	84.8	81.4
Lebanon	2011	556	64.8	64.8	12.1	13.0	4.0	4.6	1.5	68.7	60.0
	2015	548	64.9	64.9	10.6	13.7	5.2	5.1	0.4	68.5	60.9
Lithuania	2011	673	43.0	43.0	18.2	25.0	11.3	2.6	0.0	43.9	42.2
	2015	621	45.2	45.2	19.6	21.2	13.0	0.8	0.2	49.2	41.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_06 (M052131): Algebra / Applying Type: MC Key: A
Label: Step in solving the equation

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	30.7	30.7	26.5	25.7	13.9	2.1	1.1	30.1	31.2
	2015	1378	33.5	33.5	21.1	27.1	14.0	3.0	1.3	33.8	33.2
Morocco	2011	1328	35.6	35.6	23.7	24.6	9.6	4.8	1.8	37.3	34.1
	2015	1878	40.0	40.0	22.9	23.7	10.5	2.0	0.9	43.3	37.2
New Zealand	2011	761	26.9	26.9	20.8	32.5	13.4	5.7	0.8	23.0	30.3
	2015	1120	28.2	28.2	20.4	30.5	15.3	5.3	0.3	26.8	29.6
Oman	2011	1363	31.1	31.1	23.2	27.0	15.3	2.5	0.8	32.8	29.4
	2015	1246	31.3	31.3	22.3	28.1	16.6	1.6	0.2	32.9	29.8
Qatar	2011	624	32.1	32.1	22.8	26.3	15.6	2.3	1.0	32.6	31.6
	2015	771	32.8	32.8	21.4	27.9	15.0	2.3	0.5	32.6	33.0
Russian Federation	2011	709	67.8	67.8	9.6	13.4	5.4	2.9	0.9	67.3	68.3
	2015	677	63.8	63.8	13.1	14.5	6.8	1.0	0.9	59.9	67.2
Saudi Arabia	2011	626	28.1	28.1	26.9	27.8	15.0	1.6	0.6	27.3	28.8
	2015	531	29.0	29.0	25.4	28.0	15.2	2.2	0.2	32.8	24.9
Singapore	2011	849	70.3	70.3	9.3	13.2	5.7	1.3	0.2	75.0	65.6
	2015	870	78.7	78.7	8.4	7.9	4.8	0.2	0.0	81.6	76.0
Slovenia	2011	634	34.4	34.4	11.9	16.9	26.9	9.8	0.0	37.6	31.7
	2015	602	27.1	27.1	18.2	36.5	11.6	5.7	0.7	29.6	24.7
South Africa	2011	1703	28.0	28.0	24.8	27.8	14.4	3.1	1.9	25.9	29.8
	2015	1790	30.0	30.0	22.5	26.8	18.1	2.2	0.4	31.6	28.5
Sweden	2011	794	21.4	21.4	22.3	31.5	13.0	10.3	1.5	22.0	20.8
	2015	586	26.3	26.3	16.2	31.9	13.0	8.8	3.8	22.8	29.3
Thailand	2011	859	30.6	30.6	25.2	26.1	13.1	3.8	1.2	32.1	28.7
	2015	918	30.3	30.3	22.6	28.3	15.1	3.5	0.3	30.2	30.3
Turkey	2011	990	40.8	40.8	21.1	21.1	14.4	2.4	0.2	43.2	38.1
	2015	869	40.9	40.9	18.5	24.5	14.9	1.1	0.1	44.3	37.8
United Arab Emirates	2011	2001	33.6	33.6	18.3	28.0	16.9	2.2	0.9	34.0	33.3
	2015	2583	38.5	38.5	17.2	26.8	15.1	2.2	0.2	38.1	38.9
United States	2011	1490	38.4	38.4	19.1	26.5	12.5	2.3	1.1	37.8	39.1
	2015	1474	41.4	41.4	16.2	26.3	11.8	2.9	1.4	44.4	38.6
International Avg (n=33)	2011	28524	43.5	43.5	17.9	22.9	11.6	3.2	0.8	44.3	42.6
	2015	31104	45.2	45.2	17.2	22.8	11.4	2.7	0.7	46.7	43.6
Ontario, Canada	2011	682	21.0	21.0	16.6	34.7	18.7	6.7	2.3	19.6	22.2
	2015	649	24.8	24.8	14.8	36.6	14.0	6.9	2.8	23.6	25.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_06 (M052131): Algebra / Applying Type: MC Key: A
Label: Step in solving the equation

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	30.5	30.5	17.3	31.6	13.4	6.1	1.0	28.3	32.9
	2015	555	33.6	33.6	17.7	28.9	12.8	6.3	0.6	29.3	38.7
Norway (8)	2011	542	21.7	21.7	22.7	29.6	14.9	10.5	0.7	22.8	20.5
	2015	686	22.5	22.5	21.5	27.4	13.8	13.9	0.9	23.0	21.9
Abu Dhabi, UAE	2011	625	31.6	31.6	18.8	27.0	17.8	3.2	1.6	26.5	36.2
	2015	692	32.9	32.9	19.9	28.8	15.3	2.8	0.3	34.4	31.6
Dubai, UAE	2011	790	44.5	44.5	16.6	24.9	12.4	1.0	0.6	48.0	41.3
	2015	881	47.5	47.5	12.2	24.0	14.5	1.8	0.0	47.9	47.1
Florida, US	2011	246	36.3	36.3	17.9	30.1	14.1	1.2	0.3	35.9	36.6
	2015	298	42.8	42.8	19.1	24.9	10.3	2.8	0.0	39.5	45.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_07 (M052090): Algebra / Applying Type: MC Key: C
Label: Set up system of equations

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	42.8	22.2	27.1	42.8	4.8	2.5	0.6	42.0	43.8
	2015	1467	41.8	22.0	26.1	41.8	5.6	3.8	0.7	38.9	44.8
Bahrain	2011	653	35.3	18.1	35.7	35.3	6.4	2.9	1.5	34.3	36.4
	2015	701	44.0	19.2	28.4	44.0	7.1	1.2	0.1	35.6	51.9
Botswana	2011	763	26.9	30.8	29.6	26.9	7.1	3.5	2.2	26.8	26.9
	2015	845	27.9	31.1	27.6	27.9	8.3	2.7	2.3	28.8	26.9
Chile	2011	832	27.7	29.8	30.1	27.7	5.3	5.3	1.9	29.7	25.5
	2015	677	27.0	30.3	31.9	27.0	4.9	4.7	1.2	30.2	23.7
Chinese Taipei	2011	718	60.7	10.0	25.8	60.7	3.3	0.0	0.3	62.9	58.7
	2015	821	65.5	8.3	21.8	65.5	4.2	0.3	0.0	67.0	63.8
England	2011	547	41.3	19.1	27.1	41.3	5.7	5.9	0.9	46.5	36.1
	2015	692	38.8	22.9	29.5	38.8	4.6	3.3	0.9	38.8	38.7
Georgia	2011	653	32.2	30.7	25.6	32.2	6.2	4.0	1.3	31.4	32.8
	2015	572	37.1	26.3	28.7	37.1	4.9	1.9	1.1	34.7	39.5
Hong Kong SAR	2011	574	61.0	10.0	23.9	61.0	3.9	0.7	0.5	65.3	56.3
	2015	596	67.2	7.4	20.1	67.2	4.0	0.7	0.5	68.4	66.2
Hungary	2011	730	45.2	16.0	33.8	45.2	3.3	1.6	0.2	48.8	42.0
	2015	704	53.7	15.3	25.1	53.7	3.9	1.7	0.3	51.6	56.0
Iran, Islamic Rep. of	2011	875	34.8	17.0	34.5	34.8	9.3	2.7	1.7	35.5	34.2
	2015	885	35.1	22.9	29.4	35.1	6.7	4.2	1.7	33.5	36.6
Israel	2011	665	57.4	11.0	24.5	57.4	3.4	2.4	1.4	58.0	56.9
	2015	786	51.7	17.5	20.3	51.7	4.2	3.4	2.9	48.4	55.4
Italy	2011	563	40.1	20.1	32.2	40.1	3.5	3.7	0.4	39.1	41.2
	2015	627	42.2	21.1	26.4	42.2	3.9	5.4	1.1	44.0	40.3
Japan	2011	626	55.4	7.0	33.7	55.4	3.1	0.6	0.1	53.7	57.3
	2015	682	62.6	5.1	28.1	62.6	2.5	0.8	0.8	65.8	59.4
Jordan	2011	1092	31.5	22.8	35.8	31.5	6.6	2.5	0.7	29.0	33.9
	2015	1134	25.3	21.9	42.6	25.3	8.2	1.3	0.7	27.7	22.7
Kazakhstan	2011	617	34.1	24.3	34.3	34.1	4.4	2.3	0.5	31.7	36.6
	2015	696	49.4	19.5	25.5	49.4	4.1	1.2	0.4	51.4	47.2
Korea, Rep. of	2011	740	71.9	6.2	19.7	71.9	1.8	0.5	0.0	76.7	66.6
	2015	757	68.6	6.7	20.8	68.6	3.7	0.2	0.0	73.6	64.6
Lebanon	2011	554	39.0	18.7	28.3	39.0	4.1	7.6	2.2	38.8	39.3
	2015	548	33.4	20.1	28.7	33.4	4.1	13.3	0.4	39.3	27.1
Lithuania	2011	673	40.6	27.5	25.1	40.6	5.0	1.8	0.0	44.1	38.0
	2015	621	43.2	21.6	28.7	43.2	4.6	1.7	0.2	48.7	37.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_07 (M052090): Algebra / Applying Type: MC Key: C
Label: Set up system of equations

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	40.0	23.2	26.3	40.0	7.1	2.0	1.4	39.8	40.2
	2015	1378	41.2	22.0	29.0	41.2	3.5	2.4	1.9	42.4	40.0
Morocco	2011	1328	31.1	23.3	26.0	31.1	9.6	7.8	2.2	28.3	33.6
	2015	0	.	.	.	.	.	.	.	.	.
New Zealand	2011	761	34.5	21.1	31.7	34.5	4.8	7.0	0.8	33.6	35.3
	2015	1120	38.5	23.7	28.4	38.5	5.6	3.3	0.5	38.9	38.1
Oman	2011	1363	26.1	29.1	30.5	26.1	9.4	3.6	1.3	24.1	28.2
	2015	1255	30.1	31.7	27.0	30.1	9.3	1.6	0.2	29.9	30.2
Qatar	2011	624	35.7	22.5	31.1	35.7	6.3	3.3	1.0	36.2	35.1
	2015	771	38.2	24.5	29.0	38.2	5.4	2.5	0.5	38.8	37.5
Russian Federation	2011	709	48.4	21.5	24.5	48.4	1.9	2.5	1.1	46.6	50.2
	2015	677	50.8	18.2	25.6	50.8	2.7	2.0	0.9	52.8	49.0
Saudi Arabia	2011	627	28.3	29.7	30.4	28.3	10.3	0.7	0.6	26.3	30.2
	2015	532	25.4	30.2	29.9	25.4	12.5	1.4	0.6	24.0	26.9
Singapore	2011	849	71.0	8.4	15.8	71.0	3.0	1.5	0.2	73.5	68.6
	2015	870	74.4	7.3	14.2	74.4	3.8	0.3	0.0	77.1	72.0
Slovenia	2011	634	39.5	16.7	32.0	39.5	4.5	7.0	0.3	41.3	37.9
	2015	602	45.6	15.1	27.6	45.6	4.3	6.5	0.9	48.4	42.8
South Africa	2011	1703	26.5	26.4	29.1	26.5	11.9	4.0	2.1	26.9	26.2
	2015	1790	28.3	25.4	33.9	28.3	9.4	2.2	0.8	29.1	27.6
Sweden	2011	794	38.4	17.5	28.2	38.4	6.0	8.2	1.8	37.3	39.6
	2015	0	.	.	.	.	.	.	.	.	.
Thailand	2011	859	29.0	32.6	23.2	29.0	8.9	4.9	1.4	29.9	27.9
	2015	918	31.6	27.9	26.8	31.6	8.4	4.8	0.4	28.8	35.1
Turkey	2011	990	38.3	23.0	27.7	38.3	8.1	2.1	0.8	39.1	37.4
	2015	869	40.7	23.8	26.8	40.7	7.7	0.9	0.1	43.1	38.5
United Arab Emirates	2011	2001	37.6	24.9	28.0	37.6	6.5	2.1	1.0	37.9	37.2
	2015	2583	40.9	23.7	26.9	40.9	5.7	2.6	0.3	42.3	39.6
United States	2011	1490	43.5	21.8	26.8	43.5	4.5	1.9	1.6	43.2	43.8
	2015	1474	43.6	21.0	26.0	43.6	4.8	2.7	2.0	45.4	41.9
International Avg (n=33)	2011	28523	40.8	20.7	28.4	40.8	5.8	3.3	1.0	41.2	40.4
	2015	28650	43.3	20.4	27.1	43.3	5.6	2.7	0.8	44.1	42.6
Ontario, Canada	2011	682	38.7	21.7	25.3	38.7	5.7	5.3	3.3	40.2	37.5
	2015	648	36.5	24.7	25.1	36.5	5.7	3.0	5.1	38.5	34.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_07 (M052090): Algebra / Applying Type: MC Key: C
Label: Set up system of equations

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	48.3	17.6	25.8	48.3	4.2	3.0	1.3	51.2	45.3
	2015	555	53.1	15.0	21.6	53.1	3.2	4.8	2.3	53.1	53.2
Norway (8)	2011	542	30.9	22.7	31.8	30.9	6.0	6.9	1.6	32.9	28.7
	2015	686	28.7	24.0	29.6	28.7	5.8	11.0	1.0	30.0	27.3
Abu Dhabi, UAE	2011	625	37.3	22.5	27.9	37.3	8.7	1.8	1.8	34.1	40.2
	2015	692	37.3	24.5	28.0	37.3	6.4	3.4	0.5	38.1	36.5
Dubai, UAE	2011	790	38.2	26.5	29.2	38.2	3.5	2.1	0.6	43.3	33.5
	2015	881	48.0	20.5	25.2	48.0	4.3	1.9	0.0	49.7	46.0
Florida, US	2011	246	42.0	21.6	29.2	42.0	5.7	1.2	0.3	38.1	45.5
	2015	298	41.2	18.9	32.1	41.2	4.9	2.5	0.3	40.1	42.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_08A (M052121A): Algebra / Reasoning Type: MC Key: A
Label: Area of the 5th square

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	48.4	48.4	20.2	3.0	26.1	1.7	0.6	47.2	49.7
	2015	1466	44.4	44.4	21.1	5.7	26.1	1.7	1.0	41.2	47.7
Bahrain	2011	653	33.6	33.6	20.7	11.3	28.6	4.0	1.8	32.7	34.5
	2015	702	44.6	44.6	20.2	9.3	23.5	2.2	0.3	42.3	46.8
Botswana	2011	763	26.7	26.7	19.3	14.7	34.1	2.2	3.0	28.1	25.1
	2015	845	29.2	29.2	19.5	13.8	31.9	2.5	3.1	30.5	27.7
Chile	2011	832	35.7	35.7	15.7	9.4	30.6	6.3	2.3	33.8	37.7
	2015	677	35.1	35.1	18.7	8.2	33.3	3.5	1.3	33.0	37.2
Chinese Taipei	2011	718	85.3	85.3	6.6	1.6	5.6	0.6	0.3	87.9	83.1
	2015	821	83.7	83.7	6.1	2.5	6.4	1.2	0.2	87.3	79.8
England	2011	547	46.3	46.3	22.0	4.5	24.1	2.2	0.9	48.8	43.8
	2015	692	51.2	51.2	20.8	5.1	19.3	2.7	0.9	53.8	48.1
Georgia	2011	653	30.3	30.3	28.0	10.7	23.3	5.6	2.1	29.5	31.1
	2015	572	35.7	35.7	29.3	9.4	18.6	5.8	1.2	33.8	37.7
Hong Kong SAR	2011	574	76.1	76.1	13.0	2.7	6.1	1.7	0.5	76.6	75.5
	2015	596	77.6	77.6	15.1	2.1	3.9	0.9	0.5	80.3	75.3
Hungary	2011	729	50.2	50.2	21.1	5.5	20.6	2.2	0.4	49.7	50.7
	2015	704	56.2	56.2	16.5	4.8	21.0	1.2	0.3	53.3	59.2
Iran, Islamic Rep. of	2011	875	33.3	33.3	18.1	11.0	32.2	3.5	2.0	30.4	35.8
	2015	885	43.7	43.7	13.9	7.3	28.9	3.9	2.3	45.1	42.3
Israel	2011	665	57.2	57.2	22.2	4.7	11.4	2.8	1.6	56.9	57.5
	2015	786	51.3	51.3	23.3	4.1	14.4	3.6	3.4	50.1	52.5
Italy	2011	563	67.6	67.6	14.7	2.7	11.1	3.4	0.4	67.6	67.7
	2015	627	57.0	57.0	18.9	3.5	10.7	8.8	1.1	57.6	56.5
Japan	2011	626	82.1	82.1	6.1	2.9	8.0	0.7	0.1	80.5	83.9
	2015	682	83.8	83.8	6.0	3.6	5.5	0.3	0.8	85.6	82.0
Jordan	2011	1092	26.0	26.0	18.9	10.5	42.3	1.5	0.7	25.2	26.8
	2015	1134	22.7	22.7	17.2	10.3	46.1	2.9	0.7	20.3	25.4
Kazakhstan	2011	617	48.3	48.3	21.6	6.9	17.8	4.8	0.5	48.1	48.5
	2015	696	60.5	60.5	15.3	5.1	15.0	3.4	0.5	62.4	58.5
Korea, Rep. of	2011	740	77.1	77.1	14.9	0.9	6.8	0.3	0.0	78.5	75.6
	2015	757	79.2	79.2	14.5	1.2	4.5	0.6	0.0	79.4	79.1
Lebanon	2011	556	34.3	34.3	17.3	11.2	26.7	8.0	2.5	37.0	31.0
	2015	547	38.9	38.9	15.0	12.5	22.1	10.6	1.0	40.0	37.7
Lithuania	2011	673	56.0	56.0	21.0	3.0	18.6	1.3	0.0	57.0	55.2
	2015	621	54.8	54.8	19.1	3.5	20.8	1.6	0.2	52.4	57.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_08A (M052121A): Algebra / Reasoning Type: MC Key: A
Label: Area of the 5th square

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	43.2	43.2	18.1	12.0	22.5	2.5	1.7	42.7	43.6
	2015	1378	52.1	52.1	13.6	7.6	22.3	2.4	2.1	55.0	49.1
Morocco	2011	1328	24.2	24.2	20.0	16.3	29.3	7.3	3.0	24.3	23.9
	2015	1879	27.3	27.3	25.1	13.6	27.9	5.0	1.1	28.8	26.1
New Zealand	2011	761	42.8	42.8	17.7	6.4	26.9	4.6	1.6	39.3	45.9
	2015	1120	41.7	41.7	18.7	5.8	30.3	2.8	0.6	39.7	43.8
Oman	2011	1363	31.1	31.1	19.2	13.0	30.2	4.9	1.7	33.0	29.1
	2015	1255	37.0	37.0	17.0	10.9	32.4	2.2	0.6	36.2	37.8
Qatar	2011	624	38.1	38.1	21.1	13.0	23.6	3.0	1.1	37.6	38.6
	2015	771	35.2	35.2	20.4	8.2	29.6	6.1	0.5	34.3	36.0
Russian Federation	2011	709	59.3	59.3	18.8	5.5	13.0	1.7	1.6	59.9	58.8
	2015	677	66.1	66.1	16.5	2.1	11.9	2.2	1.1	65.4	66.7
Saudi Arabia	2011	627	29.0	29.0	21.1	11.3	36.5	1.4	0.6	26.3	31.5
	2015	531	22.6	22.6	21.7	12.1	40.2	2.7	0.6	24.1	21.1
Singapore	2011	849	83.0	83.0	7.7	2.5	5.4	0.9	0.4	85.4	80.7
	2015	870	82.3	82.3	9.5	0.9	6.7	0.6	0.0	82.5	82.1
Slovenia	2011	634	63.2	63.2	16.1	4.1	14.3	2.1	0.3	59.9	66.0
	2015	602	63.8	63.8	15.5	4.4	13.5	1.9	0.9	63.8	63.7
South Africa	2011	1703	18.3	18.3	14.3	22.5	38.4	4.3	2.3	17.3	19.1
	2015	1790	17.9	17.9	12.2	14.8	51.5	2.4	1.2	17.6	18.2
Sweden	2011	794	47.8	47.8	25.8	5.0	14.9	4.6	1.9	41.9	53.7
	2015	587	52.4	52.4	18.5	5.7	12.1	6.5	4.8	52.6	52.6
Thailand	2011	859	22.4	22.4	13.4	9.3	48.9	4.4	1.5	21.9	23.0
	2015	918	22.6	22.6	14.8	11.0	47.2	3.9	0.6	23.6	21.2
Turkey	2011	990	47.5	47.5	14.2	8.8	25.1	3.6	0.8	47.9	47.0
	2015	869	47.3	47.3	12.7	9.2	29.1	1.6	0.1	48.8	45.8
United Arab Emirates	2011	2001	41.1	41.1	16.9	7.3	32.4	1.2	1.0	39.3	42.8
	2015	2583	45.9	45.9	18.8	7.3	24.9	2.7	0.3	47.1	44.8
United States	2011	1490	48.8	48.8	20.2	3.1	24.5	1.6	1.8	46.6	51.0
	2015	1474	48.4	48.4	18.4	3.3	25.7	1.9	2.3	46.9	49.6
International Avg (n=33)	2011	28524	47.1	47.1	17.8	7.8	23.0	3.1	1.2	46.6	47.5
	2015	31114	48.9	48.9	17.1	6.9	22.9	3.1	1.1	48.9	48.8
Ontario, Canada	2011	682	55.1	55.1	18.0	4.4	16.5	2.3	3.7	54.3	55.8
	2015	649	58.0	58.0	18.0	3.5	13.9	1.4	5.2	57.0	58.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_08A (M052121A): Algebra / Reasoning Type: MC Key: A
Label: Area of the 5th square

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	70.0	70.0	17.5	1.4	8.1	1.6	1.3	69.1	71.0
	2015	556	68.5	68.5	15.5	1.9	9.2	2.6	2.4	67.6	69.5
Norway (8)	2011	542	45.6	45.6	21.8	4.3	23.1	3.4	1.6	41.4	50.1
	2015	686	45.9	45.9	19.3	6.2	23.1	4.3	1.2	45.8	46.1
Abu Dhabi, UAE	2011	625	37.4	37.4	19.3	8.1	32.9	0.5	1.8	31.6	42.5
	2015	692	41.6	41.6	20.4	9.1	24.0	4.3	0.5	46.2	37.5
Dubai, UAE	2011	790	46.7	46.7	14.8	8.2	27.5	2.0	0.7	47.1	46.4
	2015	881	55.9	55.9	16.0	5.3	20.8	1.8	0.0	53.3	58.9
Florida, US	2011	246	54.8	54.8	14.7	5.1	24.0	1.1	0.3	53.1	56.4
	2015	298	48.2	48.2	14.1	5.7	30.5	1.2	0.3	50.3	46.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_08B (M052121B): Algebra / Reasoning Type: CR 1 Point
Label: Area of the nth square

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	4.2	5.1	73.8	16.0	0.9	4.2	5.6	2.7
	2015	1467	4.0	4.4	72.7	17.7	1.2	4.0	4.1	3.9
Bahrain	2011	653	3.0	4.4	68.3	22.3	2.1	3.0	4.9	0.9
	2015	702	2.4	5.9	80.0	11.4	0.3	2.4	4.0	1.0
Botswana	2011	763	0.4	1.3	89.1	5.6	3.7	0.4	0.5	0.2
	2015	845	0.0	1.8	89.2	5.4	3.6	0.0	0.1	0.0
Chile	2011	832	1.1	2.7	53.5	39.7	3.0	1.1	0.9	1.3
	2015	677	1.5	3.7	55.4	37.7	1.8	1.5	1.6	1.4
Chinese Taipei	2011	718	50.8	18.8	27.1	3.1	0.3	50.8	51.7	50.0
	2015	821	50.5	14.7	25.8	8.9	0.2	50.5	53.3	47.6
England	2011	547	5.4	12.5	62.1	19.1	0.9	5.4	5.2	5.6
	2015	692	8.8	11.0	61.1	18.0	1.0	8.8	8.7	9.0
Georgia	2011	653	4.5	17.4	31.3	44.3	2.4	4.5	4.2	4.8
	2015	572	3.1	8.8	39.9	47.0	1.2	3.1	4.0	2.1
Hong Kong SAR	2011	574	32.3	25.5	35.7	5.9	0.6	32.3	34.8	29.6
	2015	596	37.4	24.4	33.9	3.8	0.5	37.4	33.6	40.7
Hungary	2011	730	6.3	10.0	49.9	33.1	0.7	6.3	5.8	6.8
	2015	704	10.0	9.0	48.1	32.6	0.3	10.0	7.3	12.7
Iran, Islamic Rep. of	2011	875	2.9	6.9	47.1	40.7	2.4	2.9	2.5	3.2
	2015	885	5.4	11.2	57.5	23.4	2.5	5.4	6.1	4.7
Israel	2011	665	13.8	19.6	46.6	17.7	2.2	13.8	15.6	12.2
	2015	786	11.0	15.4	54.9	15.1	3.5	11.0	10.4	11.7
Italy	2011	563	2.9	7.9	64.0	24.7	0.6	2.9	3.8	2.0
	2015	627	1.8	2.7	63.2	31.2	1.1	1.8	0.9	2.8
Japan	2011	626	26.1	15.3	50.4	8.1	0.1	26.1	23.6	28.6
	2015	682	30.3	22.1	39.0	7.7	0.8	30.3	31.5	29.1
Jordan	2011	1092	2.6	4.7	78.2	13.5	1.0	2.6	1.4	3.7
	2015	1134	0.9	3.8	75.8	18.6	0.9	0.9	0.5	1.4
Kazakhstan	2011	616	7.9	14.8	49.0	27.3	1.0	7.9	6.7	9.1
	2015	696	22.6	8.6	50.5	17.1	1.1	22.6	22.9	22.4
Korea, Rep. of	2011	740	37.6	19.9	36.1	6.4	0.0	37.6	36.3	39.0
	2015	757	37.6	25.1	31.7	5.6	0.0	37.6	38.0	37.3
Lebanon	2011	557	0.9	4.2	59.6	32.7	2.5	0.9	0.9	0.9
	2015	548	3.3	4.5	54.0	37.0	1.2	3.3	3.3	3.2
Lithuania	2011	673	2.6	15.4	63.7	18.2	0.1	2.6	1.3	3.7
	2015	621	3.8	17.4	58.6	19.9	0.3	3.8	5.0	2.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_08B (M052121B): Algebra / Reasoning Type: CR 1 Point
Label: Area of the nth square

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	1.4	1.8	69.6	25.2	2.0	1.4	1.1	1.6
	2015	1378	4.5	5.6	70.3	16.6	2.9	4.5	4.8	4.3
Morocco	2011	1327	0.5	1.2	54.2	40.9	3.2	0.5	0.3	0.7
	2015	1875	0.7	5.4	60.7	31.1	2.0	0.7	0.6	0.9
New Zealand	2011	761	3.7	4.1	68.7	21.9	1.6	3.7	3.3	4.0
	2015	1120	5.5	5.2	73.4	15.2	0.6	5.5	4.0	7.0
Oman	2011	1363	1.2	3.7	73.0	20.3	1.7	1.2	1.4	1.1
	2015	1253	2.5	8.7	75.9	12.2	0.8	2.5	2.6	2.3
Qatar	2011	624	3.8	5.6	67.0	22.1	1.4	3.8	3.8	3.8
	2015	771	3.4	6.2	71.3	18.2	0.9	3.4	2.5	4.2
Russian Federation	2011	709	14.9	18.6	36.6	28.2	1.7	14.9	11.5	18.3
	2015	677	11.8	16.8	40.9	29.4	1.1	11.8	12.6	11.0
Saudi Arabia	2011	628	1.4	2.3	76.5	19.1	0.8	1.4	1.0	1.7
	2015	532	1.7	0.5	76.8	20.2	0.8	1.7	1.2	2.3
Singapore	2011	849	43.4	17.8	33.4	5.0	0.4	43.4	45.6	41.3
	2015	870	51.8	15.4	29.5	3.2	0.0	51.8	54.9	49.1
Slovenia	2011	634	2.5	15.3	51.7	30.2	0.3	2.5	2.8	2.3
	2015	602	5.3	14.6	52.1	26.7	1.3	5.3	5.1	5.5
South Africa	2011	1703	1.4	3.8	80.4	11.8	2.5	1.4	1.9	0.9
	2015	1790	0.5	1.7	88.1	7.8	1.8	0.5	0.2	0.8
Sweden	2011	794	2.1	3.3	61.9	30.7	2.1	2.1	1.8	2.4
	2015	587	4.6	6.8	53.9	28.6	6.1	4.6	4.0	5.1
Thailand	2011	859	1.9	7.0	64.0	25.6	1.5	1.9	2.3	1.4
	2015	918	3.6	7.2	69.7	18.6	0.9	3.6	3.5	3.8
Turkey	2011	990	8.8	8.6	56.9	24.7	0.9	8.8	9.6	7.9
	2015	869	6.2	11.1	61.7	20.8	0.2	6.2	7.5	5.0
United Arab Emirates	2011	2001	2.7	7.0	74.4	14.7	1.1	2.7	3.0	2.4
	2015	2583	7.5	8.3	70.7	13.2	0.3	7.5	7.1	7.9
United States	2011	1490	3.5	7.4	77.5	9.5	2.0	3.5	2.6	4.5
	2015	1474	5.1	6.5	78.5	6.8	3.0	5.1	4.6	5.5
International Avg (n=33)	2011	28525	9.0	9.5	58.5	21.5	1.5	9.0	9.0	9.0
	2015	31111	10.6	9.5	59.5	19.0	1.3	10.6	10.6	10.5
Ontario, Canada	2011	682	5.4	6.1	69.9	14.4	4.2	5.4	7.1	4.0
	2015	649	7.3	7.1	69.4	10.6	5.7	7.3	7.8	6.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_08B (M052121B): Algebra / Reasoning Type: CR 1 Point
Label: Area of the nth square

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	6.6	3.6	69.5	18.7	1.7	6.6	8.0	5.1
	2015	556	6.2	9.3	63.6	18.4	2.5	6.2	5.7	6.8
Norway (8)	2011	542	0.8	1.6	63.2	32.1	2.3	0.8	0.7	1.0
	2015	686	0.4	2.1	57.8	38.3	1.4	0.4	0.5	0.2
Abu Dhabi, UAE	2011	625	2.9	5.8	74.5	15.0	1.8	2.9	2.8	3.0
	2015	692	4.1	7.1	74.6	13.7	0.5	4.1	3.9	4.3
Dubai, UAE	2011	790	4.2	7.7	69.4	17.8	0.8	4.2	5.7	2.7
	2015	881	10.8	10.4	67.3	11.4	0.0	10.8	10.5	11.2
Florida, US	2011	246	2.8	5.2	81.4	10.2	0.3	2.8	1.5	4.1
	2015	298	3.5	4.0	85.0	7.2	0.3	3.5	4.6	2.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_09 (M052042): Geometry / Applying Type: CR 1 Point
Label: Length of the side of the triangle

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	36.8	57.9	4.4	0.9	36.8	34.6	39.1
	2015	1467	30.2	61.7	6.8	1.3	30.2	31.2	29.1
Bahrain	2011	653	16.3	71.3	10.2	2.3	16.3	19.1	13.3
	2015	703	23.4	67.8	8.6	0.3	23.4	29.1	18.0
Botswana	2011	763	6.0	85.0	4.3	4.7	6.0	6.8	5.1
	2015	845	5.4	88.4	2.4	3.8	5.4	4.6	6.3
Chile	2011	832	22.9	57.5	16.3	3.3	22.9	22.9	22.9
	2015	677	23.0	56.2	19.0	1.8	23.0	21.3	24.7
Chinese Taipei	2011	718	79.7	16.3	3.8	0.3	79.7	80.7	78.9
	2015	821	79.3	17.4	3.2	0.2	79.3	79.9	78.6
England	2011	547	34.4	58.9	5.8	0.9	34.4	32.3	36.5
	2015	692	35.1	59.6	4.3	1.0	35.1	37.0	32.7
Georgia	2011	653	29.1	49.2	19.0	2.8	29.1	27.8	30.2
	2015	572	37.7	49.4	11.7	1.2	37.7	38.3	37.1
Hong Kong SAR	2011	574	71.7	24.7	3.0	0.6	71.7	71.3	72.0
	2015	596	73.3	24.6	1.6	0.5	73.3	70.4	75.6
Hungary	2011	730	47.4	44.9	6.9	0.7	47.4	48.9	46.2
	2015	704	47.0	46.1	6.5	0.3	47.0	49.0	44.9
Iran, Islamic Rep. of	2011	875	30.2	56.7	9.9	3.2	30.2	25.3	34.4
	2015	885	38.4	50.3	8.7	2.6	38.4	41.2	35.9
Israel	2011	665	48.7	40.3	8.6	2.4	48.7	51.0	46.8
	2015	786	39.1	49.1	8.2	3.6	39.1	38.2	40.1
Italy	2011	563	69.0	25.6	4.7	0.7	69.0	72.3	65.8
	2015	626	64.7	27.9	6.3	1.2	64.7	67.9	61.5
Japan	2011	626	27.8	65.8	6.3	0.1	27.8	25.6	30.1
	2015	682	32.7	61.0	5.5	0.8	32.7	30.3	35.1
Jordan	2011	1092	25.6	66.2	6.7	1.5	25.6	24.4	26.7
	2015	1134	19.9	71.4	7.7	1.0	19.9	21.6	18.2
Kazakhstan	2011	617	39.1	52.0	7.7	1.1	39.1	35.8	42.5
	2015	696	55.4	39.8	3.5	1.4	55.4	57.1	53.6
Korea, Rep. of	2011	740	51.3	47.1	1.6	0.0	51.3	48.2	54.6
	2015	757	47.4	49.7	2.8	0.1	47.4	45.0	49.4
Lebanon	2011	557	35.8	51.3	10.1	2.8	35.8	30.8	41.9
	2015	548	44.4	44.0	9.7	1.8	44.4	44.9	44.0
Lithuania	2011	673	45.7	48.4	5.9	0.1	45.7	50.6	41.8
	2015	621	37.1	56.3	6.3	0.3	37.1	38.2	35.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_09 (M052042): Geometry / Applying Type: CR 1 Point
Label: Length of the side of the triangle

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	26.1	66.3	5.2	2.5	26.1	25.1	27.0
	2015	1378	26.1	65.1	5.5	3.2	26.1	26.2	26.0
Morocco	2011	1327	14.5	66.4	14.5	4.6	14.5	16.4	12.9
	2015	1879	18.2	70.4	9.0	2.3	18.2	18.0	18.3
New Zealand	2011	761	23.9	66.1	8.3	1.7	23.9	20.9	26.5
	2015	1120	24.8	67.8	6.7	0.6	24.8	21.9	27.8
Oman	2011	1363	10.9	76.2	10.7	2.2	10.9	9.4	12.5
	2015	1252	14.2	79.6	5.2	1.0	14.2	12.3	15.9
Qatar	2011	624	20.0	71.5	6.9	1.6	20.0	18.1	21.7
	2015	771	20.9	69.5	8.5	1.1	20.9	18.5	23.1
Russian Federation	2011	709	51.9	40.1	6.4	1.7	51.9	53.3	50.4
	2015	677	54.1	38.0	6.7	1.2	54.1	53.3	54.8
Saudi Arabia	2011	628	13.5	78.4	7.2	0.9	13.5	11.3	15.5
	2015	532	12.6	81.4	5.3	0.8	12.6	13.8	11.2
Singapore	2011	849	71.1	26.2	2.2	0.4	71.1	72.2	70.1
	2015	870	82.9	16.5	0.6	0.0	82.9	82.9	82.9
Slovenia	2011	634	27.7	61.8	10.2	0.3	27.7	22.6	32.0
	2015	602	28.9	61.8	8.0	1.3	28.9	28.9	28.8
South Africa	2011	1703	13.3	80.6	3.1	3.0	13.3	12.0	14.5
	2015	1790	19.1	76.4	2.3	2.2	19.1	20.0	18.2
Sweden	2011	794	29.9	57.2	10.4	2.5	29.9	26.8	33.1
	2015	587	28.2	54.7	10.7	6.4	28.2	27.9	28.4
Thailand	2011	859	19.6	71.4	7.3	1.7	19.6	18.3	21.2
	2015	918	21.4	70.6	7.1	1.0	21.4	22.1	20.4
Turkey	2011	990	49.8	41.9	7.3	0.9	49.8	53.3	46.0
	2015	869	54.9	40.4	4.5	0.2	54.9	60.2	50.0
United Arab Emirates	2011	2001	25.9	66.9	5.9	1.2	25.9	27.6	24.2
	2015	2583	33.2	61.5	4.5	0.9	33.2	33.9	32.4
United States	2011	1490	44.1	50.8	2.8	2.3	44.1	44.1	44.1
	2015	1474	45.7	49.7	1.5	3.1	45.7	47.8	43.4
International Avg (n=33)	2011	28526	35.1	55.8	7.4	1.7	35.1	34.5	35.8
	2015	31114	36.9	55.3	6.3	1.5	36.9	37.4	36.4
Ontario, Canada	2011	682	33.9	56.1	5.3	4.7	33.9	32.2	35.2
	2015	649	38.0	51.0	5.3	5.8	38.0	36.3	39.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_09 (M052042): Geometry / Applying Type: CR 1 Point
Label: Length of the side of the triangle

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	16.3	71.6	10.0	2.1	16.3	11.8	21.0
	2015	556	14.6	70.4	12.5	2.6	14.6	12.0	17.6
Norway (8)	2011	542	22.6	67.1	7.8	2.6	22.6	22.5	22.8
	2015	686	27.7	60.6	10.0	1.7	27.7	29.7	25.5
Abu Dhabi, UAE	2011	625	23.8	69.6	4.6	2.0	23.8	21.6	25.7
	2015	692	27.5	65.7	5.3	1.5	27.5	30.2	25.1
Dubai, UAE	2011	790	28.1	63.8	7.3	0.9	28.1	31.9	24.5
	2015	881	43.8	52.0	3.5	0.7	43.8	42.2	45.6
Florida, US	2011	246	52.0	45.0	2.7	0.3	52.0	52.1	51.9
	2015	298	40.8	56.2	2.4	0.5	40.8	40.0	41.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_10 (M052047): Geometry / Applying Type: CR 1 Point
Label: Value of angle y in a triangle

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	36.4	8.5	49.1	5.1	0.9	36.4	34.5	38.4
	2015	1467	36.0	5.5	50.8	6.2	1.5	36.0	35.7	36.2
Bahrain	2011	653	19.1	6.2	62.4	9.7	2.6	19.1	20.0	18.1
	2015	703	17.4	6.0	67.8	8.5	0.3	17.4	19.1	15.8
Botswana	2011	763	14.6	3.7	74.1	2.3	5.3	14.6	14.8	14.4
	2015	845	16.1	1.6	75.7	2.5	4.1	16.1	14.0	18.3
Chile	2011	832	17.1	6.1	54.7	18.2	3.8	17.1	17.1	17.1
	2015	677	18.8	5.1	51.3	23.1	1.8	18.8	16.5	21.2
Chinese Taipei	2011	718	77.6	2.4	15.5	4.2	0.3	77.6	79.2	76.3
	2015	821	80.2	3.2	13.6	2.9	0.2	80.2	81.2	79.0
England	2011	547	41.7	5.9	46.2	4.8	1.4	41.7	42.0	41.4
	2015	692	46.2	4.0	45.1	3.6	1.0	46.2	47.4	44.8
Georgia	2011	653	26.7	3.7	45.4	21.5	2.8	26.7	25.2	27.9
	2015	572	37.3	1.4	44.3	15.9	1.2	37.3	35.6	38.9
Hong Kong SAR	2011	574	82.9	0.3	12.8	3.3	0.6	82.9	86.6	78.9
	2015	596	86.7	1.1	10.8	0.9	0.5	86.7	87.9	85.8
Hungary	2011	730	47.7	5.8	37.4	8.3	0.8	47.7	49.5	46.1
	2015	704	52.4	5.2	36.1	6.0	0.3	52.4	53.0	51.8
Iran, Islamic Rep. of	2011	875	31.8	4.4	49.6	10.9	3.3	31.8	33.5	30.3
	2015	885	41.4	2.7	46.2	6.8	3.0	41.4	44.1	38.9
Israel	2011	665	45.7	3.4	40.3	8.0	2.5	45.7	49.6	42.3
	2015	786	45.5	3.0	39.2	8.4	3.9	45.5	43.8	47.4
Italy	2011	563	36.7	9.9	41.2	11.2	1.0	36.7	35.1	38.2
	2015	627	34.8	12.5	37.0	14.6	1.2	34.8	36.5	33.0
Japan	2011	626	79.0	1.9	17.2	1.7	0.1	79.0	78.3	79.8
	2015	682	81.1	0.8	16.3	1.0	0.8	81.1	79.6	82.7
Jordan	2011	1092	31.9	3.1	57.6	5.6	1.8	31.9	33.7	30.2
	2015	1134	22.5	2.2	68.0	6.2	1.2	22.5	25.3	19.4
Kazakhstan	2011	617	46.5	3.3	37.9	11.2	1.1	46.5	45.3	47.7
	2015	696	57.3	1.1	33.5	6.7	1.4	57.3	60.0	54.4
Korea, Rep. of	2011	740	85.1	1.7	12.9	0.3	0.0	85.1	87.2	82.7
	2015	757	87.3	1.1	10.8	0.7	0.1	87.3	89.3	85.6
Lebanon	2011	557	45.5	8.4	36.5	6.5	3.2	45.5	43.8	47.6
	2015	546	55.8	3.7	29.4	9.3	1.8	55.8	59.4	51.9
Lithuania	2011	673	44.0	6.9	43.7	5.3	0.1	44.0	48.8	40.3
	2015	621	44.9	4.4	46.1	4.2	0.4	44.9	48.2	41.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_10 (M052047): Geometry / Applying Type: CR 1 Point
Label: Value of angle y in a triangle

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	31.5	5.7	53.0	7.2	2.6	31.5	32.9	30.1
	2015	1378	35.5	3.0	50.3	7.5	3.7	35.5	36.2	34.9
Morocco	2011	1328	11.1	12.1	53.1	19.0	4.7	11.1	9.2	12.8
	2015	1858	15.8	14.0	56.4	11.4	2.4	15.8	17.6	14.4
New Zealand	2011	761	32.8	5.8	52.1	7.2	2.0	32.8	29.1	36.1
	2015	1120	32.6	6.2	52.9	7.5	0.8	32.6	34.2	31.0
Oman	2011	1363	20.5	2.6	64.3	10.3	2.2	20.5	24.6	16.2
	2015	1253	25.2	3.1	64.1	6.6	1.0	25.2	28.1	22.5
Qatar	2011	624	27.2	4.5	58.8	7.8	1.6	27.2	30.0	24.7
	2015	771	30.3	5.5	56.9	5.6	1.7	30.3	28.9	31.6
Russian Federation	2011	709	56.3	3.5	30.7	7.9	1.7	56.3	58.6	54.0
	2015	677	59.9	2.3	28.5	7.7	1.6	59.9	61.8	58.3
Saudi Arabia	2011	628	15.2	5.0	73.2	5.7	0.9	15.2	16.9	13.7
	2015	532	7.4	4.2	79.7	7.7	1.0	7.4	8.1	6.8
Singapore	2011	849	88.2	0.2	10.9	0.3	0.4	88.2	91.4	85.1
	2015	870	90.2	0.2	9.3	0.3	0.0	90.2	89.2	91.1
Slovenia	2011	634	44.9	11.9	38.1	4.8	0.3	44.9	43.3	46.3
	2015	602	50.0	8.1	36.9	3.6	1.4	50.0	52.2	47.7
South Africa	2011	1703	13.2	8.7	72.6	2.4	3.1	13.2	13.6	12.9
	2015	1790	18.9	7.0	68.6	3.1	2.4	18.9	20.0	17.8
Sweden	2011	794	17.8	5.5	63.1	10.7	2.8	17.8	14.9	20.7
	2015	586	19.0	8.5	53.3	12.6	6.7	19.0	19.4	18.7
Thailand	2011	859	21.0	9.9	55.2	12.3	1.7	21.0	23.6	17.9
	2015	918	20.1	7.8	61.6	9.6	1.0	20.1	24.1	15.2
Turkey	2011	990	41.9	1.5	46.7	8.8	1.0	41.9	44.0	39.6
	2015	869	40.7	3.2	50.1	5.8	0.2	40.7	42.3	39.2
United Arab Emirates	2011	2001	30.6	3.2	58.4	6.5	1.3	30.6	33.2	28.0
	2015	2583	37.6	5.6	50.1	5.8	0.9	37.6	39.2	36.1
United States	2011	1490	23.4	8.5	61.0	4.6	2.5	23.4	21.0	25.8
	2015	1474	30.9	7.7	54.9	3.1	3.4	30.9	29.2	32.2
International Avg (n=33)	2011	28527	39.0	5.3	46.2	7.7	1.8	39.0	39.7	38.2
	2015	31092	41.7	4.6	45.3	6.8	1.6	41.7	42.6	40.7
Ontario, Canada	2011	682	39.6	7.2	42.0	6.2	5.0	39.6	37.6	41.2
	2015	649	40.6	7.6	42.8	2.9	6.0	40.6	43.3	38.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_10 (M052047): Geometry / Applying Type: CR 1 Point
Label: Value of angle y in a triangle

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	58.5	2.9	30.0	6.5	2.1	58.5	56.9	60.1
	2015	556	58.8	3.9	27.4	6.4	3.5	58.8	53.3	65.2
Norway (8)	2011	542	15.8	12.1	63.1	6.1	2.9	15.8	14.9	16.8
	2015	686	21.1	8.7	60.4	8.2	1.7	21.1	21.8	20.2
Abu Dhabi, UAE	2011	625	29.7	2.3	59.1	6.9	2.0	29.7	29.4	30.0
	2015	692	31.4	6.8	55.2	5.2	1.5	31.4	32.7	30.2
Dubai, UAE	2011	790	37.1	3.7	51.5	6.7	1.0	37.1	38.1	36.2
	2015	881	49.9	3.8	41.9	3.4	1.0	49.9	50.3	49.4
Florida, US	2011	246	30.5	3.3	62.4	3.5	0.3	30.5	31.3	29.7
	2015	298	24.6	13.5	55.6	5.4	0.9	24.6	23.3	25.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M06_11 (M052044): Geometry / Reasoning Type: MC Key: A
Label: Point equidistant from P and Q

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	55.8	55.8	22.3	13.8	3.8	3.5	0.9	53.3	58.3
	2015	1467	51.4	51.4	23.1	14.7	5.3	3.6	1.8	50.5	52.2
Bahrain	2011	653	32.8	32.8	28.7	24.7	8.3	2.5	2.9	32.7	32.9
	2015	703	47.9	47.9	25.3	17.9	7.1	1.2	0.5	47.6	48.2
Botswana	2011	764	44.5	44.5	17.7	17.1	10.8	3.9	5.9	44.4	44.6
	2015	844	43.9	43.9	17.3	17.2	11.8	4.6	5.3	42.9	45.0
Chile	2011	832	40.0	40.0	24.9	16.9	7.1	6.7	4.3	43.4	36.3
	2015	677	40.7	40.7	27.6	14.7	9.4	5.8	1.8	42.2	39.2
Chinese Taipei	2011	718	73.4	73.4	7.9	13.3	4.9	0.2	0.3	74.7	72.3
	2015	821	70.2	70.2	12.8	12.2	4.3	0.4	0.2	70.0	70.4
England	2011	547	53.0	53.0	26.4	11.3	5.1	2.8	1.5	54.8	51.2
	2015	692	54.0	54.0	23.8	13.4	5.2	2.6	1.0	54.9	53.0
Georgia	2011	643	41.6	41.6	26.7	16.1	6.0	6.5	3.0	43.9	39.5
	2015	572	45.8	45.8	20.3	19.0	6.6	7.0	1.4	42.5	49.1
Hong Kong SAR	2011	574	47.7	47.7	24.8	21.5	4.2	1.1	0.6	46.9	48.7
	2015	596	55.2	55.2	20.4	18.0	4.3	1.6	0.5	49.6	60.0
Hungary	2011	730	58.7	58.7	17.8	14.9	5.2	2.5	0.8	63.0	55.0
	2015	704	63.9	63.9	13.9	13.2	6.4	2.1	0.5	66.8	60.8
Iran, Islamic Rep. of	2011	875	39.0	39.0	19.7	20.4	9.8	6.8	4.4	37.4	40.3
	2015	885	41.1	41.1	16.8	18.6	8.6	11.2	3.6	40.1	42.0
Israel	2011	665	44.3	44.3	21.5	17.6	8.0	5.7	2.8	47.4	41.6
	2015	786	45.3	45.3	21.5	18.6	5.7	3.9	5.1	43.7	47.1
Italy	2011	563	60.9	60.9	12.8	13.7	5.9	4.7	2.0	60.5	61.3
	2015	627	56.8	56.8	11.9	16.3	6.3	7.1	1.5	57.5	56.1
Japan	2011	626	61.3	61.3	15.2	14.7	6.1	2.5	0.3	60.4	62.2
	2015	682	64.0	64.0	13.7	15.1	4.3	2.1	0.8	64.4	63.5
Jordan	2011	1092	39.2	39.2	21.8	23.8	9.8	3.0	2.3	43.9	34.8
	2015	1134	42.5	42.5	20.1	23.2	10.1	2.7	1.4	46.2	38.5
Kazakhstan	2011	617	58.1	58.1	18.9	11.6	5.0	5.2	1.2	59.0	57.1
	2015	695	65.2	65.2	12.2	14.2	3.6	3.4	1.4	63.6	67.0
Korea, Rep. of	2011	740	53.8	53.8	18.0	21.6	6.3	0.3	0.0	53.4	54.3
	2015	757	60.0	60.0	16.9	15.1	5.9	2.1	0.1	57.8	61.8
Lebanon	2011	551	32.3	32.3	27.8	17.9	6.3	12.0	3.8	32.4	32.1
	2015	548	33.6	33.6	26.5	17.0	5.4	15.7	1.8	35.0	32.1
Lithuania	2011	673	62.3	62.3	15.9	12.3	6.1	3.3	0.1	61.1	63.2
	2015	621	62.9	62.9	14.7	11.6	8.0	2.4	0.4	65.7	60.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_11 (M052044): Geometry / Reasoning Type: MC Key: A
Label: Point equidistant from P and Q

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	44.8	44.8	19.8	20.5	8.5	3.7	2.8	43.1	46.4
	2015	1378	43.5	43.5	18.3	21.9	7.8	4.3	4.1	43.3	43.7
Morocco	2011	1327	32.9	32.9	25.1	21.5	7.3	7.5	5.7	32.9	32.8
	2015	1880	47.9	47.9	22.6	15.0	7.7	3.9	2.9	48.2	47.6
New Zealand	2011	761	47.3	47.3	23.7	17.4	4.2	5.1	2.3	45.1	49.2
	2015	1120	53.6	53.6	20.9	16.1	5.0	3.1	1.3	51.6	55.7
Oman	2011	1363	37.8	37.8	24.5	23.7	6.5	4.8	2.7	37.6	38.0
	2015	1246	34.8	34.8	30.9	22.7	6.9	3.2	1.5	36.5	33.2
Qatar	2011	624	37.4	37.4	27.9	21.8	7.1	4.0	1.8	37.5	37.3
	2015	770	42.3	42.3	28.1	17.7	6.2	3.8	1.9	43.6	41.0
Russian Federation	2011	709	64.5	64.5	13.0	11.7	4.3	4.8	1.7	61.8	67.3
	2015	677	61.4	61.4	14.8	11.4	5.0	5.5	1.9	59.6	63.0
Saudi Arabia	2011	627	37.1	37.1	26.7	23.0	10.9	1.4	0.9	34.8	39.2
	2015	530	44.0	44.0	23.7	19.2	10.8	1.1	1.2	49.0	38.8
Singapore	2011	849	54.2	54.2	21.4	18.6	4.5	0.9	0.5	53.2	55.2
	2015	870	57.0	57.0	19.2	16.3	6.4	1.1	0.0	56.8	57.1
Slovenia	2011	634	67.4	67.4	14.0	9.7	4.7	3.9	0.4	67.5	67.3
	2015	602	65.3	65.3	15.7	9.3	6.7	1.7	1.4	67.9	62.6
South Africa	2011	1703	49.3	49.3	19.2	13.8	9.3	5.1	3.4	48.9	49.7
	2015	1790	49.0	49.0	21.6	15.6	7.7	3.5	2.6	48.7	49.3
Sweden	2011	794	32.1	32.1	29.4	17.8	5.7	11.3	3.8	27.8	36.2
	2015	586	39.6	39.6	22.7	14.2	6.7	9.6	7.2	36.3	42.1
Thailand	2011	859	40.8	40.8	23.3	20.6	8.7	4.4	2.1	40.7	41.0
	2015	918	39.2	39.2	23.0	23.8	7.8	4.8	1.3	38.5	40.1
Turkey	2011	989	49.7	49.7	16.2	21.9	6.4	4.7	1.0	50.9	48.3
	2015	869	47.8	47.8	19.0	23.1	8.5	1.0	0.5	50.3	45.6
United Arab Emirates	2011	2001	38.2	38.2	27.7	21.3	8.6	2.6	1.6	38.1	38.3
	2015	2583	40.0	40.0	28.4	17.9	9.7	3.0	1.1	42.9	37.2
United States	2011	1490	46.6	46.6	24.7	19.0	4.0	2.8	2.9	42.7	50.5
	2015	1474	48.8	48.8	21.0	17.6	6.4	2.1	4.1	45.8	51.5
International Avg (n=33)	2011	28509	47.8	47.8	21.4	17.7	6.6	4.3	2.1	47.7	48.0
	2015	31104	50.3	50.3	20.3	16.7	6.9	4.0	1.9	50.3	50.1
Ontario, Canada	2011	682	47.6	47.6	21.8	15.2	4.7	5.0	5.7	45.0	49.7
	2015	649	51.8	51.8	19.8	12.0	6.8	3.2	6.5	53.1	50.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_11 (M052044): Geometry / Reasoning Type: MC Key: A
Label: Point equidistant from P and Q

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	50.0	50.0	20.4	15.6	5.9	5.7	2.4	49.3	50.8
	2015	556	49.8	49.8	18.5	13.6	6.8	6.7	4.7	49.0	50.8
Norway (8)	2011	542	40.8	40.8	31.3	13.2	4.7	7.1	3.1	39.7	41.9
	2015	686	43.5	43.5	30.3	10.5	6.4	6.9	2.4	42.2	45.1
Abu Dhabi, UAE	2011	625	38.0	38.0	28.1	19.2	9.5	2.6	2.5	37.2	38.8
	2015	692	37.8	37.8	30.4	17.7	8.8	3.6	1.6	40.2	35.6
Dubai, UAE	2011	790	36.6	36.6	28.2	23.7	8.8	1.7	1.1	35.9	37.2
	2015	881	48.3	48.3	24.8	17.4	6.3	2.0	1.2	47.0	49.7
Florida, US	2011	246	47.8	47.8	25.3	18.5	5.5	2.3	0.7	52.3	43.8
	2015	298	48.2	48.2	26.7	15.1	6.3	2.7	1.1	50.9	45.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_12A (M052422A): Data and Chance / Applying Type: MC Key: B
Label: Blue color on the spinners

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	83.4	11.0	83.4	1.6	1.8	0.4	1.7	82.8	84.0
	2015	1467	81.4	10.5	81.4	2.2	2.2	1.4	2.3	83.2	79.6
Bahrain	2011	653	52.2	23.6	52.2	9.9	8.8	2.2	3.3	60.2	43.8
	2015	703	65.1	20.6	65.1	5.7	6.9	1.1	0.5	68.0	62.4
Botswana	2011	762	55.1	20.2	55.1	8.4	6.6	2.5	7.1	60.1	49.8
	2015	844	52.3	23.0	52.3	9.0	6.7	2.0	7.1	56.0	48.2
Chile	2011	831	48.7	20.0	48.7	8.0	15.8	2.5	5.0	44.6	53.3
	2015	677	65.6	11.5	65.6	7.5	9.2	4.2	2.1	62.3	68.9
Chinese Taipei	2011	718	82.9	7.6	82.9	3.6	5.0	0.5	0.3	84.5	81.6
	2015	821	84.2	7.9	84.2	2.2	5.3	0.2	0.2	85.1	83.2
England	2011	547	82.6	12.2	82.6	0.6	1.3	1.6	1.6	85.4	79.9
	2015	692	83.0	10.6	83.0	1.6	1.9	1.2	1.7	85.2	80.5
Georgia	2011	653	38.4	23.8	38.4	12.3	12.3	10.0	3.2	38.4	38.4
	2015	572	42.5	23.8	42.5	13.5	9.6	9.2	1.5	41.9	43.1
Hong Kong SAR	2011	574	81.7	7.9	81.7	3.9	5.6	0.3	0.6	83.4	79.9
	2015	596	78.8	10.9	78.8	3.9	5.0	0.9	0.5	79.4	78.2
Hungary	2011	730	73.5	11.4	73.5	5.4	5.9	2.3	1.5	72.0	74.8
	2015	704	73.2	13.2	73.2	4.5	7.0	0.8	1.2	71.5	74.9
Iran, Islamic Rep. of	2011	875	38.6	24.6	38.6	10.8	16.3	4.2	5.5	37.9	39.1
	2015	885	59.7	13.7	59.7	7.4	11.4	2.9	5.0	61.9	57.6
Israel	2011	665	73.7	9.4	73.7	5.1	4.2	3.2	4.3	76.5	71.2
	2015	786	73.2	10.1	73.2	3.5	4.1	3.1	5.9	68.3	78.5
Italy	2011	563	67.6	16.1	67.6	4.6	6.0	2.7	3.0	66.6	68.6
	2015	627	65.1	16.6	65.1	5.8	8.2	2.1	2.1	62.1	68.1
Japan	2011	626	83.3	8.8	83.3	3.8	2.7	0.6	0.7	79.0	87.8
	2015	682	83.9	7.2	83.9	3.1	4.2	0.7	1.0	82.6	85.3
Jordan	2011	1092	52.2	22.2	52.2	10.1	9.9	2.9	2.7	53.7	50.7
	2015	1134	49.3	25.6	49.3	6.7	13.2	3.4	1.9	54.9	43.2
Kazakhstan	2011	617	34.7	32.1	34.7	14.8	9.5	6.9	2.0	33.2	36.4
	2015	695	49.4	24.8	49.4	9.8	9.6	4.9	1.5	50.2	48.4
Korea, Rep. of	2011	740	93.5	3.5	93.5	1.7	1.2	0.1	0.0	93.3	93.7
	2015	757	91.7	4.7	91.7	2.1	1.2	0.2	0.3	92.6	90.9
Lebanon	2011	555	46.2	23.8	46.2	11.5	6.1	6.2	6.2	50.6	40.7
	2015	548	48.6	22.2	48.6	8.8	5.1	11.6	3.8	45.9	51.4
Lithuania	2011	673	65.8	19.9	65.8	5.8	7.6	0.9	0.1	68.3	63.7
	2015	621	67.1	17.5	67.1	3.2	9.7	1.9	0.5	62.8	71.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_12A (M052422A): Data and Chance / Applying Type: MC Key: B
Label: Blue color on the spinners

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	49.6	27.6	49.6	11.5	6.0	2.2	3.1	46.9	52.0
	2015	1378	58.1	16.6	58.1	12.1	5.5	2.9	4.8	58.5	57.6
Morocco	2011	1327	42.0	27.9	42.0	10.0	8.4	5.4	6.4	44.6	39.7
	2015	1879	42.0	26.5	42.0	12.6	12.3	3.6	3.0	43.4	40.7
New Zealand	2011	761	77.7	12.5	77.7	2.9	2.9	1.4	2.6	73.5	81.5
	2015	1120	74.2	14.6	74.2	3.7	3.2	2.6	1.7	73.2	75.1
Oman	2011	1363	49.0	24.0	49.0	10.2	8.8	4.5	3.5	51.1	46.7
	2015	1255	49.5	27.1	49.5	9.4	9.5	2.8	1.6	55.3	44.4
Qatar	2011	624	48.9	23.4	48.9	12.1	9.3	3.9	2.4	48.6	49.1
	2015	771	58.2	23.1	58.2	8.0	6.8	1.5	2.4	58.9	57.6
Russian Federation	2011	709	58.6	25.5	58.6	3.7	5.7	3.9	2.6	55.0	62.1
	2015	677	57.8	23.3	57.8	3.9	7.7	4.3	3.0	54.7	60.4
Saudi Arabia	2011	627	47.2	31.4	47.2	9.2	10.7	0.4	1.0	45.1	49.2
	2015	530	52.7	26.4	52.7	9.5	8.5	1.6	1.3	58.6	46.3
Singapore	2011	849	74.5	16.4	74.5	3.4	5.1	0.1	0.5	75.1	73.8
	2015	870	79.4	12.4	79.4	2.6	4.6	0.7	0.3	78.0	80.7
Slovenia	2011	634	63.7	20.4	63.7	3.8	9.1	2.3	0.6	62.8	64.6
	2015	602	65.5	18.5	65.5	4.1	8.3	2.1	1.6	62.2	68.6
South Africa	2011	1703	49.1	21.9	49.1	12.7	9.7	2.3	4.3	51.7	46.8
	2015	1790	54.9	23.9	54.9	8.9	7.3	1.4	3.6	57.9	51.8
Sweden	2011	794	63.5	16.5	63.5	5.2	5.7	4.2	4.8	60.3	66.7
	2015	587	62.3	15.6	62.3	1.7	3.2	9.1	8.1	62.9	62.1
Thailand	2011	859	48.6	18.8	48.6	15.8	9.9	4.2	2.8	46.4	51.2
	2015	918	57.9	14.3	57.9	13.6	9.8	2.8	1.6	61.3	53.9
Turkey	2011	990	67.8	16.3	67.8	6.6	6.3	1.8	1.2	68.7	66.9
	2015	869	69.0	16.2	69.0	6.1	7.2	0.8	0.8	74.6	63.8
United Arab Emirates	2011	2001	57.6	22.0	57.6	8.3	7.8	2.1	2.1	59.4	55.8
	2015	2583	63.7	19.6	63.7	6.8	6.7	1.9	1.3	66.1	61.4
United States	2011	1490	78.6	11.4	78.6	3.2	2.0	1.2	3.5	79.7	77.6
	2015	1474	78.5	10.7	78.5	2.5	2.5	1.0	4.8	78.6	78.3
International Avg (n=33)	2011	28521	61.5	18.6	61.5	7.3	7.1	2.7	2.7	61.8	61.2
	2015	31114	64.8	17.1	64.8	6.2	6.8	2.8	2.4	65.4	64.1
Ontario, Canada	2011	682	75.7	12.2	75.7	1.5	1.5	2.1	7.1	77.0	74.6
	2015	649	76.1	11.2	76.1	1.0	1.8	2.4	7.4	78.4	74.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_12A (M052422A): Data and Chance / Applying Type: MC Key: B
Label: Blue color on the spinners

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	83.2	7.0	83.2	0.8	3.6	2.4	3.0	83.9	82.4
	2015	554	83.5	6.4	83.5	1.6	2.5	1.0	4.9	85.6	81.2
Norway (8)	2011	542	74.6	11.1	74.6	3.7	5.2	1.6	3.8	75.4	73.7
	2015	686	74.5	9.4	74.5	2.7	7.2	3.2	2.9	76.1	72.7
Abu Dhabi, UAE	2011	625	56.0	22.0	56.0	8.2	8.4	2.0	3.4	55.3	56.5
	2015	692	59.4	20.6	59.4	7.7	8.9	1.4	2.0	62.3	56.8
Dubai, UAE	2011	790	64.1	20.9	64.1	5.8	5.9	1.8	1.4	64.9	63.3
	2015	881	73.0	15.5	73.0	4.3	3.7	2.2	1.3	74.4	71.5
Florida, US	2011	246	80.2	9.2	80.2	5.1	2.4	2.1	1.0	80.7	79.7
	2015	298	75.7	12.1	75.7	6.2	3.4	0.7	2.0	77.1	74.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_12B (M052422B): Data and Chance / Applying Type: MC Key: D
Label: Red color on the spinners

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	72.3	8.2	13.8	2.7	72.3	1.3	1.7	74.0	70.5
	2015	1467	70.1	9.6	13.7	2.6	70.1	1.3	2.7	73.0	67.2
Bahrain	2011	653	42.3	14.6	21.4	15.2	42.3	2.0	4.4	49.7	34.6
	2015	703	55.4	11.1	22.3	9.7	55.4	0.8	0.6	59.4	51.6
Botswana	2011	762	35.6	16.5	23.8	13.3	35.6	2.0	8.7	38.0	33.1
	2015	844	29.7	16.3	27.5	16.2	29.7	2.0	8.2	32.7	26.5
Chile	2011	831	46.2	14.8	16.9	13.1	46.2	3.4	5.5	44.7	47.8
	2015	677	47.3	14.9	22.7	8.5	47.3	3.1	3.5	45.7	49.0
Chinese Taipei	2011	718	73.4	12.6	10.5	2.8	73.4	0.1	0.5	76.7	70.6
	2015	821	74.2	11.4	9.6	4.4	74.2	0.1	0.3	75.7	72.5
England	2011	547	67.6	12.2	13.6	2.7	67.6	1.6	2.3	66.8	68.4
	2015	692	68.2	11.9	15.0	1.9	68.2	0.9	2.1	69.9	66.2
Georgia	2011	653	31.2	18.1	19.7	13.8	31.2	11.7	5.5	27.8	34.2
	2015	572	25.1	20.6	22.8	19.7	25.1	9.6	2.0	24.3	26.0
Hong Kong SAR	2011	574	69.2	13.2	10.5	5.0	69.2	1.3	0.8	73.3	64.7
	2015	596	71.2	12.2	10.0	4.5	71.2	1.6	0.5	75.4	67.7
Hungary	2011	730	62.6	12.3	13.2	7.5	62.6	2.2	2.1	64.4	61.1
	2015	704	66.7	10.4	14.5	6.3	66.7	0.8	1.4	63.7	69.9
Iran, Islamic Rep. of	2011	875	31.9	17.6	25.9	12.7	31.9	4.9	6.9	31.6	32.2
	2015	885	43.9	12.4	25.3	9.3	43.9	3.5	5.6	48.5	39.6
Israel	2011	665	57.6	13.4	17.1	4.4	57.6	2.2	5.3	61.0	54.6
	2015	786	52.6	11.4	18.9	6.9	52.6	3.3	7.0	49.3	56.1
Italy	2011	563	59.9	10.6	13.2	10.5	59.9	2.3	3.5	60.7	59.1
	2015	627	56.7	15.9	14.9	5.5	56.7	4.6	2.3	54.4	59.0
Japan	2011	626	71.3	14.0	9.1	3.8	71.3	0.8	1.0	70.9	71.8
	2015	682	74.5	13.9	7.1	2.9	74.5	0.4	1.2	77.8	71.1
Jordan	2011	1092	41.0	15.7	26.1	11.9	41.0	2.4	2.9	43.2	39.0
	2015	1134	39.1	15.2	27.4	12.6	39.1	2.9	2.9	43.1	34.8
Kazakhstan	2011	617	29.4	16.6	20.4	19.2	29.4	11.5	2.9	28.5	30.4
	2015	695	38.7	17.9	22.0	13.2	38.7	5.4	2.8	39.2	38.1
Korea, Rep. of	2011	740	75.7	14.1	8.1	1.6	75.7	0.3	0.1	79.2	72.0
	2015	757	70.0	16.1	10.8	2.5	70.0	0.5	0.3	76.1	64.9
Lebanon	2011	555	33.2	12.9	21.8	19.0	33.2	5.8	7.3	34.9	31.1
	2015	547	26.9	15.0	21.2	20.6	26.9	11.1	5.2	26.6	27.1
Lithuania	2011	673	55.0	14.6	19.9	8.9	55.0	1.2	0.3	57.7	52.9
	2015	621	54.0	18.4	18.5	6.4	54.0	1.6	1.0	53.6	54.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_12B (M052422B): Data and Chance / Applying Type: MC Key: D
Label: Red color on the spinners

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	28.8	22.7	22.7	18.9	28.8	3.6	3.4	28.7	28.8
	2015	1378	35.7	18.3	20.7	14.6	35.7	4.8	6.0	36.5	34.9
Morocco	2011	1328	30.6	15.8	27.4	12.6	30.6	5.7	7.9	33.2	28.3
	2015	1879	32.7	16.7	29.3	13.5	32.7	4.0	3.8	34.2	31.4
New Zealand	2011	761	67.2	12.8	13.4	2.1	67.2	1.3	3.2	68.1	66.4
	2015	1120	62.4	11.5	17.2	4.3	62.4	1.9	2.7	62.8	62.1
Oman	2011	1363	33.8	16.2	26.9	12.7	33.8	5.4	5.0	35.9	31.7
	2015	1255	32.8	17.6	28.3	13.6	32.8	5.4	2.3	34.7	31.1
Qatar	2011	624	34.6	18.1	26.7	13.8	34.6	2.4	4.4	36.9	32.4
	2015	771	43.2	15.3	25.3	11.4	43.2	2.1	2.6	44.4	42.1
Russian Federation	2011	709	39.7	16.8	26.1	9.9	39.7	3.8	3.7	37.3	42.1
	2015	677	45.7	19.5	17.9	9.1	45.7	3.8	4.0	44.6	46.6
Saudi Arabia	2011	625	37.0	15.7	27.2	17.9	37.0	1.1	1.1	35.8	38.2
	2015	531	34.7	13.8	31.1	16.4	34.7	2.2	1.9	37.8	31.3
Singapore	2011	849	68.2	11.5	11.7	7.9	68.2	0.1	0.5	68.7	67.8
	2015	870	71.2	9.9	11.9	6.2	71.2	0.3	0.5	70.5	71.8
Slovenia	2011	634	58.1	16.6	12.6	9.7	58.1	2.1	0.9	56.1	59.9
	2015	602	56.7	16.4	14.5	8.1	56.7	2.1	2.1	58.5	54.9
South Africa	2011	1703	27.3	20.0	28.4	15.8	27.3	3.6	4.9	28.1	26.6
	2015	1790	29.6	17.2	32.1	15.1	29.6	1.6	4.3	30.7	28.5
Sweden	2011	794	49.3	14.5	17.9	8.0	49.3	4.5	5.8	50.0	48.6
	2015	587	60.2	10.3	8.5	6.0	60.2	5.1	9.8	64.2	57.4
Thailand	2011	859	40.0	16.5	19.9	15.8	40.0	4.8	3.0	41.3	38.4
	2015	918	45.5	16.9	20.2	12.2	45.5	3.1	2.2	48.6	41.7
Turkey	2011	990	48.4	15.8	24.1	7.0	48.4	3.2	1.6	51.6	44.8
	2015	869	48.3	16.4	25.9	6.5	48.3	1.8	1.0	49.5	47.2
United Arab Emirates	2011	2001	43.9	13.2	25.4	12.5	43.9	2.2	2.8	45.9	41.9
	2015	2583	48.5	13.3	23.4	10.8	48.5	2.2	1.8	48.4	48.6
United States	2011	1490	68.9	8.3	14.6	3.1	68.9	1.1	3.9	71.5	66.3
	2015	1474	64.2	10.0	16.9	2.9	64.2	0.8	5.2	66.4	61.9
International Avg (n=33)	2011	28520	49.4	14.7	19.1	10.2	49.4	3.1	3.5	50.7	48.2
	2015	31114	50.8	14.5	19.6	9.2	50.8	2.9	3.0	52.1	49.5
Ontario, Canada	2011	682	69.6	7.6	11.0	2.0	69.6	1.8	7.9	68.8	70.3
	2015	649	66.5	8.1	11.8	2.6	66.5	2.4	8.6	68.5	64.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_12B (M052422B): Data and Chance / Applying Type: MC Key: D
Label: Red color on the spinners

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	73.2	8.7	9.9	2.8	73.2	2.1	3.4	72.3	74.1
	2015	555	73.9	7.5	10.7	1.3	73.9	1.4	5.2	76.3	71.1
Norway (8)	2011	542	55.0	16.1	17.1	6.0	55.0	1.0	4.8	54.3	55.9
	2015	686	58.2	13.8	17.7	3.5	58.2	3.0	3.8	60.3	55.8
Abu Dhabi, UAE	2011	625	45.5	13.6	22.6	12.3	45.5	2.2	3.9	43.9	46.8
	2015	692	47.7	15.5	21.0	12.0	47.7	1.5	2.3	48.1	47.4
Dubai, UAE	2011	790	49.5	13.1	23.3	10.3	49.5	1.8	2.1	53.9	45.4
	2015	881	56.2	11.0	20.7	7.6	56.2	2.2	2.3	53.4	59.1
Florida, US	2011	246	70.3	11.0	13.8	2.2	70.3	0.2	2.5	68.8	71.5
	2015	298	55.5	12.8	24.2	4.4	55.5	0.4	2.7	64.0	47.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_13 (M052505): Data and Chance / Knowing Type: MC Key: B
Label: Pizzas sold by a shop

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1083	88.8	4.2	88.8	2.7	1.3	1.1	1.9	86.1	91.6
	2015	1467	87.0	4.8	87.0	2.5	1.3	1.4	3.0	87.7	86.4
Bahrain	2011	653	65.8	11.0	65.8	12.6	4.6	1.5	4.5	71.5	59.9
	2015	702	75.4	8.5	75.4	10.0	4.6	0.9	0.6	78.3	72.6
Botswana	2011	762	62.3	15.6	62.3	8.0	3.3	1.1	9.7	65.9	58.5
	2015	844	58.8	15.3	58.8	9.4	6.5	1.2	8.8	62.1	55.2
Chile	2011	831	69.0	10.4	69.0	9.2	2.7	2.6	6.0	64.2	74.4
	2015	677	69.7	11.5	69.7	8.0	4.9	2.1	3.8	64.4	75.1
Chinese Taipei	2011	718	93.2	3.3	93.2	1.7	1.0	0.3	0.5	94.3	92.1
	2015	821	94.6	1.7	94.6	2.4	1.0	0.0	0.3	94.9	94.4
England	2011	547	90.7	3.0	90.7	1.9	0.3	1.4	2.6	90.5	90.9
	2015	692	92.4	2.3	92.4	1.0	1.3	0.6	2.4	93.4	91.2
Georgia	2011	651	67.1	8.9	67.1	11.9	3.0	3.5	5.6	71.0	63.5
	2015	572	81.1	6.6	81.1	4.7	1.7	3.7	2.3	79.8	82.4
Hong Kong SAR	2011	574	92.9	3.1	92.9	2.8	0.4	0.0	0.8	94.5	91.2
	2015	596	95.2	1.1	95.2	1.8	0.4	0.8	0.6	96.4	94.2
Hungary	2011	730	84.5	4.8	84.5	5.7	2.2	0.7	2.1	82.6	86.1
	2015	704	86.2	4.8	86.2	4.6	2.5	0.4	1.5	85.8	86.5
Iran, Islamic Rep. of	2011	875	64.0	8.6	64.0	11.7	6.0	2.8	6.9	60.6	67.0
	2015	885	70.1	8.3	70.1	10.3	3.1	2.4	5.8	70.5	69.6
Israel	2011	665	81.9	3.2	81.9	4.5	2.6	2.3	5.5	83.6	80.4
	2015	786	78.0	6.6	78.0	5.0	2.3	0.8	7.3	75.4	80.7
Italy	2011	563	83.0	5.7	83.0	5.1	2.0	0.7	3.5	80.2	85.7
	2015	627	84.8	6.1	84.8	3.7	1.1	1.6	2.6	82.9	86.7
Japan	2011	626	91.1	4.1	91.1	1.8	1.2	0.7	1.1	91.0	91.1
	2015	682	93.2	2.1	93.2	1.4	2.0	0.1	1.2	93.6	92.8
Jordan	2011	1092	63.0	9.9	63.0	12.7	7.3	4.1	3.0	65.2	61.0
	2015	1134	58.0	12.8	58.0	15.6	6.9	3.2	3.4	56.4	59.9
Kazakhstan	2011	617	74.7	7.4	74.7	9.6	3.0	2.2	3.1	76.0	73.3
	2015	696	73.1	9.7	73.1	10.0	2.6	1.9	2.7	73.9	72.2
Korea, Rep. of	2011	740	96.3	2.3	96.3	0.6	0.5	0.2	0.1	96.7	95.9
	2015	757	94.8	1.8	94.8	1.7	1.3	0.1	0.3	93.8	95.6
Lebanon	2011	552	64.6	7.1	64.6	10.4	4.2	6.0	7.7	67.4	61.1
	2015	548	64.4	6.1	64.4	12.0	4.5	7.5	5.5	67.4	61.1
Lithuania	2011	673	86.6	4.2	86.6	5.3	2.5	1.1	0.3	85.7	87.3
	2015	621	88.9	5.4	88.9	2.0	2.3	0.4	1.0	88.3	89.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_13 (M052505): Data and Chance / Knowing Type: MC Key: B
Label: Pizzas sold by a shop

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	833	73.7	12.4	73.7	7.0	2.9	0.5	3.6	76.1	71.5
	2015	1378	75.3	9.1	75.3	5.3	2.2	1.3	6.8	73.5	77.0
Morocco	2011	1328	49.8	9.2	49.8	10.7	4.2	17.4	8.6	49.4	50.1
	2015	1880	60.0	10.6	60.0	16.4	6.6	2.6	3.9	59.0	60.8
New Zealand	2011	761	85.0	5.4	85.0	2.6	2.3	1.5	3.2	84.1	85.8
	2015	1120	85.4	7.4	85.4	2.0	0.9	1.6	2.8	85.7	85.0
Oman	2011	1363	49.5	13.5	49.5	16.6	12.3	2.7	5.3	50.4	48.4
	2015	1255	61.0	13.3	61.0	16.9	5.4	1.2	2.3	62.5	59.7
Qatar	2011	624	63.3	8.2	63.3	14.7	6.4	2.6	4.6	69.0	58.2
	2015	771	68.6	12.5	68.6	9.9	4.8	1.5	2.7	68.5	68.7
Russian Federation	2011	709	84.6	3.2	84.6	4.6	1.4	1.6	4.4	81.7	87.5
	2015	677	83.8	4.7	83.8	4.9	0.8	1.5	4.3	84.5	83.1
Saudi Arabia	2011	624	59.1	13.4	59.1	18.0	7.7	0.5	1.2	56.5	61.5
	2015	531	56.1	14.3	56.1	15.2	12.3	0.0	2.1	57.7	54.4
Singapore	2011	849	94.2	1.9	94.2	2.1	0.6	0.7	0.5	95.6	92.8
	2015	870	96.1	2.1	96.1	0.4	0.6	0.2	0.5	96.8	95.6
Slovenia	2011	634	87.0	5.2	87.0	3.8	1.7	1.0	1.2	83.7	89.8
	2015	602	90.1	4.2	90.1	1.8	0.5	1.2	2.1	88.2	92.0
South Africa	2011	1703	45.7	17.7	45.7	17.8	8.1	5.1	5.6	44.3	46.9
	2015	1790	56.8	14.3	56.8	14.5	7.6	2.2	4.5	59.2	54.4
Sweden	2011	794	79.6	4.4	79.6	4.8	2.8	2.0	6.3	78.4	80.8
	2015	587	77.8	4.0	77.8	3.0	2.3	2.7	10.2	78.5	77.7
Thailand	2011	859	79.2	5.6	79.2	7.9	2.2	1.9	3.3	82.5	75.2
	2015	918	81.0	6.3	81.0	7.7	2.1	0.7	2.2	82.3	79.4
Turkey	2011	990	76.7	8.5	76.7	8.4	3.9	0.8	1.6	76.3	77.2
	2015	869	75.0	9.7	75.0	8.7	5.3	0.2	1.1	76.2	73.9
United Arab Emirates	2011	2001	76.5	8.5	76.5	7.7	3.2	1.2	2.9	77.5	75.5
	2015	2582	78.6	7.8	78.6	6.9	2.9	1.5	2.2	81.6	75.8
United States	2011	1490	85.8	5.7	85.8	2.3	1.4	0.7	4.2	84.0	87.5
	2015	1474	84.1	6.0	84.1	2.0	1.7	0.6	5.6	83.6	84.8
International Avg (n=33)	2011	28514	76.0	7.3	76.0	7.5	3.3	2.2	3.7	76.3	75.8
	2015	31115	78.0	7.3	78.0	6.7	3.2	1.5	3.2	78.3	77.8
Ontario, Canada	2011	682	85.3	3.2	85.3	1.4	1.4	0.6	8.3	84.4	85.9
	2015	649	83.6	3.7	83.6	1.4	0.8	1.6	8.9	83.5	83.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M06_13 (M052505): Data and Chance / Knowing Type: MC Key: B
Label: Pizzas sold by a shop

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	880	90.5	1.5	90.5	3.1	0.9	0.6	3.4	91.7	89.2
	2015	555	90.0	1.8	90.0	1.3	0.7	0.7	5.4	89.0	91.2
Norway (8)	2011	542	81.6	5.0	81.6	4.4	1.3	2.8	5.0	79.9	83.3
	2015	686	80.5	6.5	80.5	3.5	2.3	3.1	4.1	79.4	81.7
Abu Dhabi, UAE	2011	625	74.3	9.5	74.3	7.7	2.9	1.7	3.9	73.1	75.3
	2015	692	74.0	8.3	74.0	8.7	3.6	2.4	2.9	77.2	71.1
Dubai, UAE	2011	790	81.5	6.6	81.5	6.9	2.4	0.6	2.1	82.5	80.6
	2015	881	86.5	4.8	86.5	3.7	1.7	0.8	2.5	86.7	86.3
Florida, US	2011	246	81.3	6.0	81.3	6.6	2.6	1.1	2.5	83.4	79.4
	2015	298	82.0	8.5	82.0	4.5	2.4	0.0	2.7	82.1	81.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_01 (M042015): Number / Knowing Type: MC Key: C
Label: What is the value of cube of 3

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	62.7	2.1	32.4	62.7	2.3	0.2	0.3	65.8	59.5
	2015	1475	65.9	3.7	29.1	65.9	0.7	0.4	0.2	66.7	65.0
Bahrain	2011	653	53.5	7.8	34.9	53.5	2.7	0.9	0.2	61.8	45.1
	2015	695	69.9	6.0	22.0	69.9	1.9	0.0	0.3	76.1	64.1
Botswana	2011	768	30.3	10.2	55.5	30.3	3.5	0.5	0.0	31.3	29.3
	2015	855	39.4	9.2	46.4	39.4	3.9	1.0	0.0	41.9	36.9
Chile	2011	835	61.0	7.0	29.0	61.0	1.8	0.9	0.2	62.4	59.5
	2015	677	74.7	6.0	17.2	74.7	0.8	1.1	0.2	69.8	79.6
Chinese Taipei	2011	716	85.2	0.7	13.0	85.2	1.1	0.0	0.0	91.0	79.9
	2015	820	86.2	1.3	12.1	86.2	0.2	0.2	0.0	87.1	85.2
England	2011	548	65.0	4.2	29.8	65.0	0.6	0.3	0.1	63.3	66.4
	2015	676	68.7	1.9	27.8	68.7	1.0	0.4	0.0	68.6	68.9
Georgia	2011	655	66.4	4.4	27.6	66.4	0.8	0.5	0.4	70.1	63.0
	2015	579	64.2	3.3	28.8	64.2	2.8	0.3	0.5	65.8	62.7
Hong Kong SAR	2011	571	84.2	0.7	14.1	84.2	0.7	0.3	0.1	87.1	81.1
	2015	596	88.5	0.5	9.8	88.5	0.5	0.4	0.3	87.0	89.8
Hungary	2011	739	74.7	1.9	20.6	74.7	2.4	0.4	0.0	73.8	75.5
	2015	707	77.2	2.0	19.4	77.2	0.8	0.5	0.0	75.4	79.1
Iran, Islamic Rep. of	2011	870	62.3	5.3	29.9	62.3	1.2	0.7	0.5	64.5	60.4
	2015	863	67.7	3.3	28.2	67.7	0.7	0.0	0.1	69.9	65.8
Israel	2011	660	70.7	3.4	23.6	70.7	0.7	1.2	0.4	74.8	66.8
	2015	771	69.9	3.5	24.9	69.9	1.1	0.3	0.2	73.1	67.2
Italy	2011	565	92.1	0.9	6.4	92.1	0.4	0.2	0.0	94.5	89.8
	2015	640	87.5	0.6	10.7	87.5	0.6	0.7	0.0	88.6	86.2
Japan	2011	625	83.2	1.2	15.3	83.2	0.3	0.0	0.0	80.8	85.7
	2015	682	85.6	0.3	13.4	85.6	0.7	0.1	0.0	84.4	86.8
Jordan	2011	1079	59.9	8.9	28.0	59.9	2.2	1.1	0.0	66.1	54.2
	2015	1122	57.4	8.0	31.1	57.4	3.2	0.2	0.1	58.9	55.8
Kazakhstan	2011	622	75.2	1.7	21.2	75.2	0.4	1.4	0.1	78.6	72.0
	2015	701	80.5	2.3	16.3	80.5	0.3	0.6	0.0	80.7	80.2
Korea, Rep. of	2011	742	93.4	0.3	6.1	93.4	0.1	0.1	0.0	94.8	92.0
	2015	757	94.5	0.2	4.3	94.5	0.5	0.5	0.0	96.6	92.7
Lebanon	2011	568	80.5	0.9	17.8	80.5	0.6	0.0	0.2	81.8	79.1
	2015	547	80.9	0.6	15.4	80.9	1.2	1.5	0.5	84.8	76.3
Lithuania	2011	674	76.3	3.3	19.9	76.3	0.5	0.0	0.0	80.9	72.2
	2015	619	74.8	1.5	23.2	74.8	0.5	0.0	0.0	79.6	69.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_01 (M042015): Number / Knowing Type: MC Key: C
Label: What is the value of cube of 3

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	67.8	7.3	22.0	67.8	2.2	0.5	0.4	78.5	58.1
	2015	1393	75.2	3.9	18.5	75.2	2.2	0.1	0.2	80.7	69.5
Morocco	2011	1324	32.7	9.5	51.8	32.7	3.6	1.7	0.7	32.9	32.5
	2015	1853	35.2	10.5	50.0	35.2	2.3	1.9	0.1	36.4	34.2
New Zealand	2011	759	59.6	4.4	33.4	59.6	1.8	0.8	0.1	57.3	61.6
	2015	1176	57.1	4.5	35.7	57.1	2.0	0.7	0.0	57.3	56.9
Oman	2011	1368	53.3	12.0	30.7	53.3	3.0	0.8	0.1	62.7	43.4
	2015	1258	59.5	10.3	27.4	59.5	2.1	0.6	0.1	65.3	54.4
Qatar	2011	635	59.6	9.7	27.0	59.6	2.2	0.9	0.6	64.5	54.8
	2015	777	62.7	4.9	29.2	62.7	1.9	0.7	0.7	65.1	60.4
Russian Federation	2011	707	87.9	1.0	10.6	87.9	0.1	0.1	0.3	85.5	90.2
	2015	685	83.9	0.8	15.1	83.9	0.2	0.0	0.0	84.7	83.1
Saudi Arabia	2011	629	58.4	9.1	30.5	58.4	1.6	0.4	0.0	65.4	51.9
	2015	524	47.3	16.4	33.5	47.3	2.4	0.2	0.2	47.2	47.4
Singapore	2011	848	89.4	0.6	9.4	89.4	0.5	0.1	0.0	90.9	87.9
	2015	872	89.6	0.5	9.6	89.6	0.1	0.2	0.0	92.3	87.1
Slovenia	2011	632	87.3	1.6	10.7	87.3	0.2	0.2	0.0	85.0	89.5
	2015	606	92.6	0.3	6.4	92.6	0.2	0.5	0.0	92.6	92.7
South Africa	2011	1713	33.5	16.0	41.6	33.5	6.4	2.2	0.2	37.6	29.6
	2015	1789	61.9	8.1	28.3	61.9	1.1	0.5	0.1	64.9	59.0
Sweden	2011	779	50.1	3.1	39.2	50.1	5.5	1.6	0.6	48.1	51.9
	2015	578	50.0	4.2	39.4	50.0	1.2	4.6	0.5	47.9	52.6
Thailand	2011	876	58.2	5.1	33.6	58.2	2.6	0.4	0.1	65.2	49.7
	2015	920	59.4	6.0	32.5	59.4	1.9	0.1	0.0	68.3	48.3
Turkey	2011	984	63.8	8.7	25.3	63.8	1.9	0.3	0.0	65.8	61.8
	2015	861	68.5	7.1	21.8	68.5	2.2	0.4	0.0	73.9	63.4
United Arab Emirates	2011	1998	72.2	4.3	20.9	72.2	1.6	0.8	0.2	79.8	64.8
	2015	2582	72.0	5.0	19.3	72.0	2.1	1.6	0.0	78.3	66.0
United States	2011	1508	87.0	0.6	11.8	87.0	0.1	0.3	0.2	85.9	88.1
	2015	1463	87.2	1.2	10.4	87.2	0.3	0.7	0.3	88.6	85.8
International Avg (n=33)	2011	28533	67.8	4.8	25.0	67.8	1.7	0.6	0.2	70.6	65.1
	2015	31119	70.8	4.2	22.9	70.8	1.3	0.6	0.1	72.7	68.9
Ontario, Canada	2011	680	67.4	2.5	29.2	67.4	0.7	0.0	0.2	67.1	67.5
	2015	647	72.8	2.5	22.5	72.8	1.2	0.5	0.4	72.9	72.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_01 (M042015): Number / Knowing Type: MC Key: C
Label: What is the value of cube of 3

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	83.6	1.2	14.4	83.6	0.2	0.1	0.4	83.2	84.0
	2015	553	88.0	0.4	10.1	88.0	0.1	0.4	1.0	88.0	88.1
Norway (8)	2011	551	22.0	7.0	60.7	22.0	7.5	2.4	0.3	23.9	19.5
	2015	696	33.0	5.4	54.4	33.0	4.7	2.5	0.1	35.2	30.8
Abu Dhabi, UAE	2011	623	68.8	5.2	23.0	68.8	1.9	1.0	0.2	74.5	63.8
	2015	698	63.7	7.1	23.2	63.7	2.5	3.4	0.0	71.0	57.2
Dubai, UAE	2011	784	78.2	3.3	15.6	78.2	1.4	1.2	0.3	84.4	72.6
	2015	877	84.8	2.4	11.7	84.8	0.5	0.5	0.0	87.6	81.5
Florida, US	2011	240	91.7	1.1	7.3	91.7	0.0	0.0	0.0	93.1	90.4
	2015	302	86.7	0.9	10.4	86.7	1.0	0.8	0.2	86.7	86.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_02 (M042196): Data and Chance / Knowing Type: MC Key: C
Label: Speed on the speedometer

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	69.5	10.1	17.3	69.5	2.6	0.2	0.3	66.1	73.1
	2015	1475	68.5	10.6	16.4	68.5	2.2	2.1	0.2	66.5	70.8
Bahrain	2011	653	41.0	25.5	23.2	41.0	8.9	1.1	0.2	39.3	42.8
	2015	695	42.2	21.4	25.6	42.2	10.0	0.5	0.3	37.0	47.1
Botswana	2011	768	40.1	34.0	21.9	40.1	3.6	0.4	0.0	39.0	41.2
	2015	855	31.2	41.9	21.5	31.2	4.6	0.8	0.0	29.0	33.4
Chile	2011	835	37.7	25.9	28.8	37.7	6.1	1.2	0.2	34.0	41.9
	2015	677	43.9	19.7	28.6	43.9	6.2	1.3	0.3	38.4	49.6
Chinese Taipei	2011	716	74.5	17.1	7.0	74.5	1.4	0.0	0.0	75.9	73.1
	2015	820	74.0	14.6	9.9	74.0	1.4	0.1	0.0	71.5	76.4
England	2011	548	73.8	13.1	10.4	73.8	2.1	0.4	0.1	75.0	72.8
	2015	676	77.3	11.5	9.3	77.3	1.3	0.4	0.2	78.6	75.7
Georgia	2011	655	38.9	20.6	30.8	38.9	8.9	0.4	0.4	34.1	43.4
	2015	579	39.8	17.6	30.2	39.8	11.2	0.7	0.5	36.5	42.9
Hong Kong SAR	2011	571	84.7	6.5	5.9	84.7	1.9	0.9	0.1	85.1	84.3
	2015	596	89.2	5.7	2.4	89.2	2.1	0.4	0.3	90.7	87.8
Hungary	2011	739	62.1	11.5	23.0	62.1	3.4	0.0	0.0	57.6	65.8
	2015	707	65.6	14.2	17.2	65.6	2.9	0.1	0.0	61.7	69.7
Iran, Islamic Rep. of	2011	870	29.7	33.5	32.5	29.7	3.1	0.7	0.5	24.8	34.0
	2015	863	40.2	32.8	23.8	40.2	2.8	0.3	0.1	36.5	43.5
Israel	2011	660	64.4	5.2	20.9	64.4	8.3	0.9	0.4	58.7	69.8
	2015	771	66.5	7.8	16.1	66.5	9.1	0.2	0.2	63.1	69.4
Italy	2011	565	54.7	16.9	22.0	54.7	6.2	0.2	0.0	51.3	58.1
	2015	640	59.4	14.3	20.5	59.4	4.3	1.4	0.1	58.2	60.6
Japan	2011	625	84.9	4.5	9.4	84.9	1.2	0.0	0.0	84.3	85.6
	2015	682	87.8	4.4	7.1	87.8	0.5	0.1	0.0	88.6	87.0
Jordan	2011	1079	45.6	16.7	27.7	45.6	8.4	1.6	0.0	42.3	48.6
	2015	1122	29.4	25.5	32.0	29.4	12.7	0.4	0.1	26.8	32.3
Kazakhstan	2011	622	46.4	17.7	30.5	46.4	4.7	0.6	0.1	42.5	50.0
	2015	701	54.9	12.9	27.2	54.9	4.8	0.2	0.0	51.0	59.2
Korea, Rep. of	2011	742	83.4	7.6	8.0	83.4	0.9	0.1	0.0	82.8	84.1
	2015	757	77.0	14.6	7.1	77.0	1.3	0.0	0.0	78.0	76.1
Lebanon	2011	570	30.6	28.8	33.0	30.6	6.4	1.0	0.2	25.6	36.6
	2015	548	35.3	26.0	28.5	35.3	6.9	2.9	0.5	32.4	38.6
Lithuania	2011	674	64.7	9.2	23.5	64.7	2.6	0.0	0.0	60.8	68.0
	2015	619	63.2	13.1	20.3	63.2	3.3	0.0	0.0	59.0	67.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_02 (M042196): Data and Chance / Knowing Type: MC Key: C
Label: Speed on the speedometer

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	51.1	28.5	16.1	51.1	3.2	0.7	0.4	53.3	49.1
	2015	1392	59.7	22.3	16.2	59.7	1.6	0.1	0.2	57.5	62.0
Morocco	2011	1325	26.5	39.8	26.3	26.5	5.2	1.3	0.8	21.7	31.0
	2015	1853	30.1	38.3	21.9	30.1	7.4	2.3	0.1	24.1	34.9
New Zealand	2011	759	69.5	8.2	18.7	69.5	2.6	0.8	0.2	66.6	72.1
	2015	1176	65.4	15.6	16.1	65.4	2.2	0.7	0.0	63.9	67.1
Oman	2011	1368	30.8	25.5	31.9	30.8	10.2	1.3	0.3	28.2	33.6
	2015	1258	32.4	20.1	35.3	32.4	11.3	0.9	0.1	34.9	30.1
Qatar	2011	635	38.2	23.7	28.7	38.2	7.7	1.1	0.6	38.0	38.4
	2015	777	41.3	16.9	31.1	41.3	9.7	0.4	0.7	35.4	47.0
Russian Federation	2011	707	65.9	11.5	21.1	65.9	1.1	0.0	0.3	61.4	70.4
	2015	685	59.0	13.8	25.3	59.0	1.5	0.3	0.0	52.3	65.4
Saudi Arabia	2011	628	37.8	25.8	28.9	37.8	6.9	0.7	0.0	33.9	41.4
	2015	525	34.3	22.2	29.6	34.3	13.2	0.5	0.2	29.3	39.6
Singapore	2011	848	86.1	8.3	4.1	86.1	1.4	0.1	0.0	87.5	84.8
	2015	872	87.9	6.5	4.3	87.9	1.2	0.0	0.0	89.7	86.3
Slovenia	2011	632	73.0	9.3	14.0	73.0	3.7	0.0	0.0	69.6	76.2
	2015	606	72.2	9.8	14.7	72.2	3.0	0.3	0.0	67.8	76.0
South Africa	2011	1713	20.9	38.1	24.7	20.9	14.7	1.4	0.3	16.2	25.4
	2015	1789	26.1	35.7	25.4	26.1	12.1	0.5	0.1	23.4	28.9
Sweden	2011	779	64.2	10.8	19.6	64.2	4.1	0.7	0.6	60.9	67.1
	2015	578	64.9	8.6	18.3	64.9	5.4	2.2	0.6	64.3	66.5
Thailand	2011	876	44.1	28.8	25.0	44.1	2.0	0.0	0.1	44.8	43.2
	2015	920	36.6	36.2	25.0	36.6	2.3	0.0	0.0	37.0	36.1
Turkey	2011	984	44.7	22.0	25.5	44.7	7.7	0.1	0.0	41.9	47.6
	2015	861	42.1	26.3	22.1	42.1	9.3	0.1	0.0	38.1	46.0
United Arab Emirates	2011	1998	47.6	19.8	23.4	47.6	8.4	0.7	0.2	46.4	48.7
	2015	2582	49.9	17.3	23.3	49.9	8.3	1.1	0.0	46.5	53.0
United States	2011	1508	67.4	12.1	16.5	67.4	3.4	0.3	0.3	65.7	69.2
	2015	1463	68.2	11.8	15.0	68.2	3.9	0.8	0.3	66.4	70.1
International Avg (n=33)	2011	28535	54.4	18.7	21.2	54.4	4.9	0.6	0.2	52.0	56.7
	2015	31120	55.0	18.5	20.2	55.0	5.5	0.7	0.2	52.5	57.5
Ontario, Canada	2011	680	60.3	12.4	22.8	60.3	4.0	0.2	0.2	54.4	65.3
	2015	647	62.6	13.1	20.3	62.6	2.8	0.8	0.4	56.0	68.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_02 (M042196): Data and Chance / Knowing Type: MC Key: C
Label: Speed on the speedometer

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	72.9	12.9	12.1	72.9	1.6	0.1	0.4	72.4	73.5
	2015	552	72.0	10.1	14.6	72.0	1.7	0.4	1.0	68.3	75.9
Norway (8)	2011	551	55.1	15.3	25.1	55.1	3.7	0.4	0.3	53.3	57.4
	2015	696	62.8	9.6	22.7	62.8	2.9	1.8	0.1	61.8	63.9
Abu Dhabi, UAE	2011	623	46.5	19.7	25.1	46.5	7.7	0.7	0.2	41.5	50.9
	2015	698	41.6	20.1	27.9	41.6	9.3	1.1	0.1	39.0	44.0
Dubai, UAE	2011	784	52.8	22.9	17.7	52.8	5.4	0.9	0.3	55.8	50.0
	2015	877	65.5	12.7	16.0	65.5	5.3	0.5	0.0	61.8	69.7
Florida, US	2011	240	67.7	8.4	18.6	67.7	5.3	0.0	0.0	60.7	74.2
	2015	302	58.9	12.1	21.5	58.9	6.5	0.8	0.2	61.9	56.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_03 (M042194): Number / Knowing Type: CR 1 Point
Label: Present of games the team lose

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	80.0	18.4	1.3	0.3	80.0	76.0	84.2
	2015	1475	81.6	16.6	1.7	0.2	81.6	78.9	84.4
Bahrain	2011	653	47.7	44.9	7.1	0.2	47.7	42.2	53.3
	2015	695	45.5	47.3	6.9	0.4	45.5	40.9	49.7
Botswana	2011	768	33.2	64.0	2.8	0.0	33.2	31.6	35.0
	2015	856	31.9	65.4	2.7	0.0	31.9	34.8	29.0
Chile	2011	835	58.9	32.8	8.1	0.2	58.9	51.8	66.9
	2015	677	62.4	26.5	10.8	0.3	62.4	52.8	72.3
Chinese Taipei	2011	716	85.6	12.5	1.9	0.0	85.6	84.8	86.4
	2015	820	87.4	10.2	2.4	0.0	87.4	86.3	88.5
England	2011	548	84.9	12.6	2.2	0.3	84.9	80.8	88.6
	2015	676	84.5	13.8	1.5	0.2	84.5	83.4	85.7
Georgia	2011	655	57.6	33.7	8.4	0.4	57.6	51.8	62.9
	2015	579	62.5	29.1	7.9	0.5	62.5	54.2	70.5
Hong Kong SAR	2011	571	79.5	17.2	3.2	0.1	79.5	79.4	79.7
	2015	596	82.2	15.0	2.5	0.3	82.2	81.8	82.6
Hungary	2011	739	78.6	19.7	1.7	0.0	78.6	75.1	81.5
	2015	707	82.7	15.1	2.2	0.0	82.7	76.2	89.7
Iran, Islamic Rep. of	2011	870	50.0	41.4	8.0	0.5	50.0	39.2	59.5
	2015	863	56.6	37.5	5.9	0.1	56.6	47.2	65.1
Israel	2011	661	76.5	18.3	4.8	0.4	76.5	73.6	79.3
	2015	771	71.8	21.0	6.8	0.3	71.8	67.1	75.9
Italy	2011	565	78.4	17.3	4.4	0.0	78.4	74.5	82.1
	2015	640	78.8	16.9	4.2	0.1	78.8	73.3	84.8
Japan	2011	625	85.3	13.5	1.2	0.0	85.3	81.0	89.9
	2015	682	87.3	11.2	1.4	0.0	87.3	83.1	91.6
Jordan	2011	1079	38.3	56.2	5.5	0.0	38.3	26.4	49.3
	2015	1122	38.5	56.5	4.8	0.1	38.5	30.4	47.5
Kazakhstan	2011	622	64.2	30.6	5.1	0.1	64.2	56.3	71.6
	2015	701	72.4	24.9	2.8	0.0	72.4	67.4	77.9
Korea, Rep. of	2011	742	90.2	9.3	0.5	0.0	90.2	89.2	91.2
	2015	757	89.9	9.5	0.6	0.0	89.9	87.5	92.1
Lebanon	2011	570	34.6	53.8	11.1	0.4	34.6	25.0	46.1
	2015	548	43.0	45.3	11.0	0.7	43.0	36.8	50.1
Lithuania	2011	674	76.7	21.8	1.4	0.0	76.7	74.8	78.5
	2015	619	75.2	22.2	2.6	0.0	75.2	68.6	81.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

Trend Achievement Data Almanac for Mathematics Items (Weighted)

M07_03 (M042194): Number / Knowing Type: CR 1 Point
Label: Present of games the team lose

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	34.9	59.7	4.9	0.5	34.9	29.9	39.4
	2015	1393	48.1	47.5	4.3	0.2	48.1	44.9	51.4
Morocco	2011	1329	27.5	58.8	12.9	0.8	27.5	17.8	36.5
	2015	1859	31.6	59.0	9.3	0.1	31.6	22.8	38.7
New Zealand	2011	759	80.1	18.1	1.6	0.2	80.1	76.2	83.6
	2015	1176	78.7	19.0	2.3	0.0	78.7	76.4	81.2
Oman	2011	1368	24.5	66.3	8.9	0.3	24.5	18.4	30.9
	2015	1257	31.6	62.8	5.5	0.1	31.6	23.0	39.3
Qatar	2011	635	45.7	46.5	7.2	0.6	45.7	39.2	52.1
	2015	777	49.7	42.6	7.0	0.7	49.7	40.8	58.2
Russian Federation	2011	707	77.4	18.7	3.6	0.3	77.4	70.5	84.1
	2015	685	75.5	20.2	4.1	0.1	75.5	68.9	81.7
Saudi Arabia	2011	629	36.8	58.9	4.2	0.1	36.8	23.0	49.5
	2015	525	36.8	56.9	6.1	0.2	36.8	26.8	47.5
Singapore	2011	848	91.0	8.6	0.5	0.0	91.0	89.3	92.6
	2015	872	93.4	6.1	0.5	0.0	93.4	93.0	93.8
Slovenia	2011	632	76.7	21.0	2.3	0.0	76.7	69.0	83.9
	2015	606	80.9	15.2	3.9	0.0	80.9	77.1	84.2
South Africa	2011	1713	19.3	77.8	2.3	0.6	19.3	16.2	22.5
	2015	1789	25.5	72.8	1.6	0.1	25.5	22.1	28.9
Sweden	2011	779	88.2	10.0	1.2	0.6	88.2	86.3	90.0
	2015	578	86.1	11.8	1.5	0.6	86.1	84.8	87.6
Thailand	2011	876	55.1	38.6	6.2	0.1	55.1	51.2	59.8
	2015	920	55.9	40.8	3.3	0.0	55.9	54.3	57.8
Turkey	2011	984	60.4	32.2	7.4	0.0	60.4	52.2	68.9
	2015	861	64.8	32.4	2.8	0.0	64.8	60.3	69.1
United Arab Emirates	2011	1998	51.6	44.1	4.0	0.2	51.6	45.0	58.2
	2015	2582	55.6	41.3	3.1	0.0	55.6	47.4	63.4
United States	2011	1508	73.8	24.8	1.0	0.4	73.8	69.2	78.6
	2015	1463	76.9	21.6	1.2	0.3	76.9	74.7	79.3
International Avg (n=33)	2011	28541	61.9	33.4	4.5	0.2	61.9	56.6	67.2
	2015	31127	64.4	31.3	4.1	0.2	64.4	59.6	69.1
Ontario, Canada	2011	680	84.2	14.4	1.2	0.2	84.2	80.2	87.5
	2015	647	84.8	12.9	1.6	0.7	84.8	84.5	85.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_03 (M042194): Number / Knowing Type: CR 1 Point
Label: Present of games the team lose

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	87.1	10.2	2.2	0.4	87.1	83.3	91.3
	2015	553	82.9	13.9	2.2	1.0	82.9	77.8	88.1
Norway (8)	2011	551	83.1	15.1	1.5	0.3	83.1	81.0	85.6
	2015	696	81.2	16.2	2.5	0.1	81.2	81.1	81.3
Abu Dhabi, UAE	2011	623	50.9	44.6	4.2	0.2	50.9	39.2	61.1
	2015	698	50.6	45.8	3.5	0.1	50.6	46.7	54.1
Dubai, UAE	2011	784	61.3	35.1	3.3	0.3	61.3	56.3	65.9
	2015	877	68.5	29.4	2.2	0.0	68.5	58.7	79.4
Florida, US	2011	240	77.6	21.6	0.8	0.0	77.6	77.1	78.0
	2015	302	66.0	32.6	1.2	0.2	66.0	63.6	68.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_04A (M042114A): Number / Knowing Type: CR 1 Point
Label: Complete the table

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	62.5	4.1	21.3	11.7	0.3	62.5	52.3	73.1
	2015	1475	62.2	4.8	21.0	11.8	0.2	62.2	57.8	67.0
Bahrain	2011	653	32.0	3.8	43.0	21.0	0.2	32.0	30.4	33.6
	2015	695	27.4	3.5	47.3	21.4	0.4	27.4	26.3	28.4
Botswana	2011	768	19.8	3.5	59.7	17.1	0.0	19.8	19.0	20.7
	2015	856	18.2	4.6	53.1	24.1	0.0	18.2	14.7	21.8
Chile	2011	835	40.7	4.8	29.9	23.8	0.8	40.7	33.0	49.3
	2015	677	37.6	6.0	23.8	32.3	0.3	37.6	31.2	44.2
Chinese Taipei	2011	716	77.7	2.0	11.4	8.9	0.0	77.7	79.1	76.4
	2015	820	73.4	3.7	14.5	8.4	0.0	73.4	70.2	76.6
England	2011	548	70.4	4.4	15.0	9.7	0.6	70.4	66.0	74.3
	2015	676	70.4	2.2	18.4	8.9	0.2	70.4	69.2	71.7
Georgia	2011	655	46.3	3.1	19.6	30.5	0.6	46.3	40.9	51.3
	2015	579	48.7	5.9	16.5	28.1	0.8	48.7	42.2	54.9
Hong Kong SAR	2011	571	81.3	2.4	10.7	5.5	0.1	81.3	84.1	78.4
	2015	596	83.7	0.6	9.7	5.7	0.3	83.7	84.0	83.3
Hungary	2011	739	66.5	4.8	18.6	10.1	0.0	66.5	60.1	71.7
	2015	707	67.9	5.3	15.7	11.1	0.0	67.9	57.6	78.9
Iran, Islamic Rep. of	2011	870	33.7	4.2	39.9	21.7	0.5	33.7	22.5	43.5
	2015	863	38.5	3.3	35.5	22.6	0.1	38.5	31.5	44.9
Israel	2011	661	69.1	2.8	15.2	12.6	0.4	69.1	66.5	71.6
	2015	771	66.2	2.8	18.7	11.9	0.4	66.2	62.3	69.6
Italy	2011	565	55.1	4.2	16.3	24.5	0.0	55.1	49.5	60.6
	2015	639	57.2	3.5	17.7	21.5	0.1	57.2	51.9	62.8
Japan	2011	625	74.3	2.1	19.5	4.1	0.0	74.3	67.3	81.6
	2015	682	80.5	3.1	13.1	3.0	0.2	80.5	76.0	85.1
Jordan	2011	1079	33.0	4.4	50.2	12.4	0.0	33.0	24.8	40.5
	2015	1122	27.1	5.4	54.4	12.9	0.2	27.1	19.3	35.9
Kazakhstan	2011	622	56.2	5.5	21.3	16.8	0.1	56.2	53.0	59.2
	2015	701	62.7	2.1	19.3	15.8	0.1	62.7	59.9	65.9
Korea, Rep. of	2011	742	83.6	2.0	12.9	1.5	0.0	83.6	79.8	87.6
	2015	757	84.3	2.2	10.7	2.8	0.0	84.3	80.4	87.8
Lebanon	2011	570	47.7	2.9	22.7	26.4	0.4	47.7	37.8	59.5
	2015	548	47.5	1.8	22.0	27.7	0.9	47.5	40.4	55.6
Lithuania	2011	674	70.3	4.4	13.6	11.7	0.0	70.3	68.1	72.3
	2015	619	70.7	6.0	10.6	12.7	0.0	70.7	65.6	75.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

Trend Achievement Data Almanac for Mathematics Items (Weighted)

M07_04A (M042114A): Number / Knowing Type: CR 1 Point
Label: Complete the table

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	32.8	4.0	45.2	17.3	0.7	32.8	29.3	36.0
	2015	1393	34.0	3.1	48.3	14.3	0.4	34.0	27.9	40.2
Morocco	2011	1329	39.5	4.6	34.4	20.0	1.5	39.5	34.3	44.4
	2015	1859	42.4	7.9	31.2	18.4	0.2	42.4	40.0	44.3
New Zealand	2011	759	66.4	4.2	19.0	10.1	0.3	66.4	57.1	74.8
	2015	1176	62.5	1.8	24.8	10.9	0.0	62.5	57.1	68.3
Oman	2011	1368	15.3	2.7	55.8	25.9	0.3	15.3	12.3	18.5
	2015	1257	23.4	6.6	51.9	17.9	0.1	23.4	20.9	25.6
Qatar	2011	635	28.0	2.1	43.1	26.2	0.6	28.0	23.2	32.7
	2015	777	37.4	7.1	33.0	21.5	1.0	37.4	32.3	42.4
Russian Federation	2011	707	71.2	2.0	12.5	13.9	0.3	71.2	63.8	78.6
	2015	685	69.7	3.2	15.5	11.5	0.1	69.7	60.0	78.8
Saudi Arabia	2011	629	27.8	3.6	55.9	12.6	0.1	27.8	18.9	36.1
	2015	525	21.2	4.7	54.1	19.8	0.2	21.2	18.4	24.1
Singapore	2011	848	85.4	1.5	10.5	2.6	0.0	85.4	84.6	86.2
	2015	872	86.3	1.4	10.4	1.8	0.0	86.3	87.1	85.6
Slovenia	2011	632	72.2	4.6	15.1	8.1	0.0	72.2	63.8	79.9
	2015	606	72.6	3.9	16.9	6.6	0.0	72.6	65.7	78.6
South Africa	2011	1713	17.0	5.8	56.8	19.8	0.6	17.0	13.2	20.7
	2015	1789	22.0	1.6	63.6	12.7	0.1	22.0	19.5	24.4
Sweden	2011	779	71.2	4.4	11.8	12.0	0.6	71.2	68.9	73.3
	2015	578	69.9	5.0	13.4	11.0	0.6	69.9	63.5	75.9
Thailand	2011	876	34.4	4.6	32.7	28.2	0.1	34.4	33.5	35.4
	2015	920	33.9	5.5	38.2	22.4	0.0	33.9	35.1	32.4
Turkey	2011	984	44.4	3.3	27.5	24.8	0.0	44.4	38.9	50.0
	2015	861	41.2	4.4	34.5	19.9	0.0	41.2	36.2	46.0
United Arab Emirates	2011	1998	38.1	4.6	39.5	17.6	0.2	38.1	33.9	42.4
	2015	2582	43.1	3.4	38.7	14.7	0.1	43.1	39.9	46.1
United States	2011	1508	56.0	2.3	32.6	8.7	0.4	56.0	50.2	62.0
	2015	1463	57.5	3.2	36.1	2.7	0.5	57.5	54.9	60.1
International Avg (n=33)	2011	28541	52.1	3.6	28.3	15.7	0.3	52.1	47.3	56.9
	2015	31126	52.8	3.9	28.3	14.8	0.2	52.8	48.5	57.1
Ontario, Canada	2011	679	60.2	2.0	27.7	9.9	0.2	60.2	54.7	64.7
	2015	647	66.7	2.8	25.5	4.3	0.7	66.7	61.6	71.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_04A (M042114A): Number / Knowing Type: CR 1 Point
Label: Complete the table

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	79.7	2.3	10.5	7.1	0.4	79.7	75.9	83.9
	2015	553	79.2	3.2	10.5	6.0	1.1	79.2	70.0	88.6
Norway (8)	2011	551	65.4	5.0	18.8	10.4	0.3	65.4	59.3	73.1
	2015	696	66.2	3.7	16.9	13.1	0.1	66.2	61.5	70.6
Abu Dhabi, UAE	2011	623	32.9	5.8	41.4	19.7	0.2	32.9	28.7	36.6
	2015	698	33.6	3.7	46.5	16.0	0.3	33.6	30.8	36.2
Dubai, UAE	2011	784	46.3	2.4	31.1	19.8	0.4	46.3	38.8	53.0
	2015	877	61.1	2.6	26.3	10.1	0.0	61.1	58.8	63.6
Florida, US	2011	240	52.7	1.4	34.8	11.1	0.0	52.7	47.6	57.4
	2015	302	49.1	1.7	43.2	5.9	0.2	49.1	48.2	49.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_04B (M042114B): Number / Applying Type: CR 1 Point
Label: Number of papers in a 28mm stack

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	49.8	39.6	10.4	0.3	49.8	41.0	58.8
	2015	1475	49.4	38.6	11.9	0.2	49.4	45.0	54.1
Bahrain	2011	653	24.0	55.4	20.3	0.2	24.0	24.1	23.9
	2015	695	21.5	57.2	20.9	0.4	21.5	20.1	22.8
Botswana	2011	768	15.0	79.2	5.5	0.2	15.0	12.4	17.7
	2015	856	14.7	78.3	7.0	0.0	14.7	11.4	18.0
Chile	2011	835	28.1	42.1	28.6	1.2	28.1	23.7	33.0
	2015	677	27.6	39.5	32.6	0.3	27.6	23.1	32.3
Chinese Taipei	2011	716	72.2	20.8	7.0	0.0	72.2	73.1	71.4
	2015	820	71.3	22.0	6.7	0.0	71.3	68.4	74.1
England	2011	548	55.4	32.1	11.6	0.8	55.4	47.3	62.6
	2015	676	57.5	31.9	10.2	0.3	57.5	56.2	59.0
Georgia	2011	655	36.3	31.1	31.9	0.7	36.3	33.6	38.9
	2015	579	39.2	29.5	30.5	0.8	39.2	34.0	44.1
Hong Kong SAR	2011	571	75.6	18.8	5.5	0.1	75.6	76.7	74.4
	2015	596	78.5	17.2	4.0	0.3	78.5	77.5	79.3
Hungary	2011	739	55.5	28.9	15.6	0.0	55.5	48.4	61.2
	2015	707	52.4	31.5	16.1	0.0	52.4	44.2	61.1
Iran, Islamic Rep. of	2011	870	22.5	40.0	36.9	0.5	22.5	14.7	29.3
	2015	863	29.8	33.8	36.3	0.1	29.8	23.2	35.8
Israel	2011	661	57.2	25.8	16.4	0.6	57.2	54.4	60.0
	2015	771	57.2	28.8	13.4	0.5	57.2	53.9	60.0
Italy	2011	565	48.5	22.8	28.7	0.0	48.5	43.2	53.8
	2015	640	50.0	23.6	26.4	0.1	50.0	44.0	56.3
Japan	2011	625	67.0	26.7	6.3	0.0	67.0	58.1	76.5
	2015	682	72.1	22.1	5.5	0.4	72.1	66.8	77.5
Jordan	2011	1079	25.6	60.0	14.4	0.0	25.6	18.6	32.0
	2015	1122	20.0	62.7	17.1	0.2	20.0	13.7	27.1
Kazakhstan	2011	621	48.6	36.3	14.9	0.2	48.6	45.3	51.7
	2015	701	57.4	30.5	11.9	0.1	57.4	53.8	61.5
Korea, Rep. of	2011	742	78.7	19.5	1.7	0.0	78.7	73.3	84.3
	2015	757	77.9	19.2	2.9	0.0	77.9	75.4	80.1
Lebanon	2011	570	35.5	31.5	32.3	0.6	35.5	26.5	46.2
	2015	547	32.0	30.7	35.7	1.6	32.0	27.9	36.8
Lithuania	2011	674	62.0	23.4	14.6	0.0	62.0	58.4	65.2
	2015	619	57.0	28.4	14.6	0.0	57.0	52.3	61.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_04B (M042114B): Number / Applying Type: CR 1 Point
Label: Number of papers in a 28mm stack

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	28.3	58.4	12.6	0.7	28.3	27.3	29.2
	2015	1393	31.0	51.4	17.1	0.4	31.0	26.5	35.7
Morocco	2011	1324	24.8	40.8	32.6	1.8	24.8	20.2	29.2
	2015	1858	27.5	44.9	27.5	0.2	27.5	24.7	29.7
New Zealand	2011	759	51.9	39.1	8.6	0.4	51.9	43.0	59.9
	2015	1176	49.0	38.7	12.3	0.0	49.0	45.3	53.0
Oman	2011	1368	12.5	63.0	24.0	0.5	12.5	10.8	14.3
	2015	1257	17.4	69.5	13.0	0.1	17.4	15.2	19.4
Qatar	2011	635	23.4	55.8	20.3	0.6	23.4	20.3	26.3
	2015	777	31.6	50.7	16.2	1.4	31.6	25.6	37.4
Russian Federation	2011	707	64.9	18.7	16.0	0.3	64.9	55.6	74.2
	2015	685	62.0	23.7	14.1	0.1	62.0	53.1	70.3
Saudi Arabia	2011	629	20.0	65.2	14.7	0.1	20.0	13.5	26.1
	2015	525	15.3	68.7	15.8	0.2	15.3	12.2	18.6
Singapore	2011	848	81.5	16.5	2.0	0.0	81.5	82.8	80.2
	2015	872	84.0	13.9	2.0	0.0	84.0	85.1	83.1
Slovenia	2011	632	58.4	25.8	15.9	0.0	58.4	50.5	65.7
	2015	606	61.5	24.2	14.3	0.0	61.5	55.1	67.2
South Africa	2011	1713	11.2	77.1	11.1	0.6	11.2	8.6	13.6
	2015	1789	15.1	75.0	9.8	0.1	15.1	14.2	16.0
Sweden	2011	779	54.7	29.5	15.0	0.8	54.7	48.4	60.5
	2015	578	57.6	28.6	13.0	0.9	57.6	50.8	63.7
Thailand	2011	876	31.2	48.0	20.4	0.4	31.2	31.6	30.6
	2015	920	29.5	54.9	15.5	0.0	29.5	31.5	27.0
Turkey	2011	984	39.5	39.8	20.8	0.0	39.5	33.3	45.9
	2015	861	34.5	51.6	13.9	0.0	34.5	30.1	38.7
United Arab Emirates	2011	1998	32.0	53.2	14.2	0.5	32.0	29.8	34.3
	2015	2582	35.6	49.3	14.9	0.1	35.6	33.4	37.8
United States	2011	1508	47.8	46.1	5.8	0.4	47.8	41.1	54.7
	2015	1463	50.4	46.3	2.6	0.7	50.4	47.1	53.7
International Avg (n=33)	2011	28535	43.6	39.7	16.3	0.4	43.6	39.1	48.1
	2015	31125	44.5	39.9	15.3	0.3	44.5	40.6	48.3
Ontario, Canada	2011	680	49.3	38.1	12.1	0.4	49.3	44.2	53.5
	2015	647	56.3	37.8	5.0	1.0	56.3	50.5	62.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_04B (M042114B): Number / Applying Type: CR 1 Point
Label: Number of papers in a 28mm stack

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	73.2	17.4	9.1	0.4	73.2	69.1	77.6
	2015	553	73.3	19.0	6.2	1.5	73.3	66.8	80.1
Norway (8)	2011	551	49.7	35.2	14.8	0.3	49.7	45.4	55.0
	2015	696	49.9	33.7	16.3	0.1	49.9	44.3	55.1
Abu Dhabi, UAE	2011	623	28.5	57.2	13.7	0.5	28.5	24.1	32.4
	2015	698	27.7	55.6	16.4	0.3	27.7	28.0	27.5
Dubai, UAE	2011	784	41.2	40.5	17.5	0.7	41.2	37.0	45.0
	2015	877	50.8	38.3	10.9	0.0	50.8	49.2	52.6
Florida, US	2011	240	47.8	44.7	7.1	0.4	47.8	40.5	54.6
	2015	302	44.2	49.7	5.9	0.2	44.2	45.3	43.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_05 (M042112): Algebra / Applying Type: MC Key: D
Label: Relationship between x and y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	46.6	16.4	15.1	17.3	46.6	4.1	0.5	43.5	49.8
	2015	1475	45.3	16.2	16.0	17.3	45.3	5.0	0.2	43.8	46.9
Bahrain	2011	653	44.4	13.8	15.8	20.4	44.4	5.0	0.6	51.7	37.2
	2015	695	46.0	14.7	17.9	18.5	46.0	2.5	0.4	48.4	43.8
Botswana	2011	768	45.4	20.3	13.2	17.6	45.4	3.3	0.2	48.9	41.8
	2015	856	47.0	18.6	12.1	18.4	47.0	3.8	0.0	52.0	42.0
Chile	2011	835	44.2	15.7	14.0	18.0	44.2	6.8	1.3	43.4	45.0
	2015	677	42.8	15.8	13.9	20.3	42.8	6.8	0.4	41.5	44.2
Chinese Taipei	2011	716	69.6	6.5	11.6	11.4	69.6	0.9	0.0	70.7	68.7
	2015	820	67.7	7.4	12.4	11.3	67.7	1.2	0.0	66.6	68.8
England	2011	548	45.7	13.4	15.1	18.9	45.7	6.2	0.8	44.6	46.6
	2015	676	48.1	14.7	14.7	17.9	48.1	4.2	0.3	51.3	44.4
Georgia	2011	655	40.4	7.5	12.9	29.6	40.4	8.9	0.8	41.7	39.2
	2015	579	41.5	10.0	13.0	27.7	41.5	7.0	0.8	40.0	43.0
Hong Kong SAR	2011	571	55.1	8.1	16.2	17.1	55.1	3.3	0.1	55.8	54.3
	2015	596	55.1	9.5	16.9	15.6	55.1	2.5	0.3	49.8	59.5
Hungary	2011	739	49.9	8.7	13.4	22.7	49.9	5.3	0.0	50.3	49.6
	2015	707	49.7	12.3	13.9	20.2	49.7	3.9	0.0	45.5	54.1
Iran, Islamic Rep. of	2011	870	38.6	12.2	14.3	28.7	38.6	5.6	0.5	40.3	37.1
	2015	863	37.7	13.3	15.3	25.5	37.7	8.2	0.1	40.3	35.3
Israel	2011	661	48.8	14.8	12.6	17.8	48.8	5.4	0.6	53.6	44.1
	2015	771	43.4	20.7	13.4	15.7	43.4	6.2	0.6	42.0	44.6
Italy	2011	565	47.3	11.4	18.3	15.1	47.3	7.9	0.0	44.5	50.1
	2015	640	50.2	9.6	14.8	15.1	50.2	10.2	0.1	50.9	49.5
Japan	2011	625	54.9	16.9	12.7	14.0	54.9	1.5	0.0	53.2	56.8
	2015	682	55.3	22.0	9.1	11.7	55.3	1.5	0.4	55.0	55.6
Jordan	2011	1079	52.9	12.8	13.6	16.4	52.9	4.2	0.1	55.5	50.4
	2015	1122	48.8	14.7	14.4	18.2	48.8	3.6	0.2	51.9	45.4
Kazakhstan	2011	622	45.2	12.4	12.2	25.8	45.2	4.3	0.2	43.4	46.8
	2015	701	59.9	13.7	8.6	14.9	59.9	2.8	0.1	61.5	58.2
Korea, Rep. of	2011	742	64.6	12.0	9.1	13.4	64.6	0.9	0.0	64.9	64.3
	2015	757	60.9	11.7	13.8	12.0	60.9	1.6	0.0	60.8	61.0
Lebanon	2011	567	55.6	8.3	11.6	11.5	55.6	12.0	1.0	57.3	53.6
	2015	543	45.8	8.8	11.4	15.2	45.8	16.9	1.9	47.6	43.8
Lithuania	2011	674	47.8	9.4	15.1	20.9	47.8	6.8	0.0	54.0	42.2
	2015	619	50.0	11.0	13.7	17.9	50.0	7.4	0.0	49.1	50.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_05 (M042112): Algebra / Applying Type: MC Key: D
Label: Relationship between x and y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	50.1	12.4	15.4	19.4	50.1	2.1	0.7	58.5	42.5
	2015	1393	46.6	14.7	14.9	20.1	46.6	3.2	0.6	47.1	46.0
Morocco	2011	1321	39.7	11.1	16.4	23.1	39.7	7.4	2.2	39.6	39.8
	2015	1860	45.0	14.8	15.3	19.1	45.0	5.5	0.2	46.6	43.9
New Zealand	2011	759	47.1	10.8	17.3	19.2	47.1	5.2	0.4	49.4	45.2
	2015	1176	42.0	13.8	19.5	19.4	42.0	5.3	0.0	38.7	45.6
Oman	2011	1368	42.8	12.0	19.5	19.7	42.8	5.4	0.5	49.6	35.8
	2015	1258	46.4	14.7	16.1	19.4	46.4	3.2	0.1	51.1	42.2
Qatar	2011	635	45.5	12.7	16.7	19.2	45.5	5.3	0.6	48.8	42.2
	2015	777	41.5	15.9	16.8	18.4	41.5	5.9	1.4	43.2	39.9
Russian Federation	2011	706	55.1	10.6	10.3	16.3	55.1	7.2	0.6	54.7	55.4
	2015	685	50.8	12.9	9.7	17.1	50.8	9.4	0.1	52.9	48.8
Saudi Arabia	2011	627	38.7	15.9	21.1	21.7	38.7	2.5	0.1	41.7	36.0
	2015	525	35.3	17.4	20.4	24.3	35.3	2.4	0.2	41.2	28.9
Singapore	2011	848	61.9	14.0	13.6	9.8	61.9	0.7	0.0	61.7	62.2
	2015	872	61.0	13.0	15.0	9.5	61.0	1.5	0.0	61.6	60.5
Slovenia	2011	632	52.1	10.8	10.9	19.5	52.1	6.7	0.0	48.0	55.9
	2015	606	54.5	9.7	16.4	12.4	54.5	6.9	0.0	54.1	54.9
South Africa	2011	1713	35.2	19.3	12.1	29.6	35.2	3.2	0.7	40.5	30.1
	2015	1789	44.4	16.6	12.4	24.2	44.4	2.1	0.2	44.7	44.1
Sweden	2011	779	40.1	9.5	16.6	21.9	40.1	11.1	0.8	44.0	36.7
	2015	578	37.9	13.1	15.7	20.6	37.9	11.8	0.9	42.3	34.2
Thailand	2011	876	55.5	11.6	12.9	15.1	55.5	4.5	0.4	59.2	51.0
	2015	920	51.2	13.4	13.4	18.4	51.2	3.6	0.0	54.2	47.4
Turkey	2011	984	52.5	9.7	13.7	20.0	52.5	4.0	0.0	53.9	51.1
	2015	861	45.6	13.1	17.3	21.7	45.6	2.3	0.0	48.8	42.6
United Arab Emirates	2011	1998	41.3	19.7	15.3	18.5	41.3	4.5	0.7	45.1	37.6
	2015	2582	45.6	17.8	16.4	16.1	45.6	3.9	0.1	48.3	43.0
United States	2011	1508	42.1	22.6	16.6	16.8	42.1	1.5	0.4	41.5	42.8
	2015	1463	41.2	26.1	14.4	15.8	41.2	1.9	0.7	42.2	40.2
International Avg (n=33)	2011	28527	48.4	12.8	14.4	19.0	48.4	5.0	0.4	50.1	46.7
	2015	31124	48.0	14.3	14.5	17.9	48.0	5.0	0.3	48.9	47.1
Ontario, Canada	2011	680	44.1	12.6	17.1	18.7	44.1	6.8	0.6	48.1	40.8
	2015	647	44.0	12.4	17.0	19.6	44.0	5.8	1.2	43.2	44.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_05 (M042112): Algebra / Applying Type: MC Key: D
Label: Relationship between x and y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	870	42.0	11.4	17.2	20.9	42.0	8.0	0.6	37.3	47.2
	2015	553	45.6	11.1	17.0	15.9	45.6	8.9	1.5	39.0	52.3
Norway (8)	2011	551	33.2	14.1	20.2	24.3	33.2	7.9	0.3	35.0	30.9
	2015	696	30.2	13.5	21.5	23.9	30.2	10.8	0.1	32.7	27.9
Abu Dhabi, UAE	2011	623	43.2	22.5	15.0	14.1	43.2	4.2	0.9	46.8	40.1
	2015	698	43.6	16.6	16.2	18.7	43.6	4.6	0.3	49.6	38.2
Dubai, UAE	2011	784	44.1	16.7	14.5	18.6	44.1	5.3	0.8	46.0	42.3
	2015	877	52.9	17.4	14.5	12.4	52.9	2.8	0.0	53.5	52.3
Florida, US	2011	240	45.4	17.5	17.5	19.0	45.4	0.3	0.4	45.8	44.9
	2015	302	31.8	28.9	17.6	19.9	31.8	1.5	0.2	36.9	27.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_06 (M042109): Algebra / Applying Type: MC Key: D
Label: Formula for distance traveled

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	34.1	9.3	21.8	31.0	34.1	3.2	0.5	29.5	39.0
	2015	1475	32.9	7.3	25.0	31.2	32.9	3.4	0.2	35.3	30.3
Bahrain	2011	653	33.5	6.9	21.3	35.2	33.5	2.6	0.6	35.8	31.2
	2015	695	33.2	6.7	20.4	37.2	33.2	2.0	0.4	33.9	32.5
Botswana	2011	768	15.4	9.3	33.2	40.9	15.4	0.9	0.3	12.5	18.6
	2015	856	15.5	6.8	32.5	43.7	15.5	1.5	0.0	14.9	16.1
Chile	2011	835	27.8	9.9	23.2	31.6	27.8	5.8	1.6	26.5	29.3
	2015	677	25.5	9.2	26.8	33.4	25.5	4.6	0.4	24.9	26.1
Chinese Taipei	2011	716	61.3	3.1	12.0	23.2	61.3	0.4	0.0	61.0	61.5
	2015	820	62.5	3.1	12.1	21.4	62.5	0.9	0.0	58.2	66.8
England	2011	548	29.9	4.6	29.5	30.9	29.9	4.1	1.0	32.8	27.3
	2015	676	31.3	8.0	26.5	29.9	31.3	4.0	0.3	35.7	26.3
Georgia	2011	655	39.8	8.3	23.9	23.7	39.8	3.6	0.8	37.8	41.6
	2015	579	27.2	6.9	30.8	31.5	27.2	2.9	0.8	24.2	30.0
Hong Kong SAR	2011	571	62.8	4.0	12.6	18.8	62.8	1.6	0.1	58.5	67.3
	2015	596	64.6	3.5	14.2	16.2	64.6	1.1	0.3	63.7	65.4
Hungary	2011	739	25.9	7.0	18.9	45.9	25.9	2.0	0.3	26.3	25.5
	2015	707	25.2	4.8	20.1	48.4	25.2	1.5	0.0	23.9	26.6
Iran, Islamic Rep. of	2011	870	38.3	13.7	14.7	29.2	38.3	3.3	0.7	34.8	41.3
	2015	863	37.5	14.8	16.4	27.0	37.5	4.2	0.1	40.5	34.8
Israel	2011	661	48.2	6.6	19.8	21.1	48.2	3.8	0.6	54.4	42.3
	2015	771	44.3	7.4	21.4	22.1	44.3	4.1	0.7	43.0	45.4
Italy	2011	565	31.0	6.1	20.0	38.7	31.0	4.1	0.0	29.9	32.1
	2015	640	26.4	3.7	21.4	41.9	26.4	6.6	0.1	26.6	26.1
Japan	2011	625	68.8	3.1	16.6	10.9	68.8	0.5	0.0	68.2	69.5
	2015	682	72.6	2.8	14.8	8.9	72.6	0.7	0.4	74.2	71.0
Jordan	2011	1079	34.6	9.7	19.3	32.1	34.6	4.1	0.2	37.6	31.8
	2015	1122	30.2	13.9	18.2	34.3	30.2	3.2	0.2	33.8	26.3
Kazakhstan	2011	622	50.2	8.2	16.1	21.9	50.2	3.3	0.2	52.5	48.2
	2015	701	55.6	6.6	14.7	19.8	55.6	3.1	0.1	51.2	60.6
Korea, Rep. of	2011	742	70.0	2.5	12.7	14.6	70.0	0.2	0.0	70.4	69.6
	2015	757	68.1	1.0	15.6	14.6	68.1	0.7	0.0	70.3	66.1
Lebanon	2011	568	31.1	5.3	21.1	35.2	31.1	6.2	1.0	32.3	29.6
	2015	545	30.0	2.8	18.3	37.4	30.0	9.5	2.0	30.5	29.5
Lithuania	2011	674	43.3	4.7	17.7	32.7	43.3	1.6	0.0	45.9	41.0
	2015	619	40.6	5.2	23.0	30.1	40.6	1.1	0.0	42.3	38.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_06 (M042109): Algebra / Applying Type: MC Key: D
Label: Formula for distance traveled

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	18.3	8.8	32.0	38.9	18.3	1.3	0.7	15.7	20.8
	2015	1393	24.1	6.2	29.4	37.8	24.1	1.8	0.7	24.4	23.8
Morocco	2011	1323	25.1	10.0	17.8	39.8	25.1	5.1	2.2	26.4	23.9
	2015	1859	31.3	11.1	22.7	31.5	31.3	3.2	0.3	28.9	33.1
New Zealand	2011	759	35.7	7.8	21.0	30.5	35.7	4.6	0.4	30.9	39.9
	2015	1176	38.1	10.2	21.8	25.2	38.1	4.7	0.0	41.9	34.0
Oman	2011	1368	31.2	12.7	18.5	32.3	31.2	4.6	0.7	34.9	27.3
	2015	1258	31.9	12.6	20.1	31.7	31.9	3.6	0.1	32.9	31.0
Qatar	2011	635	29.6	8.0	27.0	32.0	29.6	2.7	0.6	29.2	30.0
	2015	777	24.5	5.0	33.4	32.6	24.5	2.8	1.6	23.4	25.5
Russian Federation	2011	706	61.1	4.9	11.3	18.9	61.1	3.2	0.6	60.4	61.7
	2015	685	63.7	4.9	9.9	17.9	63.7	3.4	0.1	62.0	65.3
Saudi Arabia	2011	629	33.0	10.4	19.7	34.4	33.0	2.4	0.1	34.7	31.5
	2015	525	29.9	12.7	24.7	30.8	29.9	1.7	0.2	26.8	33.1
Singapore	2011	848	72.4	1.4	7.9	17.9	72.4	0.5	0.0	77.4	67.6
	2015	872	77.9	0.9	6.4	14.3	77.9	0.3	0.1	83.6	72.6
Slovenia	2011	632	22.3	4.0	29.9	38.3	22.3	5.5	0.0	20.3	24.2
	2015	606	15.3	2.4	31.1	48.2	15.3	3.1	0.0	15.3	15.3
South Africa	2011	1713	28.3	11.6	29.6	26.6	28.3	3.0	0.9	29.0	27.6
	2015	1789	22.5	9.8	31.4	34.8	22.5	1.3	0.2	21.4	23.6
Sweden	2011	779	23.2	5.5	27.2	37.2	23.2	6.0	1.0	20.4	25.7
	2015	578	28.8	5.5	21.1	37.3	28.8	6.5	0.9	27.3	29.4
Thailand	2011	876	22.0	10.3	24.0	40.3	22.0	2.7	0.6	19.4	25.2
	2015	920	24.6	10.5	22.3	39.2	24.6	3.3	0.0	23.8	25.6
Turkey	2011	984	31.3	8.3	32.3	25.3	31.3	2.8	0.0	30.8	31.8
	2015	861	26.4	8.4	36.1	28.1	26.4	0.9	0.0	27.8	25.1
United Arab Emirates	2011	1998	32.3	8.4	22.7	34.3	32.3	1.6	0.7	34.6	30.0
	2015	2582	35.0	8.0	22.2	31.4	35.0	3.2	0.1	36.5	33.7
United States	2011	1508	45.9	5.5	21.8	25.2	45.9	1.2	0.4	46.3	45.6
	2015	1463	51.3	4.9	19.5	22.3	51.3	1.2	0.7	53.4	49.3
International Avg (n=33)	2011	28532	38.1	7.3	21.1	30.0	38.1	3.0	0.5	38.1	38.2
	2015	31125	37.8	6.9	21.9	30.1	37.8	2.9	0.3	38.1	37.6
Ontario, Canada	2011	680	43.1	4.8	18.4	29.0	43.1	4.1	0.6	40.6	45.4
	2015	647	48.0	5.7	17.3	25.6	48.0	2.1	1.3	49.3	46.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_06 (M042109): Algebra / Applying Type: MC Key: D
Label: Formula for distance traveled

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	39.6	3.7	12.7	39.6	39.6	3.8	0.6	40.5	38.6
	2015	553	39.1	4.3	11.1	39.4	39.1	4.6	1.5	41.7	36.5
Norway (8)	2011	551	23.0	6.4	23.2	41.5	23.0	5.6	0.3	22.0	24.1
	2015	696	16.9	8.4	28.5	38.8	16.9	7.3	0.1	14.9	18.7
Abu Dhabi, UAE	2011	623	33.7	10.0	20.6	33.4	33.7	1.4	0.9	34.8	32.8
	2015	698	30.5	9.4	24.3	31.6	30.5	3.9	0.3	31.3	29.8
Dubai, UAE	2011	784	27.9	6.4	24.4	38.5	27.9	2.0	0.8	29.2	26.6
	2015	877	43.1	4.8	17.5	32.4	43.1	2.1	0.0	46.0	39.9
Florida, US	2011	240	45.8	4.5	22.0	26.6	45.8	0.7	0.4	49.6	42.3
	2015	302	48.1	6.7	22.6	21.8	48.1	0.6	0.2	50.2	46.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_07 (M042050): Algebra / Knowing Type: CR 1 Point
Label: Value of the expression

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	25.0	63.9	10.7	0.5	25.0	26.5	23.4
	2015	1475	28.1	61.3	10.4	0.2	28.1	32.0	24.1
Bahrain	2011	653	18.8	66.5	14.1	0.7	18.8	23.9	13.6
	2015	695	21.6	68.0	10.0	0.4	21.6	27.4	16.2
Botswana	2011	768	4.4	91.4	3.9	0.3	4.4	5.4	3.3
	2015	856	5.9	89.2	4.9	0.0	5.9	6.4	5.4
Chile	2011	835	10.2	57.8	30.3	1.8	10.2	11.8	8.3
	2015	677	12.8	55.6	30.9	0.8	12.8	14.5	11.0
Chinese Taipei	2011	716	73.6	19.2	7.2	0.0	73.6	77.9	69.6
	2015	820	72.5	22.1	5.4	0.0	72.5	73.3	71.8
England	2011	548	23.0	66.1	10.0	1.0	23.0	25.3	20.9
	2015	676	26.4	61.1	12.2	0.3	26.4	28.9	23.5
Georgia	2011	655	29.5	45.4	24.4	0.8	29.5	31.3	27.8
	2015	579	34.9	42.1	22.2	0.8	34.9	35.2	34.7
Hong Kong SAR	2011	571	70.9	24.4	4.6	0.1	70.9	74.7	66.8
	2015	596	74.8	20.3	4.7	0.3	74.8	76.4	73.5
Hungary	2011	737	31.6	57.0	11.1	0.3	31.6	34.7	29.1
	2015	707	36.3	50.6	13.1	0.0	36.3	36.7	35.9
Iran, Islamic Rep. of	2011	869	5.3	67.2	26.7	0.7	5.3	7.0	3.8
	2015	863	16.5	63.1	20.2	0.2	16.5	19.6	13.7
Israel	2011	661	38.9	45.8	14.6	0.7	38.9	42.4	35.5
	2015	771	36.8	45.4	17.0	0.7	36.8	41.5	32.8
Italy	2011	565	32.0	48.2	19.8	0.0	32.0	34.9	29.1
	2015	640	33.2	49.8	16.9	0.1	33.2	37.9	28.2
Japan	2011	625	52.3	40.9	6.8	0.0	52.3	50.0	54.8
	2015	682	55.1	39.0	5.5	0.5	55.1	54.4	55.8
Jordan	2011	1079	16.3	74.7	8.7	0.3	16.3	19.9	12.9
	2015	1122	15.7	73.6	10.5	0.2	15.7	19.4	11.5
Kazakhstan	2011	620	46.7	40.6	12.5	0.2	46.7	48.0	45.4
	2015	701	56.9	32.3	10.6	0.1	56.9	57.8	55.9
Korea, Rep. of	2011	742	67.4	30.4	2.2	0.0	67.4	67.6	67.1
	2015	757	68.7	28.1	3.2	0.0	68.7	73.5	64.6
Lebanon	2011	570	43.5	41.9	13.5	1.0	43.5	43.8	43.3
	2015	548	43.1	39.8	15.0	2.1	43.1	45.0	40.9
Lithuania	2011	674	31.7	52.5	15.8	0.0	31.7	34.3	29.4
	2015	619	32.5	50.8	16.7	0.0	32.5	35.9	29.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_07 (M042050): Algebra / Knowing Type: CR 1 Point
Label: Value of the expression

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	18.9	66.3	14.1	0.7	18.9	23.7	14.6
	2015	1393	27.9	59.3	11.9	0.9	27.9	32.0	23.7
Morocco	2011	1317	7.0	52.6	38.3	2.2	7.0	7.4	6.7
	2015	1858	8.1	61.2	30.4	0.3	8.1	9.0	7.3
New Zealand	2011	759	20.6	67.8	11.1	0.5	20.6	20.3	20.9
	2015	1176	19.7	67.9	12.5	0.0	19.7	21.6	17.6
Oman	2011	1368	12.6	71.3	15.3	0.7	12.6	16.7	8.3
	2015	1256	18.8	71.6	9.3	0.3	18.8	24.3	13.8
Qatar	2011	635	15.8	70.9	12.7	0.6	15.8	17.0	14.7
	2015	777	21.1	67.7	9.6	1.6	21.1	22.2	20.0
Russian Federation	2011	707	57.2	28.9	12.8	1.0	57.2	56.3	58.2
	2015	685	56.5	33.2	10.1	0.1	56.5	54.8	58.2
Saudi Arabia	2011	629	9.7	75.4	14.8	0.1	9.7	10.1	9.4
	2015	525	12.7	70.6	16.5	0.2	12.7	12.3	13.0
Singapore	2011	848	73.4	25.8	0.8	0.0	73.4	81.3	65.9
	2015	872	76.9	21.5	1.5	0.1	76.9	82.5	71.7
Slovenia	2011	632	47.4	42.3	10.3	0.0	47.4	47.0	47.8
	2015	606	48.4	41.1	10.4	0.0	48.4	54.8	42.8
South Africa	2011	1713	5.3	83.2	10.5	0.9	5.3	5.8	4.9
	2015	1789	10.5	81.6	7.8	0.2	10.5	10.2	10.7
Sweden	2011	779	5.6	70.7	22.6	1.1	5.6	7.1	4.3
	2015	578	8.1	72.9	17.8	1.3	8.1	7.5	8.7
Thailand	2011	876	10.1	71.0	18.3	0.6	10.1	10.3	9.7
	2015	920	11.6	78.1	10.3	0.0	11.6	13.3	9.4
Turkey	2011	984	20.9	57.0	22.1	0.0	20.9	22.9	18.9
	2015	861	19.6	63.1	17.3	0.0	19.6	23.1	16.3
United Arab Emirates	2011	1998	28.3	61.1	9.9	0.7	28.3	34.3	22.4
	2015	2582	37.5	55.4	6.9	0.2	37.5	42.7	32.5
United States	2011	1508	42.5	54.7	2.3	0.5	42.5	45.6	39.3
	2015	1463	51.4	45.2	2.5	0.8	51.4	53.6	49.2
International Avg (n=33)	2011	28524	30.2	55.6	13.7	0.5	30.2	32.3	28.2
	2015	31125	33.3	54.0	12.2	0.4	33.3	35.8	31.0
Ontario, Canada	2011	680	29.9	60.7	8.8	0.7	29.9	30.4	28.9
	2015	647	37.7	54.5	6.5	1.3	37.7	40.3	35.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_07 (M042050): Algebra / Knowing Type: CR 1 Point
Label: Value of the expression

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	35.6	55.5	8.3	0.6	35.6	37.7	33.3
	2015	553	40.7	47.4	10.4	1.5	40.7	39.5	41.9
Norway (8)	2011	551	2.5	75.2	21.9	0.4	2.5	2.9	1.9
	2015	696	2.3	70.0	27.6	0.1	2.3	2.6	2.1
Abu Dhabi, UAE	2011	623	23.2	64.0	11.8	0.9	23.2	27.4	19.6
	2015	698	29.4	61.6	8.6	0.4	29.4	35.1	24.3
Dubai, UAE	2011	784	32.9	57.4	8.9	0.8	32.9	40.1	26.3
	2015	877	47.3	48.2	4.2	0.2	47.3	52.4	41.7
Florida, US	2011	240	39.4	57.1	3.1	0.4	39.4	48.5	30.9
	2015	302	34.8	60.3	4.6	0.2	34.8	39.7	30.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_08A (M042074A): Algebra / Reasoning Type: CR 1 Point
Label: Circles for patterns 4 & 30

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	42.0	53.1	4.0	0.9	42.0	42.8	41.2
	2015	1475	39.8	55.2	4.8	0.2	39.8	41.9	37.7
Bahrain	2011	653	20.5	68.2	10.6	0.7	20.5	22.3	18.7
	2015	695	29.3	60.4	9.9	0.4	29.3	34.1	24.8
Botswana	2011	767	15.8	78.6	5.3	0.3	15.8	18.1	13.2
	2015	856	20.6	71.2	7.9	0.3	20.6	21.1	20.1
Chile	2011	835	21.4	67.6	8.9	2.2	21.4	22.3	20.3
	2015	677	25.5	58.3	15.4	0.8	25.5	27.0	24.0
Chinese Taipei	2011	716	75.9	18.9	5.2	0.0	75.9	78.4	73.6
	2015	820	71.8	24.0	4.2	0.0	71.8	73.5	70.1
England	2011	548	37.2	58.6	3.3	1.0	37.2	39.8	34.8
	2015	676	34.7	61.8	3.1	0.3	34.7	41.7	26.7
Georgia	2011	655	20.4	46.7	32.0	1.0	20.4	22.2	18.7
	2015	579	20.6	52.7	25.8	0.8	20.6	23.2	18.2
Hong Kong SAR	2011	571	53.0	42.5	4.4	0.1	53.0	52.1	54.0
	2015	596	64.7	30.3	4.7	0.3	64.7	63.6	65.7
Hungary	2011	737	27.5	66.8	5.3	0.4	27.5	29.0	26.3
	2015	707	36.5	58.6	4.9	0.0	36.5	34.5	38.7
Iran, Islamic Rep. of	2011	870	16.9	69.9	12.3	0.8	16.9	16.4	17.4
	2015	863	33.1	58.6	8.0	0.4	33.1	35.7	30.6
Israel	2011	661	44.7	46.2	8.2	0.8	44.7	49.4	40.3
	2015	771	40.7	51.6	6.7	1.0	40.7	42.0	39.6
Italy	2011	565	38.0	51.6	10.4	0.0	38.0	38.9	37.2
	2015	640	41.4	41.9	16.6	0.1	41.4	41.3	41.6
Japan	2011	625	53.7	42.6	3.6	0.1	53.7	50.9	56.6
	2015	682	60.2	36.1	3.3	0.5	60.2	61.3	59.0
Jordan	2011	1079	26.7	64.7	8.3	0.3	26.7	31.0	22.7
	2015	1122	18.0	73.1	8.5	0.4	18.0	22.5	13.0
Kazakhstan	2011	621	34.9	46.3	18.5	0.3	34.9	37.8	32.2
	2015	701	47.1	38.1	14.7	0.1	47.1	46.5	47.7
Korea, Rep. of	2011	742	69.6	28.8	1.6	0.0	69.6	71.6	67.6
	2015	757	66.5	30.0	3.5	0.0	66.5	67.4	65.8
Lebanon	2011	570	16.5	67.4	14.8	1.3	16.5	15.8	17.4
	2015	548	19.7	58.1	20.0	2.2	19.7	17.3	22.3
Lithuania	2011	674	27.6	67.1	5.2	0.0	27.6	32.2	23.6
	2015	619	32.1	62.6	5.2	0.0	32.1	33.1	31.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_08A (M042074A): Algebra / Reasoning Type: CR 1 Point
Label: Circles for patterns 4 & 30

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	19.5	66.6	13.0	0.9	19.5	21.3	17.9
	2015	1393	28.6	61.1	9.4	0.9	28.6	27.8	29.4
Morocco	2011	1326	10.1	64.9	22.4	2.6	10.1	8.4	11.7
	2015	1858	13.6	67.9	18.1	0.5	13.6	11.5	15.1
New Zealand	2011	759	41.0	54.3	4.0	0.6	41.0	39.9	42.1
	2015	1176	42.2	54.0	3.8	0.1	42.2	43.5	40.7
Oman	2011	1368	15.7	70.7	12.8	0.7	15.7	18.1	13.2
	2015	1257	18.3	70.3	11.1	0.3	18.3	22.0	14.9
Qatar	2011	635	24.8	59.8	14.9	0.6	24.8	26.7	22.8
	2015	777	29.4	59.3	9.6	1.6	29.4	36.5	22.6
Russian Federation	2011	707	53.3	38.7	6.8	1.3	53.3	55.1	51.4
	2015	685	53.0	41.5	5.4	0.1	53.0	52.3	53.6
Saudi Arabia	2011	629	15.4	76.7	7.8	0.1	15.4	19.0	12.1
	2015	525	40.8	43.8	15.2	0.2	40.8	47.4	33.7
Singapore	2011	848	66.4	31.9	1.7	0.0	66.4	67.1	65.7
	2015	872	71.3	27.4	1.1	0.1	71.3	71.9	70.8
Slovenia	2011	632	33.6	62.0	4.3	0.1	33.6	38.1	29.4
	2015	606	34.2	61.5	4.3	0.0	34.2	35.2	33.2
South Africa	2011	1713	12.7	71.3	14.6	1.5	12.7	13.7	11.7
	2015	1789	23.2	71.5	5.1	0.3	23.2	23.0	23.4
Sweden	2011	779	33.9	55.9	9.2	1.1	33.9	37.3	30.8
	2015	578	38.9	55.1	4.7	1.4	38.9	41.1	37.8
Thailand	2011	876	24.9	52.7	21.8	0.6	24.9	27.1	22.2
	2015	920	27.3	58.3	14.2	0.1	27.3	29.1	25.1
Turkey	2011	984	30.5	58.9	10.6	0.0	30.5	31.8	29.2
	2015	861	28.7	62.5	8.8	0.0	28.7	31.8	25.8
United Arab Emirates	2011	1998	29.4	61.3	8.3	1.0	29.4	31.7	27.2
	2015	2582	32.9	58.7	8.1	0.3	32.9	36.4	29.7
United States	2011	1508	39.0	56.3	4.1	0.5	39.0	38.7	39.4
	2015	1463	39.0	58.1	1.9	0.9	39.0	41.0	37.1
International Avg (n=33)	2011	28534	33.1	56.6	9.6	0.7	33.1	34.7	31.6
	2015	31126	37.1	53.7	8.7	0.4	37.1	38.7	35.4
Ontario, Canada	2011	680	50.7	46.6	2.0	0.7	50.7	47.1	53.5
	2015	647	53.1	42.4	2.8	1.6	53.1	55.2	51.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_08A (M042074A): Algebra / Reasoning Type: CR 1 Point
Label: Circles for patterns 4 & 30

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	46.6	49.2	3.6	0.6	46.6	50.9	41.8
	2015	553	44.6	48.0	5.4	2.0	44.6	33.9	55.7
Norway (8)	2011	551	25.4	68.6	5.5	0.4	25.4	27.5	22.9
	2015	696	27.6	66.2	6.1	0.1	27.6	28.2	27.1
Abu Dhabi, UAE	2011	623	27.3	60.9	10.5	1.3	27.3	26.4	28.1
	2015	698	26.2	63.7	9.6	0.5	26.2	32.0	21.0
Dubai, UAE	2011	784	31.3	60.6	7.1	1.1	31.3	34.8	28.1
	2015	877	47.0	48.0	4.8	0.2	47.0	47.6	46.4
Florida, US	2011	240	40.0	54.5	5.2	0.4	40.0	39.4	40.5
	2015	302	34.3	62.0	3.4	0.4	34.3	39.2	29.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_08B (M042074B): Algebra / Reasoning Type: CR 1 Point
Label: Procedure for finding the number

COUNTRY	Year	N	10 %	11 %	12 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	25.5	8.8	8.3	43.6	13.0	0.9	42.6	43.6	41.6
	2015	1475	18.6	13.6	9.0	48.1	10.3	0.4	41.1	44.5	37.6
Bahrain	2011	653	8.7	1.9	7.5	60.4	20.7	0.7	18.1	21.1	15.2
	2015	695	9.9	2.3	25.3	45.3	16.8	0.4	37.5	42.7	32.6
Botswana	2011	767	4.5	0.2	16.8	69.4	8.8	0.3	21.5	24.0	18.9
	2015	856	8.5	0.3	8.5	75.8	6.6	0.3	17.3	19.3	15.2
Chile	2011	835	9.4	0.4	13.9	46.7	27.4	2.3	23.6	26.0	21.0
	2015	677	7.2	1.1	5.8	57.5	27.6	0.8	14.0	14.4	13.7
Chinese Taipei	2011	716	28.4	8.2	21.2	33.3	8.9	0.0	57.8	59.9	55.8
	2015	820	17.5	17.3	24.7	33.6	7.0	0.0	59.4	61.6	57.3
England	2011	548	18.8	6.9	10.8	49.2	13.3	1.0	36.5	41.0	32.5
	2015	676	17.5	6.7	8.6	57.0	9.8	0.3	32.8	38.6	26.2
Georgia	2011	655	5.4	0.2	12.1	25.6	55.8	1.0	17.7	17.4	18.0
	2015	579	6.7	3.5	8.3	35.2	45.4	0.9	18.4	18.8	18.1
Hong Kong SAR	2011	571	29.0	5.7	10.2	39.6	15.3	0.1	44.9	44.0	45.9
	2015	596	32.4	7.8	12.3	35.3	11.9	0.3	52.5	49.0	55.5
Hungary	2011	739	15.1	1.7	11.2	44.1	27.6	0.4	28.0	27.3	28.5
	2015	707	19.0	1.7	13.3	43.4	22.6	0.0	34.0	32.9	35.2
Iran, Islamic Rep. of	2011	870	7.0	0.3	4.8	55.8	31.1	1.0	12.0	11.6	12.4
	2015	863	11.4	3.7	2.0	55.4	27.0	0.4	17.1	17.6	16.7
Israel	2011	661	22.8	12.6	11.7	31.3	20.4	1.3	47.0	51.5	42.7
	2015	771	19.6	10.6	6.2	44.1	18.5	1.0	36.4	37.1	35.7
Italy	2011	565	22.9	0.6	13.9	32.4	30.1	0.1	37.4	38.1	36.7
	2015	640	25.2	0.5	10.0	37.5	26.7	0.2	35.6	35.2	36.1
Japan	2011	625	28.1	9.2	9.3	36.7	16.6	0.1	46.6	41.0	52.6
	2015	682	16.9	28.8	11.8	29.5	12.5	0.5	57.6	60.0	55.1
Jordan	2011	1079	10.6	3.7	7.2	59.2	18.7	0.4	21.6	21.8	21.5
	2015	1122	8.9	1.2	9.3	56.8	23.0	0.9	19.3	24.7	13.4
Kazakhstan	2011	621	19.0	0.9	5.9	38.4	35.4	0.4	25.7	26.2	25.2
	2015	701	9.5	10.7	0.5	54.0	25.1	0.1	20.7	21.8	19.4
Korea, Rep. of	2011	742	32.7	13.0	21.1	27.4	5.8	0.0	66.7	69.7	63.7
	2015	757	35.6	10.7	21.7	25.2	6.8	0.0	68.0	69.9	66.4
Lebanon	2011	570	5.8	0.3	2.0	54.8	35.7	1.3	8.1	6.9	9.6
	2015	548	6.8	0.2	4.2	46.7	39.7	2.4	11.2	9.1	13.7
Lithuania	2011	674	15.3	0.9	12.4	47.7	23.7	0.0	28.6	31.4	26.0
	2015	619	18.7	0.7	16.3	43.6	20.8	0.0	35.6	39.1	32.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_08B (M042074B): Algebra / Reasoning Type: CR 1 Point
Label: Procedure for finding the number

COUNTRY	Year	N	10 %	11 %	12 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	3.7	0.0	5.5	67.1	22.5	1.3	9.1	9.8	8.5
	2015	1393	7.7	1.9	8.4	59.5	21.5	1.0	18.0	18.2	17.7
Morocco	2011	1325	2.9	0.9	0.5	48.9	43.7	3.0	4.4	3.4	5.3
	2015	1859	1.9	0.0	4.1	53.3	40.2	0.5	6.0	4.1	7.6
New Zealand	2011	759	26.8	6.1	8.6	47.9	10.0	0.6	41.5	42.9	40.3
	2015	1176	23.1	8.3	6.5	48.6	13.3	0.3	37.9	40.8	34.7
Oman	2011	1368	7.3	3.3	8.3	54.4	25.9	0.8	18.9	22.3	15.3
	2015	1257	8.2	3.4	8.3	65.2	14.5	0.4	19.9	24.5	15.7
Qatar	2011	635	13.2	1.5	10.2	52.6	21.7	0.8	24.9	23.2	26.6
	2015	777	12.3	3.2	6.9	58.6	17.2	1.7	22.4	23.3	21.6
Russian Federation	2011	706	25.3	1.8	24.1	24.9	22.3	1.6	51.2	52.0	50.4
	2015	685	25.1	2.8	18.9	31.0	22.1	0.1	46.8	45.7	47.7
Saudi Arabia	2011	629	5.9	1.3	8.4	64.5	19.7	0.2	15.6	19.0	12.5
	2015	525	7.2	0.6	5.4	59.8	26.8	0.2	13.2	14.3	12.0
Singapore	2011	848	41.3	9.7	6.0	38.7	4.2	0.2	57.0	58.4	55.6
	2015	872	44.3	10.3	8.0	33.0	4.1	0.2	62.6	64.1	61.2
Slovenia	2011	632	19.8	0.6	9.1	49.0	21.4	0.1	29.5	32.1	27.2
	2015	606	21.5	1.8	5.4	51.0	20.2	0.1	28.6	28.6	28.7
South Africa	2011	1713	4.2	1.2	7.6	69.9	15.3	1.9	13.0	13.0	13.0
	2015	1789	8.7	1.4	8.4	72.8	8.3	0.4	18.5	19.2	17.8
Sweden	2011	779	19.0	2.0	7.3	51.6	19.2	1.1	28.2	29.8	26.8
	2015	578	22.3	6.5	8.0	44.9	16.8	1.6	36.8	42.0	33.1
Thailand	2011	876	7.4	1.9	6.7	48.9	34.3	0.8	16.0	17.4	14.3
	2015	920	6.7	4.5	20.5	45.8	22.3	0.1	31.7	37.6	24.4
Turkey	2011	984	6.8	4.0	9.2	59.4	20.5	0.0	20.1	20.0	20.2
	2015	861	8.6	7.5	14.9	53.5	15.4	0.0	31.0	34.9	27.4
United Arab Emirates	2011	1998	12.4	3.5	14.3	53.7	14.8	1.2	30.3	32.8	27.7
	2015	2582	15.5	4.4	15.2	50.3	14.3	0.4	35.1	40.9	29.6
United States	2011	1508	15.8	5.0	21.7	50.3	6.6	0.6	42.6	43.9	41.2
	2015	1463	18.5	5.4	15.8	57.3	2.0	1.0	39.7	43.6	35.9
International Avg (n=33)	2011	28534	15.8	3.6	10.5	47.8	21.5	0.8	29.9	31.0	28.9
	2015	31127	15.8	5.6	10.7	48.7	18.7	0.5	32.0	33.9	30.2
Ontario, Canada	2011	680	18.0	10.2	16.8	44.2	9.9	0.9	45.0	43.4	46.7
	2015	647	20.9	13.8	11.1	43.7	8.6	1.8	45.9	48.9	42.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_08B (M042074B): Algebra / Reasoning Type: CR 1 Point
Label: Procedure for finding the number

COUNTRY	Year	N	10 %	11 %	12 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	18.3	7.0	12.0	49.5	12.2	0.9	37.4	40.4	34.0
	2015	553	24.4	6.7	9.6	45.1	12.2	2.0	40.7	32.8	48.9
Norway (8)	2011	551	13.2	1.4	8.8	59.5	16.5	0.7	23.3	26.7	19.1
	2015	696	13.1	1.3	8.9	59.0	17.5	0.1	23.4	25.3	21.5
Abu Dhabi, UAE	2011	623	11.5	2.7	15.6	54.6	13.7	1.9	29.8	32.6	27.4
	2015	698	11.2	2.6	19.7	50.0	15.7	0.7	33.6	42.4	25.6
Dubai, UAE	2011	784	12.0	3.8	11.4	52.9	18.6	1.3	27.2	28.6	25.8
	2015	877	24.6	8.5	8.5	47.4	10.7	0.2	41.6	43.4	39.7
Florida, US	2011	240	13.3	5.8	22.5	47.2	10.4	0.8	41.6	41.1	42.0
	2015	302	16.9	1.3	17.1	61.2	3.1	0.4	35.3	41.1	30.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_08C (M042074C): Algebra / Reasoning Type: CR 1 Point
Label: Rule for finding number of circles

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	27.4	0.5	43.4	27.6	1.1	27.9	27.0	28.8
	2015	1475	27.5	1.5	47.5	23.0	0.5	29.0	29.7	28.4
Bahrain	2011	653	8.9	0.4	58.4	31.6	0.7	9.3	11.2	7.4
	2015	695	10.0	2.0	62.2	25.4	0.4	12.0	13.9	10.2
Botswana	2011	767	2.4	0.7	87.6	8.9	0.3	3.1	2.5	3.8
	2015	856	2.9	1.3	86.2	9.3	0.3	4.2	4.6	3.8
Chile	2011	835	4.3	2.7	44.9	45.3	2.7	7.0	7.8	6.0
	2015	677	6.1	0.7	47.4	44.6	1.3	6.7	5.8	7.6
Chinese Taipei	2011	716	58.8	3.1	21.2	16.8	0.0	62.0	63.3	60.8
	2015	820	52.2	0.6	32.6	14.5	0.0	52.8	53.2	52.5
England	2011	548	23.8	3.0	46.7	25.6	1.0	26.7	25.7	27.7
	2015	676	26.4	1.2	48.7	23.3	0.3	27.6	33.2	21.2
Georgia	2011	655	6.1	0.7	23.5	68.7	1.0	6.8	6.0	7.5
	2015	579	8.3	1.1	27.9	61.8	0.9	9.4	9.2	9.6
Hong Kong SAR	2011	571	40.1	1.8	39.3	18.7	0.1	41.9	42.2	41.5
	2015	596	51.0	0.6	33.7	14.4	0.3	51.6	49.3	53.5
Hungary	2011	739	13.3	1.3	34.8	50.2	0.4	14.6	14.4	14.7
	2015	707	19.1	1.0	34.7	45.1	0.0	20.1	16.6	23.8
Iran, Islamic Rep. of	2011	870	4.7	0.6	43.8	49.9	1.0	5.3	5.3	5.3
	2015	863	16.7	0.6	45.5	36.5	0.8	17.2	18.6	16.0
Israel	2011	661	35.9	0.5	34.5	27.7	1.5	36.4	39.4	33.5
	2015	771	29.5	0.9	38.6	30.0	1.0	30.4	30.3	30.5
Italy	2011	565	14.9	6.5	31.8	46.6	0.2	21.4	24.0	18.9
	2015	640	13.2	6.9	33.2	46.5	0.2	20.0	23.0	16.9
Japan	2011	625	42.3	0.4	39.2	17.9	0.1	42.7	36.0	49.7
	2015	682	47.9	0.3	35.2	16.2	0.5	48.2	48.7	47.6
Jordan	2011	1079	11.6	1.5	66.3	20.2	0.4	13.0	14.7	11.5
	2015	1122	7.0	1.4	66.1	24.7	0.9	8.4	10.7	5.8
Kazakhstan	2011	621	12.2	4.1	40.0	42.7	0.9	16.4	16.1	16.7
	2015	701	26.0	0.1	43.0	30.8	0.2	26.1	27.1	24.9
Korea, Rep. of	2011	742	47.8	4.2	37.7	10.4	0.0	52.0	54.0	50.0
	2015	757	46.6	5.7	32.9	14.9	0.0	52.3	53.3	51.4
Lebanon	2011	570	3.3	1.9	39.0	54.0	1.8	5.2	3.6	7.1
	2015	547	6.8	0.2	31.5	58.9	2.6	7.0	4.9	9.4
Lithuania	2011	674	12.2	1.6	42.7	43.5	0.0	13.8	14.7	12.9
	2015	619	15.8	2.2	40.1	41.9	0.0	18.0	18.3	17.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_08C (M042074C): Algebra / Reasoning Type: CR 1 Point
Label: Rule for finding number of circles

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	1.7	0.4	63.6	32.8	1.6	2.1	1.8	2.3
	2015	1393	5.8	0.1	63.3	29.5	1.2	6.0	7.0	5.0
Morocco	2011	1327	2.5	0.1	33.7	60.2	3.5	2.6	1.5	3.6
	2015	1859	3.1	0.1	40.4	55.8	0.6	3.2	2.5	3.7
New Zealand	2011	759	27.7	1.8	46.7	23.2	0.6	29.5	28.1	30.8
	2015	1176	26.5	3.9	46.0	23.3	0.3	30.4	32.6	28.0
Oman	2011	1368	8.0	1.9	55.6	33.6	0.9	9.8	10.9	8.8
	2015	1257	9.2	2.1	65.5	22.9	0.4	11.2	15.4	7.5
Qatar	2011	635	12.7	1.3	55.1	29.9	0.9	14.1	15.0	13.2
	2015	777	13.5	0.8	57.8	26.0	2.0	14.2	18.2	10.4
Russian Federation	2011	707	25.0	0.7	30.2	42.3	1.7	25.7	26.5	24.9
	2015	685	20.7	1.5	33.7	43.5	0.5	22.3	21.6	23.0
Saudi Arabia	2011	629	5.6	1.0	65.1	28.0	0.2	6.7	7.0	6.3
	2015	525	7.0	0.6	60.9	31.1	0.4	7.6	8.0	7.2
Singapore	2011	848	53.7	0.5	38.1	7.5	0.2	54.2	58.8	49.8
	2015	872	56.6	1.1	34.7	7.3	0.2	57.7	59.7	55.9
Slovenia	2011	632	15.4	1.7	38.7	44.0	0.1	17.1	16.4	17.8
	2015	606	17.8	0.5	39.2	42.3	0.2	18.3	19.9	16.8
South Africa	2011	1713	3.4	5.2	71.6	17.9	1.9	8.6	9.4	7.9
	2015	1789	8.4	0.4	79.6	10.8	0.7	8.8	9.6	8.1
Sweden	2011	779	9.1	2.1	45.5	42.2	1.1	11.2	12.6	9.9
	2015	578	24.0	1.7	43.6	28.5	2.2	25.7	29.3	23.1
Thailand	2011	876	5.3	0.1	46.9	46.7	0.9	5.4	5.3	5.6
	2015	920	9.7	0.0	54.3	35.9	0.1	9.7	9.9	9.5
Turkey	2011	984	13.6	1.0	51.1	34.1	0.2	14.6	13.5	15.8
	2015	861	18.8	0.6	57.1	23.5	0.0	19.4	21.1	17.7
United Arab Emirates	2011	1998	12.6	0.9	64.5	20.5	1.4	13.5	14.3	12.8
	2015	2582	18.6	1.5	59.3	20.1	0.5	20.1	21.9	18.4
United States	2011	1508	20.4	1.9	66.4	10.6	0.8	22.2	22.4	22.0
	2015	1463	24.4	1.9	70.8	1.9	1.0	26.3	28.0	24.6
International Avg (n=33)	2011	28537	17.8	1.7	46.9	32.7	0.9	19.5	19.7	19.3
	2015	31126	20.5	1.4	48.3	29.2	0.6	21.9	22.9	20.9
Ontario, Canada	2011	680	29.2	3.3	48.5	17.5	1.5	32.5	27.2	36.7
	2015	647	34.8	5.8	43.3	13.6	2.4	40.6	44.5	36.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_08C (M042074C): Algebra / Reasoning Type: CR 1 Point
Label: Rule for finding number of circles

COUNTRY	Year	N	10 %	11 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	32.0	2.0	47.5	17.5	1.1	34.0	38.3	29.2
	2015	553	30.6	2.0	48.9	16.2	2.4	32.6	28.1	37.2
Norway (8)	2011	551	5.6	3.6	55.0	35.1	0.7	9.2	11.1	6.8
	2015	696	5.4	6.2	52.6	35.3	0.5	11.6	10.7	12.4
Abu Dhabi, UAE	2011	623	10.0	1.1	68.7	18.3	1.9	11.1	9.4	12.6
	2015	698	12.9	1.9	63.3	21.1	0.8	14.8	17.0	12.7
Dubai, UAE	2011	784	13.1	0.8	57.8	26.7	1.6	13.9	14.4	13.5
	2015	877	31.6	1.7	48.5	17.9	0.3	33.4	36.1	30.3
Florida, US	2011	240	23.0	1.9	62.7	11.6	0.8	24.9	22.8	26.8
	2015	302	18.5	1.7	76.0	3.4	0.4	20.2	19.9	20.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_09 (M042151): Geometry / Applying Type: CR 1 Point
Label: Shape with AB as line of symmetry

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	66.5	26.5	5.8	1.1	66.5	66.8	66.2
	2015	1475	65.6	26.6	7.3	0.5	65.6	66.9	64.4
Bahrain	2011	653	25.9	40.1	33.3	0.7	25.9	32.1	19.6
	2015	695	28.9	46.0	24.6	0.5	28.9	35.7	22.5
Botswana	2011	767	20.8	59.4	19.4	0.3	20.8	17.5	24.3
	2015	856	26.9	51.9	20.6	0.5	26.9	25.5	28.4
Chile	2011	835	40.3	28.0	28.8	2.9	40.3	40.7	39.9
	2015	677	42.3	23.1	32.6	2.0	42.3	42.0	42.6
Chinese Taipei	2011	716	87.7	8.9	3.4	0.0	87.7	92.6	83.2
	2015	820	35.3	60.9	3.8	0.0	35.3	40.8	29.8
England	2011	548	79.0	14.2	5.9	1.0	79.0	77.3	80.4
	2015	676	75.7	18.0	5.8	0.6	75.7	76.9	74.3
Georgia	2011	649	37.1	29.3	32.3	1.4	37.1	37.5	36.7
	2015	578	39.7	31.9	27.5	0.9	39.7	39.7	39.7
Hong Kong SAR	2011	571	84.0	11.9	4.0	0.1	84.0	87.0	80.8
	2015	596	83.0	10.4	6.4	0.3	83.0	84.4	81.7
Hungary	2011	739	69.5	15.1	15.1	0.4	69.5	69.1	69.9
	2015	707	74.1	14.4	11.5	0.0	74.1	68.5	80.2
Iran, Islamic Rep. of	2011	870	51.7	29.1	18.1	1.0	51.7	53.9	49.9
	2015	863	59.3	25.4	14.5	0.8	59.3	64.6	54.5
Israel	2011	661	25.6	45.8	27.2	1.5	25.6	28.8	22.5
	2015	771	25.1	48.5	25.4	1.1	25.1	25.5	24.7
Italy	2011	565	69.2	12.0	18.6	0.2	69.2	72.1	66.3
	2015	638	59.8	21.4	18.2	0.5	59.8	61.3	58.3
Japan	2011	625	89.2	7.2	3.6	0.1	89.2	88.6	89.7
	2015	682	92.9	4.6	2.0	0.5	92.9	93.2	92.6
Jordan	2011	1079	24.4	54.1	21.1	0.4	24.4	26.7	22.3
	2015	1122	20.0	52.3	26.8	0.9	20.0	25.4	13.9
Kazakhstan	2011	622	64.3	23.4	11.5	0.9	64.3	67.2	61.6
	2015	701	53.0	28.2	18.6	0.2	53.0	50.6	55.7
Korea, Rep. of	2011	742	76.8	19.4	3.8	0.0	76.8	79.0	74.6
	2015	757	83.6	13.7	2.8	0.0	83.6	84.1	83.1
Lebanon	2011	570	28.4	43.4	26.3	2.0	28.4	28.4	28.3
	2015	548	30.1	35.0	32.1	2.8	30.1	29.2	31.2
Lithuania	2011	674	67.9	21.7	10.3	0.1	67.9	75.8	60.8
	2015	619	69.3	22.6	8.1	0.0	69.3	71.0	67.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_09 (M042151): Geometry / Applying Type: CR 1 Point
Label: Shape with AB as line of symmetry

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	30.2	36.5	31.6	1.7	30.2	32.0	28.6
	2015	1393	30.0	38.4	30.3	1.3	30.0	28.8	31.3
Morocco	2011	1327	43.9	26.6	26.0	3.5	43.9	44.0	44.0
	2015	1858	35.6	36.2	27.6	0.6	35.6	35.2	36.0
New Zealand	2011	759	75.7	15.4	8.4	0.6	75.7	74.8	76.4
	2015	1176	66.8	21.4	11.5	0.3	66.8	66.5	67.0
Oman	2011	1368	29.6	41.9	27.6	0.9	29.6	36.6	22.3
	2015	1257	35.9	43.7	19.9	0.5	35.9	43.6	29.2
Qatar	2011	635	30.1	39.5	29.2	1.2	30.1	33.6	26.6
	2015	777	41.3	35.2	21.5	2.0	41.3	47.5	35.3
Russian Federation	2011	707	66.3	13.8	18.3	1.7	66.3	67.4	65.1
	2015	685	63.7	16.2	19.5	0.5	63.7	62.2	65.1
Saudi Arabia	2011	629	15.8	50.4	33.6	0.2	15.8	19.1	12.9
	2015	525	19.5	43.3	36.8	0.4	19.5	24.2	14.5
Singapore	2011	848	81.5	13.5	4.8	0.2	81.5	82.3	80.7
	2015	872	85.9	10.5	3.4	0.2	85.9	87.8	84.1
Slovenia	2011	632	75.5	17.2	7.2	0.1	75.5	74.1	76.9
	2015	606	74.8	16.7	8.3	0.2	74.8	75.2	74.5
South Africa	2011	1713	11.9	48.6	37.5	2.0	11.9	10.4	13.3
	2015	1789	23.5	47.6	28.0	0.9	23.5	22.1	24.8
Sweden	2011	779	28.5	37.0	33.4	1.1	28.5	29.6	27.5
	2015	577	48.5	24.7	24.4	2.4	48.5	51.6	46.8
Thailand	2011	876	22.1	36.1	40.9	0.9	22.1	24.5	19.1
	2015	920	24.2	43.9	31.7	0.1	24.2	24.7	23.7
Turkey	2011	984	35.5	45.5	18.9	0.2	35.5	35.2	35.7
	2015	860	37.0	50.3	12.6	0.1	37.0	38.9	35.2
United Arab Emirates	2011	1998	34.7	40.7	23.1	1.5	34.7	38.0	31.4
	2015	2582	42.4	36.2	20.9	0.5	42.4	47.6	37.5
United States	2011	1508	53.8	31.7	13.7	0.9	53.8	51.1	56.6
	2015	1463	57.9	30.6	10.6	1.0	57.9	58.7	57.0
International Avg (n=33)	2011	28532	49.8	29.8	19.5	0.9	49.8	51.3	48.3
	2015	31121	50.1	31.2	18.0	0.7	50.1	51.5	48.7
Ontario, Canada	2011	680	79.0	13.1	6.3	1.6	79.0	81.4	76.9
	2015	647	76.7	15.8	5.1	2.5	76.7	78.5	74.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_09 (M042151): Geometry / Applying Type: CR 1 Point
Label: Shape with AB as line of symmetry

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	869	75.5	12.5	11.0	1.1	75.5	75.3	75.7
	2015	553	71.3	16.9	9.3	2.4	71.3	68.3	74.4
Norway (8)	2011	551	43.8	36.4	19.1	0.7	43.8	47.9	38.7
	2015	696	53.5	26.1	19.9	0.5	53.5	54.2	52.9
Abu Dhabi, UAE	2011	623	29.3	41.4	27.2	2.1	29.3	27.7	30.8
	2015	698	34.0	40.4	24.8	0.8	34.0	39.2	29.2
Dubai, UAE	2011	784	44.3	33.3	20.8	1.6	44.3	48.9	40.2
	2015	877	58.1	27.4	14.3	0.3	58.1	62.0	53.8
Florida, US	2011	240	56.8	31.6	10.8	0.8	56.8	55.2	58.4
	2015	302	49.4	32.9	17.3	0.4	49.4	52.9	46.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M07_10 (M042132): Geometry / Reasoning Type: MC Key: A
Label: What is the perimeter of the figure

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	29.4	29.4	37.8	18.2	11.2	2.3	1.1	26.0	32.9
	2015	1474	26.5	26.5	41.2	16.8	12.0	2.7	0.9	26.3	26.8
Bahrain	2011	653	23.1	23.1	27.4	16.4	28.1	4.4	0.7	26.7	19.4
	2015	695	22.5	22.5	30.4	17.3	25.0	4.4	0.5	25.5	19.7
Botswana	2011	767	21.9	21.9	28.0	13.8	34.3	1.5	0.6	20.6	23.2
	2015	856	22.0	22.0	27.5	12.8	34.9	2.3	0.5	18.9	25.1
Chile	2011	835	19.2	19.2	31.5	16.0	22.6	7.5	3.2	19.2	19.2
	2015	677	23.8	23.8	31.5	21.2	13.3	7.8	2.4	27.5	20.1
Chinese Taipei	2011	716	72.1	72.1	14.6	7.8	4.7	0.8	0.0	76.0	68.5
	2015	820	72.1	72.1	14.7	6.0	6.5	0.8	0.0	72.7	71.4
England	2011	548	26.6	26.6	39.1	16.8	11.1	5.3	1.0	22.8	30.0
	2015	676	31.3	31.3	36.5	17.2	11.0	3.5	0.6	33.0	29.3
Georgia	2011	649	30.3	30.3	22.5	14.1	26.9	4.9	1.4	27.2	33.1
	2015	578	29.3	29.3	26.3	14.1	22.3	7.1	0.9	31.6	27.1
Hong Kong SAR	2011	571	56.4	56.4	21.0	16.6	5.0	0.9	0.1	60.1	52.5
	2015	596	55.2	55.2	23.8	13.7	5.2	1.8	0.3	53.5	56.6
Hungary	2011	739	35.7	35.7	26.4	20.1	12.8	4.7	0.4	36.8	34.7
	2015	707	38.5	38.5	26.2	17.1	15.2	3.1	0.0	38.5	38.4
Iran, Islamic Rep. of	2011	870	22.9	22.9	22.6	21.1	27.4	4.9	1.1	19.1	26.1
	2015	863	27.8	27.8	24.1	17.9	22.6	6.4	1.2	27.0	28.5
Israel	2011	661	42.8	42.8	27.5	11.6	10.9	5.8	1.5	44.6	41.0
	2015	771	39.8	39.8	29.1	15.3	9.9	4.7	1.2	39.3	40.3
Italy	2011	565	47.9	47.9	26.6	11.7	10.4	3.2	0.2	50.4	45.4
	2015	640	45.8	45.8	28.9	9.4	10.5	4.9	0.5	48.6	42.9
Japan	2011	625	39.5	39.5	37.2	13.0	8.7	1.4	0.1	39.2	39.9
	2015	682	45.1	45.1	34.2	11.8	7.1	1.3	0.5	45.4	44.9
Jordan	2011	1079	24.1	24.1	23.2	18.2	30.4	3.7	0.4	23.8	24.3
	2015	1122	24.8	24.8	24.5	15.8	30.9	3.1	0.9	27.1	22.2
Kazakhstan	2011	622	34.9	34.9	21.5	12.3	25.3	5.1	0.9	34.1	35.6
	2015	701	47.4	47.4	19.3	8.7	21.7	2.8	0.2	47.4	47.3
Korea, Rep. of	2011	742	48.4	48.4	33.2	10.8	7.2	0.4	0.0	46.7	50.2
	2015	757	48.4	48.4	34.4	9.6	7.0	0.6	0.0	44.6	51.7
Lebanon	2011	569	23.6	23.6	22.2	14.0	30.3	7.7	2.2	23.0	24.4
	2015	547	17.9	17.9	26.5	14.5	29.7	8.5	2.8	17.1	18.9
Lithuania	2011	674	41.2	41.2	32.9	10.1	12.5	3.1	0.1	45.6	37.3
	2015	619	33.8	33.8	35.7	11.1	16.0	3.3	0.1	35.2	32.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_10 (M042132): Geometry / Reasoning Type: MC Key: A
Label: What is the perimeter of the figure

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	29.4	29.4	36.4	12.0	18.0	2.4	1.7	29.7	29.1
	2015	1393	30.5	30.5	38.2	13.6	13.6	2.5	1.5	32.0	29.0
Morocco	2011	1324	21.1	21.1	20.0	18.9	29.8	6.4	3.7	20.6	21.7
	2015	1859	25.4	25.4	16.9	16.9	35.0	5.1	0.7	24.9	25.8
New Zealand	2011	759	24.6	24.6	35.8	20.3	13.9	4.8	0.6	21.1	27.8
	2015	1176	25.7	25.7	40.4	14.6	14.0	5.0	0.3	24.5	27.1
Oman	2011	1368	25.8	25.8	25.9	15.6	25.9	5.7	1.0	25.2	26.6
	2015	1258	28.0	28.0	23.4	17.6	28.9	1.8	0.5	24.9	30.7
Qatar	2011	635	17.5	17.5	30.1	19.8	25.1	6.2	1.2	19.9	15.2
	2015	777	22.8	22.8	27.5	17.3	24.7	5.5	2.2	23.9	21.8
Russian Federation	2011	707	43.1	43.1	25.3	10.6	13.8	5.4	1.9	42.4	43.7
	2015	685	43.5	43.5	23.0	12.9	15.8	4.2	0.7	43.4	43.5
Saudi Arabia	2011	628	22.1	22.1	25.0	18.5	32.4	1.8	0.2	22.3	21.9
	2015	525	20.2	20.2	23.4	24.0	29.8	2.1	0.5	20.4	20.0
Singapore	2011	848	60.2	60.2	26.4	8.1	4.2	0.9	0.2	63.1	57.4
	2015	872	68.3	68.3	20.6	5.2	4.2	1.3	0.3	70.4	66.4
Slovenia	2011	632	25.4	25.4	39.4	14.7	15.5	4.9	0.1	25.1	25.6
	2015	606	25.9	25.9	37.1	17.7	14.9	4.2	0.2	25.5	26.2
South Africa	2011	1713	21.8	21.8	16.4	18.1	39.5	1.9	2.3	18.7	24.7
	2015	1789	19.7	19.7	19.4	15.1	42.6	2.0	1.2	19.8	19.7
Sweden	2011	779	19.5	19.5	41.5	18.2	10.4	9.2	1.2	23.5	15.8
	2015	578	17.8	17.8	47.0	16.0	8.6	7.8	2.8	15.3	20.2
Thailand	2011	876	22.0	22.0	23.7	13.7	33.8	5.8	0.9	20.2	24.3
	2015	920	24.1	24.1	27.8	16.2	28.0	3.7	0.2	24.4	23.8
Turkey	2011	984	36.6	36.6	25.3	11.4	21.4	5.1	0.2	34.6	38.7
	2015	861	38.3	38.3	25.4	14.1	20.9	1.1	0.1	40.6	36.1
United Arab Emirates	2011	1998	22.8	22.8	28.3	16.5	27.4	3.5	1.6	25.3	20.3
	2015	2582	26.0	26.0	29.5	15.1	25.3	3.6	0.6	27.1	24.8
United States	2011	1508	29.1	29.1	37.0	14.4	16.0	2.5	1.0	29.0	29.2
	2015	1463	32.8	32.8	36.6	14.2	13.7	1.4	1.5	31.8	33.7
International Avg (n=33)	2011	28527	32.1	32.1	28.2	15.0	19.6	4.1	1.0	32.2	32.1
	2015	31125	33.4	33.4	28.8	14.6	18.8	3.6	0.8	33.6	33.1
Ontario, Canada	2011	680	25.6	25.6	42.7	13.2	12.1	4.4	2.0	24.4	26.1
	2015	647	29.8	29.8	39.0	11.3	14.4	2.9	2.6	28.5	31.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_10 (M042132): Geometry / Reasoning Type: MC Key: A
Label: What is the perimeter of the figure

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	26.5	26.5	46.3	11.5	8.9	5.7	1.1	26.4	26.6
	2015	553	31.8	31.8	44.5	9.8	6.5	5.1	2.4	30.5	33.0
Norway (8)	2011	551	23.5	23.5	38.9	17.7	12.4	6.9	0.7	25.4	21.1
	2015	696	18.5	18.5	45.7	17.3	11.6	5.5	1.3	16.5	20.5
Abu Dhabi, UAE	2011	623	23.4	23.4	26.4	17.1	27.6	3.4	2.1	27.2	20.1
	2015	698	21.7	21.7	30.3	17.5	25.9	3.6	1.0	21.8	21.5
Dubai, UAE	2011	784	25.1	25.1	30.9	13.3	23.5	5.4	1.8	25.3	24.9
	2015	877	32.4	32.4	33.0	12.3	19.3	2.7	0.3	33.3	31.3
Florida, US	2011	240	26.3	26.3	45.2	15.7	10.2	1.7	0.8	24.7	27.9
	2015	302	23.7	23.7	42.3	14.8	15.6	2.9	0.7	26.0	21.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_11 (M042257): Geometry / Reasoning Type: MC Key: C
Label: Which 2 shapes fit together

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	44.9	21.1	28.8	44.9	3.8	0.3	1.1	42.3	47.7
	2015	1475	44.2	26.0	21.7	44.2	5.6	1.4	1.0	46.0	42.3
Bahrain	2011	653	28.2	31.4	24.9	28.2	13.1	1.5	0.8	33.5	22.8
	2015	695	24.6	31.0	30.9	24.6	11.9	0.5	1.0	25.3	24.0
Botswana	2011	767	33.4	28.8	25.5	33.4	11.2	0.4	0.7	34.5	32.1
	2015	856	29.0	32.3	21.8	29.0	13.9	2.2	0.8	25.9	32.2
Chile	2011	835	38.7	23.9	25.3	38.7	7.2	1.4	3.4	38.0	39.4
	2015	677	44.7	19.0	25.4	44.7	6.2	2.0	2.7	45.9	43.5
Chinese Taipei	2011	716	63.1	15.5	16.8	63.1	3.9	0.6	0.2	62.5	63.5
	2015	820	62.6	17.6	15.8	62.6	3.3	0.7	0.0	67.1	58.1
England	2011	548	45.9	20.9	25.7	45.9	4.5	2.0	1.0	48.5	43.5
	2015	676	50.0	22.6	21.7	50.0	3.6	1.3	0.8	51.3	48.6
Georgia	2011	655	24.3	25.5	37.6	24.3	9.1	2.2	1.4	27.4	21.4
	2015	578	25.3	29.0	31.5	25.3	12.2	1.2	0.8	23.3	27.2
Hong Kong SAR	2011	571	59.5	17.2	18.5	59.5	3.9	0.8	0.1	61.3	57.7
	2015	596	59.4	20.2	14.8	59.4	5.0	0.2	0.3	59.7	59.2
Hungary	2011	739	39.8	26.1	28.3	39.8	3.2	2.3	0.4	40.5	39.2
	2015	707	45.2	18.4	30.7	45.2	3.6	2.1	0.0	46.2	44.2
Iran, Islamic Rep. of	2011	870	31.9	27.6	27.2	31.9	11.3	0.7	1.3	27.5	35.8
	2015	863	30.9	27.1	28.4	30.9	11.1	0.9	1.6	34.4	27.7
Israel	2011	661	41.2	28.6	20.9	41.2	7.2	0.4	1.8	42.3	40.1
	2015	771	37.2	26.0	27.9	37.2	5.5	1.6	1.7	41.6	33.5
Italy	2011	565	54.4	14.7	24.2	54.4	5.2	1.3	0.3	53.9	54.8
	2015	640	56.5	15.9	19.5	56.5	7.0	0.4	0.6	57.8	55.1
Japan	2011	625	65.6	14.7	17.1	65.6	1.5	0.7	0.3	66.1	65.0
	2015	682	70.0	11.5	15.2	70.0	1.7	1.1	0.5	71.5	68.4
Jordan	2011	1079	22.6	34.2	23.8	22.6	16.9	1.4	1.0	19.9	25.1
	2015	1122	15.1	41.0	24.8	15.1	16.9	1.3	1.0	16.4	13.6
Kazakhstan	2011	622	45.4	18.4	27.4	45.4	6.3	1.4	1.1	44.4	46.3
	2015	701	49.6	17.9	25.8	49.6	4.6	1.8	0.4	47.2	52.2
Korea, Rep. of	2011	742	66.8	13.1	15.6	66.8	4.5	0.1	0.0	68.0	65.4
	2015	757	62.9	17.3	15.3	62.9	4.1	0.4	0.0	63.1	62.7
Lebanon	2011	557	26.2	29.5	26.7	26.2	11.6	3.4	2.6	25.9	26.6
	2015	547	26.4	29.7	25.8	26.4	10.1	5.3	2.8	26.1	26.7
Lithuania	2011	674	45.8	20.2	25.5	45.8	4.1	3.9	0.5	49.6	42.4
	2015	619	47.7	21.3	25.5	47.7	3.9	1.5	0.1	46.5	49.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_11 (M042257): Geometry / Reasoning Type: MC Key: C
Label: Which 2 shapes fit together

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	33.3	33.0	23.2	33.3	8.3	0.3	1.8	35.1	31.7
	2015	1393	37.4	28.9	24.4	37.4	6.0	1.6	1.7	36.8	38.0
Morocco	2011	1294	31.2	28.8	23.3	31.2	9.9	2.3	4.5	30.2	32.1
	2015	1859	25.7	32.7	27.7	25.7	9.2	4.0	0.7	24.0	27.1
New Zealand	2011	759	47.6	21.5	24.8	47.6	3.6	1.6	0.9	48.7	46.6
	2015	1176	45.0	23.6	24.9	45.0	4.9	1.2	0.3	44.0	46.1
Oman	2011	1368	21.7	43.5	17.7	21.7	14.3	1.2	1.6	20.1	23.3
	2015	1258	21.4	42.2	18.8	21.4	16.2	0.9	0.5	22.7	20.2
Qatar	2011	635	24.4	31.6	28.5	24.4	12.8	0.6	2.0	22.2	26.5
	2015	777	27.3	31.3	26.3	27.3	11.8	1.0	2.3	28.0	26.6
Russian Federation	2011	707	58.3	13.8	18.8	58.3	4.0	3.0	2.1	54.6	61.9
	2015	685	51.8	18.0	20.9	51.8	6.6	1.9	0.7	51.8	51.9
Saudi Arabia	2011	629	23.4	38.0	24.4	23.4	13.6	0.4	0.2	23.9	23.0
	2015	525	18.4	40.0	24.0	18.4	16.7	0.4	0.5	20.8	15.9
Singapore	2011	847	56.8	18.2	19.3	56.8	5.0	0.3	0.4	60.7	53.1
	2015	872	61.6	15.8	17.2	61.6	4.5	0.3	0.6	63.1	60.2
Slovenia	2011	632	41.8	25.4	25.9	41.8	3.5	3.2	0.1	44.1	39.7
	2015	606	47.2	20.5	23.9	47.2	5.5	2.7	0.2	51.3	43.7
South Africa	2011	1713	21.5	29.2	24.4	21.5	19.4	2.7	2.9	20.0	22.9
	2015	1789	26.4	33.5	20.6	26.4	16.4	1.7	1.3	25.6	27.3
Sweden	2011	779	44.2	19.7	27.2	44.2	3.0	4.6	1.3	45.9	42.5
	2015	578	43.9	20.8	21.1	43.9	2.8	8.4	3.0	46.6	41.9
Thailand	2011	875	37.3	18.7	33.1	37.3	8.7	1.3	0.9	36.9	37.7
	2015	920	37.7	20.0	28.9	37.7	12.4	0.7	0.2	39.3	35.7
Turkey	2011	983	29.3	33.4	26.7	29.3	9.4	0.9	0.3	27.3	31.3
	2015	861	27.0	31.2	32.6	27.0	8.9	0.2	0.1	30.4	23.7
United Arab Emirates	2011	1999	27.1	36.2	24.4	27.1	9.2	1.4	1.6	28.4	25.9
	2015	2582	29.1	29.8	28.4	29.1	10.5	1.6	0.7	29.4	28.8
United States	2011	1508	38.4	29.2	24.9	38.4	5.2	1.2	1.2	35.9	41.1
	2015	1463	41.6	27.2	23.6	41.6	5.3	0.8	1.6	42.2	40.9
International Avg (n=33)	2011	28490	39.8	25.2	24.4	39.8	7.8	1.5	1.2	40.0	39.6
	2015	31126	40.1	25.4	23.8	40.1	8.1	1.6	0.9	41.0	39.3
Ontario, Canada	2011	680	48.7	22.3	21.3	48.7	4.0	1.0	2.6	50.8	46.6
	2015	647	42.6	24.4	24.1	42.6	5.9	0.1	3.0	46.3	38.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_11 (M042257): Geometry / Reasoning Type: MC Key: C
Label: Which 2 shapes fit together

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	48.9	21.6	19.3	48.9	4.6	4.1	1.5	48.6	49.3
	2015	547	51.5	18.8	20.2	51.5	5.4	1.0	3.1	46.8	56.3
Norway (8)	2011	551	36.1	27.1	27.2	36.1	4.7	3.5	1.4	37.3	34.6
	2015	696	40.8	24.9	25.9	40.8	2.8	4.2	1.4	45.7	36.1
Abu Dhabi, UAE	2011	624	24.3	37.4	26.4	24.3	8.6	1.2	2.1	24.9	23.9
	2015	698	24.0	32.1	29.8	24.0	10.5	2.5	1.0	23.4	24.6
Dubai, UAE	2011	784	34.1	31.3	21.7	34.1	8.9	2.2	1.8	36.2	32.1
	2015	877	40.5	25.8	24.8	40.5	7.3	1.0	0.6	41.7	39.2
Florida, US	2011	240	34.7	28.0	29.5	34.7	5.9	1.2	0.8	31.8	37.4
	2015	302	43.0	27.4	21.7	43.0	6.6	0.5	0.7	42.4	43.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_12 (M042158): Data and Chance / Knowing Type: MC Key: B
Label: Difference in high and low temp

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	68.6	10.3	68.6	11.4	6.4	2.2	1.1	67.9	69.3
	2015	1475	62.9	12.1	62.9	14.1	6.9	2.9	1.0	62.8	63.0
Bahrain	2011	653	51.7	16.4	51.7	16.1	11.5	3.2	1.0	53.2	50.2
	2015	694	51.4	14.2	51.4	15.7	16.2	1.2	1.2	49.7	53.1
Botswana	2011	766	53.2	13.0	53.2	18.3	13.0	1.7	0.9	54.7	51.6
	2015	856	53.5	16.2	53.5	14.2	12.1	2.5	1.4	53.8	53.3
Chile	2011	835	63.1	13.2	63.1	11.0	6.1	3.0	3.4	66.2	59.7
	2015	677	62.2	11.2	62.2	14.0	6.8	3.2	2.7	61.8	62.7
Chinese Taipei	2011	716	78.7	7.7	78.7	2.3	10.7	0.6	0.2	80.0	77.4
	2015	820	79.8	6.2	79.8	1.9	11.8	0.3	0.0	79.7	79.9
England	2011	548	67.9	11.2	67.9	9.1	8.9	1.9	1.1	66.6	69.0
	2015	676	70.3	10.8	70.3	8.6	8.4	0.9	1.0	73.4	66.7
Georgia	2011	633	45.7	18.8	45.7	15.0	13.3	5.5	1.7	45.4	46.0
	2015	579	53.6	12.7	53.6	14.7	14.7	3.0	1.3	54.7	52.6
Hong Kong SAR	2011	571	75.3	10.5	75.3	4.2	9.6	0.4	0.1	77.0	73.4
	2015	596	77.5	9.1	77.5	3.9	8.7	0.4	0.3	78.2	76.9
Hungary	2011	739	58.8	12.1	58.8	10.9	15.4	2.4	0.4	58.0	59.5
	2015	707	65.0	10.6	65.0	8.5	13.8	2.1	0.0	66.3	63.5
Iran, Islamic Rep. of	2011	870	46.0	14.5	46.0	17.7	16.1	4.1	1.5	48.0	44.3
	2015	863	47.5	14.4	47.5	19.2	13.4	3.6	1.8	45.8	49.1
Israel	2011	661	60.5	11.5	60.5	10.9	13.4	1.9	1.8	61.7	59.4
	2015	771	62.3	10.1	62.3	10.3	13.2	2.3	1.7	63.7	61.2
Italy	2011	565	66.6	14.0	66.6	9.7	7.8	1.2	0.6	64.6	68.6
	2015	640	72.9	11.8	72.9	6.8	6.8	1.1	0.6	75.9	69.7
Japan	2011	625	82.1	6.9	82.1	3.9	6.7	0.2	0.3	81.3	82.8
	2015	682	83.4	5.7	83.4	3.0	6.7	0.7	0.5	86.3	80.6
Jordan	2011	1079	50.6	14.7	50.6	18.4	12.6	2.5	1.2	52.8	48.6
	2015	1122	46.0	15.5	46.0	20.1	16.2	1.1	1.0	49.8	41.8
Kazakhstan	2011	622	51.6	18.4	51.6	17.4	8.8	2.6	1.3	51.1	52.1
	2015	701	64.3	13.0	64.3	11.5	8.2	2.0	1.0	63.8	64.9
Korea, Rep. of	2011	742	84.6	7.0	84.6	2.3	6.1	0.0	0.0	86.4	82.6
	2015	757	83.5	6.2	83.5	3.1	6.7	0.3	0.2	85.2	82.0
Lebanon	2011	566	59.8	7.8	59.8	17.6	8.4	3.1	3.3	61.6	57.7
	2015	547	54.1	9.2	54.1	17.1	10.0	6.9	2.8	53.7	54.4
Lithuania	2011	674	71.4	12.3	71.4	7.1	7.0	1.7	0.5	70.9	71.9
	2015	619	66.7	11.6	66.7	9.3	9.6	2.7	0.1	66.7	66.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_12 (M042158): Data and Chance / Knowing Type: MC Key: B
Label: Difference in high and low temp

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	61.2	9.9	61.2	15.5	10.3	1.0	2.1	61.1	61.4
	2015	1393	64.9	7.8	64.9	14.5	9.5	1.2	2.0	65.6	64.3
Morocco	2011	1310	40.0	14.2	40.0	21.7	15.6	3.6	4.9	37.1	42.8
	2015	1858	38.8	16.7	38.8	22.5	17.3	3.8	0.9	35.9	41.2
New Zealand	2011	759	58.0	15.5	58.0	10.7	10.6	4.2	0.9	53.5	62.1
	2015	1176	65.7	10.0	65.7	14.2	7.7	2.0	0.3	67.6	63.7
Oman	2011	1368	44.4	13.3	44.4	20.3	17.3	3.2	1.6	47.1	41.6
	2015	1258	54.1	13.5	54.1	16.3	13.8	1.7	0.5	57.7	51.0
Qatar	2011	635	51.8	12.6	51.8	18.3	13.4	1.8	2.0	49.8	53.7
	2015	777	54.6	13.0	54.6	18.6	10.5	1.1	2.3	55.3	53.8
Russian Federation	2011	707	67.4	14.0	67.4	9.1	5.0	2.0	2.5	66.8	68.0
	2015	685	72.0	12.9	72.0	7.7	4.1	2.1	1.1	71.4	72.7
Saudi Arabia	2011	628	49.0	14.7	49.0	16.7	18.2	1.1	0.2	49.8	48.3
	2015	525	46.2	14.1	46.2	20.2	18.0	1.0	0.5	46.3	46.1
Singapore	2011	847	73.0	12.0	73.0	5.5	8.2	0.9	0.4	73.5	72.6
	2015	872	79.8	6.1	79.8	5.8	7.0	0.9	0.6	82.5	77.3
Slovenia	2011	632	58.4	16.1	58.4	10.9	13.9	0.6	0.1	56.9	59.8
	2015	606	60.2	14.8	60.2	8.1	15.7	0.9	0.2	61.2	59.4
South Africa	2011	1713	45.6	12.5	45.6	18.7	16.5	3.5	3.2	45.4	45.8
	2015	1789	52.5	9.6	52.5	20.0	13.9	2.4	1.6	54.0	51.0
Sweden	2011	779	55.1	11.7	55.1	12.7	15.8	3.2	1.5	57.0	53.4
	2015	577	59.6	11.8	59.6	7.3	13.1	4.7	3.4	66.8	54.5
Thailand	2011	875	63.8	15.1	63.8	10.2	7.5	2.2	1.1	63.9	63.7
	2015	920	65.3	12.4	65.3	10.7	8.7	2.7	0.2	68.7	61.1
Turkey	2011	984	66.6	12.2	66.6	11.1	9.0	0.7	0.4	64.7	68.5
	2015	861	66.2	11.7	66.2	11.0	10.4	0.5	0.1	68.5	64.0
United Arab Emirates	2011	1999	61.0	11.5	61.0	13.5	10.4	1.9	1.7	64.5	57.5
	2015	2582	60.9	9.6	60.9	15.2	11.9	1.5	0.8	62.5	59.4
United States	2011	1508	67.8	10.5	67.8	10.6	9.1	0.9	1.2	67.3	68.3
	2015	1463	64.3	10.1	64.3	10.1	12.3	1.5	1.7	65.5	63.0
International Avg (n=33)	2011	28492	60.6	12.6	60.6	12.4	11.0	2.1	1.3	60.8	60.4
	2015	31124	62.5	11.4	62.5	12.1	11.0	2.0	1.1	63.7	61.3
Ontario, Canada	2011	680	67.4	9.9	67.4	8.6	8.6	2.5	3.1	65.7	68.6
	2015	647	67.9	8.8	67.9	7.9	10.8	1.6	3.0	69.5	66.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_12 (M042158): Data and Chance / Knowing Type: MC Key: B
Label: Difference in high and low temp

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	73.8	10.2	73.8	4.5	7.5	2.6	1.5	69.8	78.2
	2015	553	77.0	7.8	77.0	2.8	6.6	2.2	3.6	74.8	79.3
Norway (8)	2011	551	59.0	9.9	59.0	11.6	15.3	2.7	1.4	59.0	59.1
	2015	696	60.6	12.5	60.6	9.3	12.6	3.5	1.5	64.4	57.1
Abu Dhabi, UAE	2011	624	57.6	12.7	57.6	12.7	12.7	2.3	2.1	58.1	57.1
	2015	698	57.9	10.0	57.9	16.9	12.7	1.3	1.2	57.9	57.9
Dubai, UAE	2011	784	64.8	9.5	64.8	13.1	8.5	2.1	1.9	66.9	62.8
	2015	877	66.7	8.9	66.7	11.2	10.5	1.9	0.8	67.3	66.0
Florida, US	2011	240	72.7	8.9	72.7	9.9	7.8	0.0	0.8	76.8	68.9
	2015	302	62.1	13.7	62.1	9.7	13.5	0.0	1.0	71.3	53.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_13 (M042252): Data and Chance / Applying Type: MC Key: A
Label: Speed time graph

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	50.8	50.8	32.0	10.3	4.4	1.3	1.3	44.3	57.5
	2015	1475	54.8	54.8	27.2	9.6	5.4	1.6	1.5	49.5	60.4
Bahrain	2011	653	23.7	23.7	50.1	15.3	7.2	1.8	1.9	20.9	26.6
	2015	694	25.0	25.0	48.6	17.6	6.4	0.8	1.7	21.2	28.4
Botswana	2011	767	22.1	22.1	50.2	15.0	9.8	0.8	2.1	22.8	21.4
	2015	856	20.4	20.4	49.6	16.2	9.8	1.8	2.1	18.3	22.6
Chile	2011	835	32.0	32.0	39.4	16.2	5.5	2.5	4.5	27.7	36.8
	2015	677	36.9	36.9	39.2	13.0	4.9	2.3	3.8	34.6	39.2
Chinese Taipei	2011	716	64.0	64.0	29.2	3.8	2.1	0.3	0.6	61.7	66.1
	2015	820	68.9	68.9	24.7	4.0	2.1	0.2	0.1	63.9	73.9
England	2011	548	59.0	59.0	21.7	11.9	3.9	1.8	1.6	56.6	61.1
	2015	676	55.4	55.4	26.4	11.4	5.0	0.1	1.7	51.7	59.6
Georgia	2011	655	20.6	20.6	52.3	13.7	6.1	4.6	2.6	15.7	25.2
	2015	579	20.8	20.8	60.1	10.3	3.2	3.5	2.1	18.6	22.9
Hong Kong SAR	2011	571	54.3	54.3	33.1	8.3	3.6	0.3	0.3	48.4	60.6
	2015	596	60.7	60.7	25.9	9.3	3.4	0.3	0.5	56.2	64.4
Hungary	2011	739	39.7	39.7	37.6	14.6	6.1	1.3	0.6	34.0	44.2
	2015	707	47.5	47.5	35.0	10.3	5.7	1.3	0.1	41.0	54.5
Iran, Islamic Rep. of	2011	870	23.7	23.7	46.2	16.3	9.0	1.8	3.0	20.0	26.9
	2015	862	23.2	23.2	49.2	15.0	7.6	2.6	2.4	17.9	28.1
Israel	2011	661	43.2	43.2	36.3	12.2	4.8	1.2	2.3	40.4	46.0
	2015	771	43.6	43.6	33.9	15.6	2.8	1.4	2.7	38.4	48.1
Italy	2011	565	48.6	48.6	30.5	14.7	4.6	0.7	0.8	41.9	55.3
	2015	640	46.2	46.2	34.4	13.4	4.7	0.7	0.6	42.4	50.1
Japan	2011	625	60.8	60.8	25.5	7.5	5.6	0.4	0.3	54.9	67.0
	2015	682	62.4	62.4	21.1	7.8	7.2	0.8	0.7	60.1	64.7
Jordan	2011	1079	18.1	18.1	55.5	14.8	8.1	1.8	1.7	15.6	20.3
	2015	1122	17.6	17.6	57.3	14.3	8.3	1.4	1.2	13.9	21.6
Kazakhstan	2011	622	29.5	29.5	47.8	14.9	4.0	1.5	2.3	20.3	38.1
	2015	701	35.4	35.4	44.6	13.5	2.4	2.7	1.4	30.4	40.9
Korea, Rep. of	2011	742	73.4	73.4	20.3	3.7	2.6	0.0	0.0	71.1	75.8
	2015	757	69.2	69.2	23.3	4.5	2.7	0.0	0.3	68.9	69.4
Lebanon	2011	569	18.9	18.9	43.6	19.1	8.9	5.3	4.2	17.0	21.2
	2015	547	22.3	22.3	36.5	22.4	6.1	8.9	3.8	20.2	24.7
Lithuania	2011	674	50.0	50.0	36.9	8.6	1.5	1.8	1.3	45.7	53.9
	2015	619	55.0	55.0	32.6	8.4	1.8	1.8	0.5	49.8	60.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_13 (M042252): Data and Chance / Applying Type: MC Key: A
Label: Speed time graph

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	29.1	29.1	53.7	9.2	4.1	1.6	2.4	27.6	30.4
	2015	1393	32.8	32.8	47.3	9.1	6.8	1.4	2.6	29.4	36.2
Morocco	2011	1323	23.4	23.4	45.3	15.4	7.2	2.8	5.8	20.8	25.8
	2015	1859	22.9	22.9	46.4	18.1	8.0	2.9	1.8	21.3	24.1
New Zealand	2011	759	51.3	51.3	31.3	8.4	3.5	4.6	0.9	45.1	56.8
	2015	1176	52.5	52.5	29.5	11.9	3.5	2.2	0.4	49.1	56.1
Oman	2011	1368	19.5	19.5	50.6	16.9	7.8	2.8	2.3	16.4	22.8
	2015	1258	26.7	26.7	48.0	16.1	6.6	2.1	0.6	23.7	29.4
Qatar	2011	635	26.6	26.6	40.7	20.8	7.1	2.1	2.7	27.3	25.9
	2015	777	28.1	28.1	45.8	17.8	5.1	0.4	2.8	20.7	35.3
Russian Federation	2011	707	45.1	45.1	36.2	8.3	4.2	2.7	3.5	37.3	52.8
	2015	685	48.2	48.2	33.9	12.1	2.3	2.0	1.6	38.5	57.3
Saudi Arabia	2011	628	23.1	23.1	54.0	15.8	6.0	0.8	0.3	13.8	31.6
	2015	525	23.5	23.5	48.9	14.4	11.6	1.0	0.7	23.1	23.9
Singapore	2011	847	70.6	70.6	21.7	3.4	3.2	0.6	0.6	67.5	73.5
	2015	872	76.4	76.4	17.9	3.3	1.0	0.7	0.8	71.4	80.9
Slovenia	2011	632	49.4	49.4	38.5	7.9	3.1	1.0	0.1	40.1	58.0
	2015	606	56.5	56.5	31.5	7.4	2.0	2.4	0.2	55.4	57.6
South Africa	2011	1713	19.9	19.9	37.5	24.8	12.7	1.4	3.8	16.5	23.2
	2015	1788	23.5	23.5	41.8	20.7	9.8	2.0	2.2	21.4	25.5
Sweden	2011	779	52.2	52.2	27.4	11.6	3.3	3.3	2.1	48.6	55.5
	2015	576	51.5	51.5	27.4	6.3	4.4	6.4	3.9	51.9	51.1
Thailand	2011	875	16.2	16.2	62.3	10.7	6.7	2.3	1.8	13.5	19.4
	2015	919	22.5	22.5	58.5	9.9	6.6	0.9	1.5	21.1	24.2
Turkey	2011	984	31.1	31.1	47.4	9.1	11.4	0.7	0.4	26.2	36.0
	2015	861	34.1	34.1	47.3	6.9	11.2	0.2	0.2	32.3	35.9
United Arab Emirates	2011	1999	28.3	28.3	48.3	14.2	5.6	1.2	2.5	24.7	31.9
	2015	2582	30.2	30.2	45.2	14.9	6.7	2.1	0.9	25.4	34.7
United States	2011	1508	51.4	51.4	31.3	11.8	3.6	0.7	1.4	47.0	55.9
	2015	1463	51.4	51.4	29.8	10.2	5.0	1.6	2.0	45.4	57.3
International Avg (n=33)	2011	28531	38.5	38.5	39.8	12.4	5.7	1.8	1.9	34.3	42.5
	2015	31121	40.8	40.8	38.4	12.0	5.5	1.8	1.5	37.2	44.3
Ontario, Canada	2011	680	50.9	50.9	29.5	11.1	2.4	2.6	3.6	43.7	56.9
	2015	647	52.1	52.1	31.8	9.5	2.1	0.7	3.8	54.7	49.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_13 (M042252): Data and Chance / Applying Type: MC Key: A
Label: Speed time graph

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	50.6	50.6	31.1	10.9	3.0	2.2	2.0	43.7	58.4
	2015	553	51.9	51.9	27.4	11.4	3.1	1.1	5.2	37.7	66.4
Norway (8)	2011	551	52.5	52.5	26.4	13.4	3.0	2.9	1.8	53.6	51.1
	2015	696	53.4	53.4	25.8	13.7	3.7	1.7	1.7	52.4	54.3
Abu Dhabi, UAE	2011	624	24.5	24.5	50.8	13.5	6.5	1.6	3.2	20.1	28.3
	2015	698	26.3	26.3	45.0	16.9	8.1	2.6	1.2	21.2	30.9
Dubai, UAE	2011	784	39.6	39.6	37.8	13.7	5.1	1.2	2.6	33.4	45.3
	2015	877	40.8	40.8	41.2	11.9	4.0	1.1	1.0	35.8	46.4
Florida, US	2011	240	48.8	48.8	33.6	14.7	2.2	0.0	0.8	42.7	54.4
	2015	302	37.4	37.4	45.0	11.4	4.6	0.5	1.0	35.0	39.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_14 (M042261): Data and Chance / Knowing Type: MC Key: C
Label: How likely it will rain

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1061	77.0	0.9	18.8	77.0	0.9	1.1	1.3	71.9	82.3
	2015	1475	78.6	1.0	16.8	78.6	0.7	1.3	1.5	74.9	82.7
Bahrain	2011	653	54.1	14.6	16.0	54.1	11.2	1.8	2.3	55.8	52.4
	2015	695	57.3	9.5	19.1	57.3	11.0	1.5	1.7	59.1	55.5
Botswana	2011	768	24.2	15.1	43.8	24.2	13.6	0.5	2.8	22.5	26.0
	2015	856	28.7	17.5	38.3	28.7	11.3	1.6	2.6	28.9	28.5
Chile	2011	835	47.7	1.2	38.1	47.7	6.6	0.8	5.6	50.6	44.6
	2015	677	49.2	2.9	39.5	49.2	3.5	0.7	4.2	47.7	50.8
Chinese Taipei	2011	716	66.6	0.1	29.2	66.6	2.8	0.6	0.6	67.6	65.7
	2015	820	72.8	0.1	24.4	72.8	2.2	0.2	0.2	72.2	73.3
England	2011	548	82.0	0.5	14.0	82.0	1.6	0.0	1.9	79.9	83.8
	2015	676	84.8	1.1	11.5	84.8	0.5	0.3	1.8	83.0	86.9
Georgia	2011	655	66.7	3.4	19.0	66.7	6.6	1.2	3.2	66.8	66.5
	2015	579	71.6	0.7	18.7	71.6	6.1	0.4	2.4	70.3	72.8
Hong Kong SAR	2011	571	77.3	1.1	19.4	77.3	1.8	0.1	0.3	79.6	74.8
	2015	596	77.3	2.4	18.0	77.3	1.3	0.4	0.6	79.8	75.2
Hungary	2011	739	76.4	0.7	17.9	76.4	3.6	0.6	0.8	75.7	76.9
	2015	707	81.6	0.1	14.1	81.6	3.3	0.4	0.4	82.3	80.8
Iran, Islamic Rep. of	2011	870	77.0	2.3	8.6	77.0	7.4	1.3	3.4	74.8	78.9
	2015	862	84.4	2.5	6.8	84.4	2.9	0.3	3.1	85.4	83.5
Israel	2011	661	56.0	1.8	35.7	56.0	3.0	0.8	2.6	53.1	58.9
	2015	771	58.5	2.4	32.1	58.5	3.2	0.8	3.0	59.4	57.7
Italy	2011	565	49.0	0.4	46.3	49.0	2.7	0.6	1.0	51.0	47.0
	2015	640	46.3	0.7	48.1	46.3	3.1	1.1	0.6	46.2	46.5
Japan	2011	625	82.6	0.4	14.5	82.6	1.8	0.3	0.5	83.8	81.3
	2015	682	83.5	0.3	13.4	83.5	1.8	0.3	0.7	81.2	85.9
Jordan	2011	1079	18.3	5.1	64.7	18.3	8.9	1.0	2.0	14.5	21.8
	2015	1122	15.9	6.2	66.8	15.9	8.9	0.9	1.4	13.9	18.1
Kazakhstan	2011	622	48.1	5.4	32.1	48.1	10.4	1.4	2.4	47.3	48.9
	2015	701	53.7	2.6	34.2	53.7	7.0	1.0	1.5	54.5	52.9
Korea, Rep. of	2011	742	97.4	0.2	1.4	97.4	1.0	0.0	0.0	98.3	96.4
	2015	757	97.5	0.3	1.2	97.5	0.5	0.3	0.3	97.4	97.5
Lebanon	2011	568	21.7	14.0	41.3	21.7	13.0	5.5	4.6	21.6	21.8
	2015	548	24.5	12.3	41.2	24.5	12.4	5.2	4.4	22.0	27.4
Lithuania	2011	674	90.9	1.0	3.7	90.9	3.0	0.1	1.4	92.2	89.7
	2015	619	87.8	0.4	5.7	87.8	4.3	0.9	0.9	88.8	86.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_14 (M042261): Data and Chance / Knowing Type: MC Key: C
Label: How likely it will rain

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	822	26.4	8.1	52.7	26.4	9.3	0.6	3.0	27.4	25.5
	2015	1393	26.7	4.8	58.3	26.7	5.6	1.2	3.4	25.2	28.2
Morocco	2011	1325	17.3	11.4	53.6	17.3	10.1	1.3	6.3	16.1	18.4
	2015	1855	19.2	8.3	57.6	19.2	10.8	1.9	2.2	18.0	20.2
New Zealand	2011	759	78.5	0.7	17.6	78.5	1.6	0.8	0.9	76.8	79.9
	2015	1176	78.2	1.8	18.8	78.2	0.7	0.1	0.4	77.5	78.9
Oman	2011	1368	24.3	7.8	52.8	24.3	11.0	1.7	2.5	22.1	26.6
	2015	1257	21.9	8.9	56.8	21.9	10.4	1.2	0.8	22.0	21.8
Qatar	2011	635	33.1	9.1	44.3	33.1	9.4	1.2	2.8	32.1	34.1
	2015	777	35.9	8.0	47.5	35.9	5.3	0.4	2.9	34.6	37.2
Russian Federation	2011	707	76.8	0.7	13.9	76.8	3.7	0.9	4.1	78.5	75.1
	2015	685	80.9	0.4	13.2	80.9	2.9	0.8	1.7	82.8	79.1
Saudi Arabia	2011	629	23.2	7.0	63.1	23.2	5.5	0.8	0.3	17.4	28.6
	2015	525	26.5	6.6	60.7	26.5	4.7	0.8	0.7	24.3	28.9
Singapore	2011	847	77.7	6.1	13.8	77.7	1.7	0.1	0.7	78.9	76.5
	2015	872	81.7	3.5	12.9	81.7	1.1	0.0	0.8	80.0	83.2
Slovenia	2011	632	80.8	1.1	13.8	80.8	3.9	0.3	0.1	78.8	82.6
	2015	606	76.8	1.4	18.6	76.8	2.2	0.7	0.2	75.3	78.2
South Africa	2011	1713	26.2	16.7	33.4	26.2	19.0	0.4	4.2	27.0	25.4
	2015	1788	30.5	15.2	35.1	30.5	15.3	1.1	2.8	32.6	28.4
Sweden	2011	779	52.2	1.9	38.7	52.2	3.8	1.0	2.4	49.0	55.1
	2015	578	56.6	1.1	31.3	56.6	3.0	3.5	4.5	52.4	60.4
Thailand	2011	875	49.4	2.9	37.6	49.4	7.0	0.9	2.2	47.8	51.3
	2015	920	43.6	3.8	42.3	43.6	7.8	0.8	1.7	42.9	44.6
Turkey	2011	984	78.6	3.2	7.7	78.6	9.7	0.2	0.6	78.9	78.3
	2015	861	80.7	3.1	5.3	80.7	10.1	0.5	0.2	82.3	79.2
United Arab Emirates	2011	1999	34.0	5.9	49.0	34.0	6.8	1.7	2.6	31.8	36.2
	2015	2582	44.5	5.2	42.5	44.5	5.1	1.4	1.3	44.6	44.5
United States	2011	1508	76.5	1.3	18.4	76.5	1.2	1.0	1.4	74.2	79.0
	2015	1463	76.6	2.5	16.8	76.6	1.4	0.7	2.0	74.2	78.9
International Avg (n=33)	2011	28534	56.6	4.6	29.5	56.6	6.2	0.9	2.1	55.9	57.3
	2015	31121	58.6	4.2	29.3	58.6	5.2	1.0	1.7	58.1	59.2
Ontario, Canada	2011	680	83.1	1.9	9.7	83.1	0.2	0.7	4.5	81.3	84.5
	2015	647	83.4	1.2	10.5	83.4	1.1	0.0	3.8	83.5	83.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M07_14 (M042261): Data and Chance / Knowing Type: MC Key: C
Label: How likely it will rain

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	871	81.6	0.8	11.9	81.6	2.3	1.0	2.3	83.5	79.5
	2015	552	77.8	0.7	13.0	77.8	2.3	0.3	5.9	76.1	79.5
Norway (8)	2011	551	67.3	2.2	24.4	67.3	2.5	1.1	2.5	68.7	65.5
	2015	696	70.3	1.7	20.9	70.3	2.8	2.5	1.8	68.2	72.3
Abu Dhabi, UAE	2011	624	34.4	5.2	48.8	34.4	7.1	1.3	3.2	30.7	37.6
	2015	698	44.2	4.2	44.3	44.2	4.4	1.2	1.7	43.1	45.2
Dubai, UAE	2011	784	42.1	4.6	42.2	42.1	6.0	2.4	2.7	37.1	46.6
	2015	877	58.0	6.0	30.2	58.0	3.7	0.6	1.5	57.3	58.8
Florida, US	2011	240	73.6	2.0	21.7	73.6	1.6	0.4	0.8	69.8	77.1
	2015	302	66.2	5.2	23.2	66.2	4.4	0.0	1.0	66.1	66.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_01 (M052413): Number / Knowing Type: MC Key: A
Label: Solve given numeric expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	65.3	65.3	24.7	3.0	5.5	1.6	0.0	67.3	63.3
	2015	1456	66.6	66.6	23.9	2.9	5.0	1.4	0.2	71.2	61.9
Bahrain	2011	661	47.6	47.6	33.9	5.1	12.1	1.1	0.2	54.8	40.0
	2015	706	61.8	61.8	22.5	5.6	9.5	0.6	0.0	67.0	57.2
Botswana	2011	773	39.5	39.5	35.5	8.1	15.3	1.6	0.0	43.0	35.8
	2015	851	61.6	61.6	19.9	2.4	15.8	0.3	0.0	61.3	61.8
Chile	2011	827	43.8	43.8	45.5	4.2	5.3	1.0	0.2	46.2	41.0
	2015	678	47.5	47.5	36.7	6.6	6.1	2.8	0.3	50.8	44.7
Chinese Taipei	2011	716	84.0	84.0	14.3	1.1	0.4	0.2	0.0	85.4	82.7
	2015	808	82.3	82.3	15.2	1.0	1.4	0.1	0.0	82.9	81.7
England	2011	554	59.2	59.2	31.6	2.6	5.3	1.4	0.0	58.6	59.7
	2015	686	62.4	62.4	24.8	3.5	7.4	1.8	0.0	64.2	60.6
Georgia	2011	655	51.0	51.0	30.3	4.8	8.9	4.9	0.1	51.7	50.3
	2015	581	54.8	54.8	29.7	6.2	7.4	1.9	0.0	57.1	53.0
Hong Kong SAR	2011	576	90.2	90.2	8.0	0.8	0.7	0.2	0.2	91.9	88.5
	2015	590	92.0	92.0	5.8	0.7	1.2	0.3	0.0	91.8	92.3
Hungary	2011	737	68.4	68.4	19.3	3.0	8.4	1.0	0.0	69.6	67.3
	2015	691	67.1	67.1	23.1	3.0	5.9	0.8	0.0	68.9	65.5
Iran, Islamic Rep. of	2011	847	44.9	44.9	31.6	11.8	9.9	1.8	0.0	47.7	42.4
	2015	871	57.8	57.8	24.7	5.6	9.7	1.6	0.7	62.9	53.1
Israel	2011	677	81.0	81.0	10.5	1.0	5.7	1.5	0.3	84.8	77.2
	2015	790	79.5	79.5	8.9	2.9	7.1	1.4	0.2	81.8	77.4
Italy	2011	566	65.0	65.0	26.4	2.5	3.5	2.4	0.2	68.5	61.7
	2015	627	62.3	62.3	26.5	3.2	6.4	1.5	0.0	64.9	60.0
Japan	2011	628	84.8	84.8	11.1	0.7	2.6	0.9	0.0	85.2	84.3
	2015	670	86.9	86.9	10.1	0.9	1.8	0.3	0.0	87.5	86.2
Jordan	2011	1100	44.6	44.6	32.6	8.7	11.9	2.2	0.0	47.6	41.6
	2015	1122	41.2	41.2	33.0	12.6	11.7	1.4	0.2	45.0	37.2
Kazakhstan	2011	633	71.0	71.0	22.7	2.9	2.9	0.5	0.0	74.0	67.9
	2015	696	75.5	75.5	16.1	1.7	6.1	0.6	0.0	77.4	73.9
Korea, Rep. of	2011	736	80.8	80.8	17.0	1.2	0.9	0.1	0.0	81.4	80.3
	2015	749	79.6	79.6	18.1	0.8	1.2	0.2	0.0	81.1	78.1
Lebanon	2011	566	86.2	86.2	7.6	1.4	4.3	0.5	0.0	87.4	84.8
	2015	543	54.9	54.9	17.9	8.3	8.4	9.8	0.6	57.3	51.8
Lithuania	2011	672	67.1	67.1	25.1	0.9	6.8	0.1	0.0	73.8	59.5
	2015	619	69.4	69.4	24.4	1.1	4.7	0.3	0.0	74.0	64.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_01 (M052413): Number / Knowing Type: MC Key: A
Label: Solve given numeric expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	82.2	82.2	10.9	1.9	4.4	0.6	0.0	88.0	76.1
	2015	1389	90.5	90.5	5.4	1.1	2.6	0.2	0.2	94.1	87.2
Morocco	2011	1287	38.3	38.3	32.0	6.7	18.7	3.8	0.5	39.1	37.5
	2015	1881	41.7	41.7	28.9	6.5	19.9	2.9	0.1	46.8	36.8
New Zealand	2011	745	57.2	57.2	31.7	4.1	5.5	1.5	0.0	55.2	58.9
	2015	1179	58.9	58.9	29.4	2.9	6.2	2.5	0.2	61.5	56.1
Oman	2011	1364	51.4	51.4	23.9	8.1	15.0	1.5	0.2	57.2	45.2
	2015	1273	59.7	59.7	20.9	5.9	12.2	1.2	0.2	64.1	55.9
Qatar	2011	633	40.7	40.7	30.5	7.1	20.4	1.3	0.0	39.3	42.2
	2015	762	39.7	39.7	27.6	7.7	23.5	1.0	0.5	40.3	39.1
Russian Federation	2011	708	82.8	82.8	12.0	0.8	3.5	0.6	0.3	86.9	78.4
	2015	686	82.0	82.0	11.8	0.4	5.7	0.0	0.0	82.7	81.5
Saudi Arabia	2011	609	38.0	38.0	34.8	6.7	19.5	0.9	0.0	37.4	38.6
	2015	540	35.5	35.5	35.8	8.8	19.6	0.3	0.0	36.2	34.8
Singapore	2011	843	93.5	93.5	4.0	1.0	1.3	0.2	0.0	95.2	92.0
	2015	870	95.4	95.4	2.9	0.6	1.0	0.1	0.0	96.4	94.5
Slovenia	2011	621	70.8	70.8	24.1	0.5	4.1	0.4	0.0	75.1	66.3
	2015	613	72.1	72.1	19.9	2.2	5.3	0.5	0.0	74.4	69.9
South Africa	2011	1697	51.3	51.3	23.1	5.7	18.2	1.8	0.0	50.3	52.0
	2015	1793	61.0	61.0	22.0	4.3	11.6	0.9	0.1	62.6	59.4
Sweden	2011	784	28.0	28.0	51.8	4.7	11.6	3.8	0.1	28.8	27.3
	2015	585	27.2	27.2	47.0	6.5	16.5	2.5	0.2	28.5	25.9
Thailand	2011	886	41.1	41.1	45.4	4.0	9.1	0.4	0.0	42.5	39.4
	2015	928	39.6	39.6	44.1	4.5	11.1	0.7	0.0	41.6	37.3
Turkey	2011	988	46.2	46.2	32.8	8.6	9.3	3.1	0.0	43.2	49.3
	2015	869	44.4	44.4	34.2	9.3	10.7	1.4	0.0	46.9	42.2
United Arab Emirates	2011	2005	78.5	78.5	13.9	2.1	5.1	0.4	0.0	81.2	75.9
	2015	2589	75.8	75.8	13.5	3.1	5.8	1.6	0.2	79.9	71.8
United States	2011	1485	70.1	70.1	23.3	1.9	4.3	0.3	0.1	71.0	69.2
	2015	1463	78.2	78.2	13.8	2.5	4.6	0.8	0.1	80.3	75.9
International Avg (n=33)	2011	28498	62.0	62.0	24.9	3.9	7.9	1.3	0.1	63.9	59.9
	2015	31154	63.8	63.8	22.4	4.1	8.3	1.3	0.1	66.2	61.5
Ontario, Canada	2011	670	56.5	56.5	34.6	1.9	6.1	0.8	0.0	57.3	55.8
	2015	643	62.9	62.9	26.8	4.2	5.6	0.2	0.3	65.3	60.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_01 (M052413): Number / Knowing Type: MC Key: A
Label: Solve given numeric expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	74.3	74.3	17.1	2.0	5.3	1.2	0.0	74.8	73.8
	2015	564	82.2	82.2	9.1	1.4	5.5	0.7	1.1	86.0	78.2
Norway (8)	2011	551	31.3	31.3	46.5	5.2	13.6	3.1	0.2	34.0	28.7
	2015	691	28.7	28.7	45.9	6.4	13.6	5.2	0.3	27.5	29.6
Abu Dhabi, UAE	2011	626	76.0	76.0	14.0	2.7	6.9	0.3	0.0	77.6	74.7
	2015	699	76.4	76.4	13.5	3.3	6.0	0.8	0.0	83.8	69.5
Dubai, UAE	2011	793	75.3	75.3	15.7	2.4	5.8	0.7	0.0	79.3	71.4
	2015	885	80.3	80.3	11.5	1.1	5.9	1.0	0.1	82.1	78.4
Florida, US	2011	242	78.6	78.6	13.8	2.0	5.5	0.0	0.0	77.0	80.5
	2015	301	66.6	66.6	22.6	2.7	7.9	0.2	0.0	71.1	62.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_02 (M052134): Number / Knowing Type: MC Key: D
Label: How much hotter is city A than B

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	77.1	5.9	4.2	11.7	77.1	1.1	0.0	73.1	80.9
	2015	1456	79.4	3.7	4.8	10.5	79.4	1.4	0.2	77.9	80.9
Bahrain	2011	661	43.4	14.8	14.9	25.9	43.4	0.8	0.2	43.8	43.0
	2015	706	56.7	9.5	10.7	22.1	56.7	1.0	0.0	54.2	58.9
Botswana	2011	773	33.2	15.7	19.4	31.3	33.2	0.4	0.0	33.3	33.1
	2015	851	52.9	11.0	10.0	25.6	52.9	0.6	0.0	54.4	51.3
Chile	2011	827	62.1	6.1	8.2	22.5	62.1	0.9	0.2	57.0	67.7
	2015	678	59.4	8.4	9.4	20.6	59.4	2.0	0.3	51.4	66.3
Chinese Taipei	2011	716	86.0	2.2	1.9	9.8	86.0	0.0	0.0	84.8	87.3
	2015	808	86.3	2.9	3.0	7.7	86.3	0.1	0.0	87.0	85.7
England	2011	554	87.0	5.2	1.1	6.2	87.0	0.4	0.1	87.1	86.8
	2015	686	84.7	6.2	2.8	5.7	84.7	0.6	0.0	82.6	86.9
Georgia	2011	655	45.5	9.8	14.9	28.4	45.5	1.3	0.1	39.3	51.1
	2015	581	57.5	6.8	11.2	23.4	57.5	1.1	0.0	50.1	63.2
Hong Kong SAR	2011	576	85.1	2.3	2.7	9.6	85.1	0.2	0.2	84.7	85.4
	2015	590	89.1	3.2	1.2	6.1	89.1	0.3	0.0	88.0	90.1
Hungary	2011	737	81.1	3.9	5.5	9.1	81.1	0.4	0.0	79.3	82.6
	2015	691	79.6	3.4	3.9	12.6	79.6	0.4	0.1	77.4	81.6
Iran, Islamic Rep. of	2011	847	36.1	7.4	19.2	36.7	36.1	0.5	0.1	27.1	43.6
	2015	871	40.2	9.3	14.0	35.2	40.2	0.7	0.7	31.0	48.6
Israel	2011	677	74.5	4.9	2.2	16.6	74.5	1.1	0.7	72.6	76.4
	2015	790	73.5	5.7	5.0	15.0	73.5	0.7	0.2	69.7	76.9
Italy	2011	566	69.1	4.2	3.8	22.1	69.1	0.7	0.2	59.1	78.6
	2015	627	66.4	4.5	8.0	19.6	66.4	1.5	0.0	60.2	71.8
Japan	2011	628	79.9	2.1	3.3	14.1	79.9	0.6	0.0	78.3	81.3
	2015	670	83.2	2.0	2.7	11.5	83.2	0.6	0.0	80.9	85.5
Jordan	2011	1100	37.0	14.0	16.3	31.9	37.0	0.7	0.0	32.0	42.0
	2015	1122	37.2	18.7	17.2	25.8	37.2	0.9	0.2	36.4	38.0
Kazakhstan	2011	633	54.7	10.5	10.0	24.1	54.7	0.7	0.0	47.2	62.5
	2015	696	57.9	8.9	13.0	19.4	57.9	0.7	0.0	54.1	61.3
Korea, Rep. of	2011	736	85.4	2.2	2.6	9.7	85.4	0.1	0.0	82.3	88.6
	2015	749	81.0	2.5	2.6	13.5	81.0	0.5	0.0	79.6	82.3
Lebanon	2011	560	43.2	6.8	3.7	44.3	43.2	2.0	0.0	43.0	43.5
	2015	543	28.1	43.5	5.1	18.9	28.1	3.8	0.6	29.4	26.4
Lithuania	2011	672	67.9	5.6	6.7	19.3	67.9	0.4	0.0	65.6	70.6
	2015	619	73.4	2.1	6.5	17.3	73.4	0.8	0.0	69.5	77.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_02 (M052134): Number / Knowing Type: MC Key: D
Label: How much hotter is city A than B

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	48.9	10.2	11.2	28.9	48.9	0.8	0.0	50.3	47.4
	2015	1389	54.3	7.4	8.3	29.4	54.3	0.3	0.2	57.9	51.1
Morocco	2011	1287	25.6	11.5	21.7	38.2	25.6	2.5	0.5	21.3	29.5
	2015	1881	29.4	12.9	21.4	34.1	29.4	2.1	0.1	27.2	31.4
New Zealand	2011	745	78.7	4.8	4.0	11.6	78.7	0.9	0.0	75.7	81.1
	2015	1179	73.8	6.5	4.6	13.5	73.8	1.4	0.2	72.6	75.1
Oman	2011	1364	36.2	12.4	13.6	36.7	36.2	0.9	0.2	35.5	36.8
	2015	1273	44.8	10.2	11.5	31.8	44.8	1.5	0.2	45.2	44.4
Qatar	2011	633	44.0	11.6	13.0	30.4	44.0	1.1	0.0	38.8	49.0
	2015	762	46.8	13.1	13.1	25.1	46.8	1.5	0.5	40.2	53.7
Russian Federation	2011	708	72.4	4.3	4.7	17.6	72.4	0.7	0.3	68.8	76.4
	2015	686	75.6	4.2	5.8	13.6	75.6	0.7	0.0	72.6	78.2
Saudi Arabia	2011	610	36.1	10.8	15.0	37.8	36.1	0.4	0.0	30.3	41.9
	2015	539	30.6	12.1	23.7	33.6	30.6	0.0	0.0	28.2	33.0
Singapore	2011	843	87.8	3.9	1.8	6.1	87.8	0.3	0.0	88.1	87.5
	2015	870	88.5	2.8	1.5	7.1	88.5	0.1	0.0	88.5	88.5
Slovenia	2011	621	85.4	2.0	1.5	10.7	85.4	0.4	0.0	81.8	89.2
	2015	613	87.5	3.3	2.0	6.9	87.5	0.4	0.0	85.5	89.3
South Africa	2011	1697	34.3	23.0	11.7	28.6	34.3	2.3	0.0	33.9	34.7
	2015	1793	37.9	17.7	9.4	33.7	37.9	1.2	0.1	37.3	38.7
Sweden	2011	784	86.8	3.7	2.8	5.7	86.8	1.0	0.1	86.3	87.3
	2015	585	84.2	2.2	2.4	7.3	84.2	3.7	0.2	82.7	85.9
Thailand	2011	886	36.6	9.5	18.2	35.4	36.6	0.3	0.1	31.1	43.0
	2015	928	34.3	12.7	17.6	35.0	34.3	0.4	0.0	32.4	36.4
Turkey	2011	988	51.5	8.8	10.8	28.5	51.5	0.4	0.0	43.1	59.8
	2015	869	51.6	11.2	11.1	25.4	51.6	0.6	0.0	45.0	57.6
United Arab Emirates	2011	2005	61.3	8.3	6.5	23.2	61.3	0.7	0.0	64.3	58.3
	2015	2589	60.1	8.9	6.4	22.9	60.1	1.4	0.2	59.6	60.7
United States	2011	1485	71.6	6.6	6.0	15.6	71.6	0.2	0.1	68.1	74.9
	2015	1463	77.1	5.7	3.1	13.1	77.1	0.8	0.1	75.7	78.5
International Avg (n=33)	2011	28493	60.8	7.7	8.6	22.1	60.8	0.8	0.1	57.8	63.7
	2015	31153	62.5	8.6	8.3	19.5	62.5	1.0	0.1	60.1	64.7
Ontario, Canada	2011	670	80.2	6.0	4.0	9.6	80.2	0.1	0.1	79.8	80.6
	2015	643	77.4	4.6	4.8	12.6	77.4	0.2	0.3	77.7	77.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_02 (M052134): Number / Knowing Type: MC Key: D
Label: How much hotter is city A than B

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	82.2	5.5	1.9	10.1	82.2	0.3	0.0	79.9	84.7
	2015	565	83.6	3.7	0.4	10.8	83.6	0.4	1.1	81.8	85.6
Norway (8)	2011	551	82.3	3.8	3.5	9.3	82.3	0.9	0.2	80.9	83.6
	2015	691	81.5	2.6	3.5	8.5	81.5	3.7	0.3	84.3	79.2
Abu Dhabi, UAE	2011	626	56.6	10.2	6.5	26.3	56.6	0.5	0.0	61.5	52.3
	2015	699	57.7	8.7	6.9	25.1	57.7	1.6	0.1	60.0	55.5
Dubai, UAE	2011	793	68.7	6.0	4.1	20.4	68.7	0.8	0.0	70.4	67.1
	2015	885	67.7	6.4	7.4	17.3	67.7	1.1	0.1	65.1	70.5
Florida, US	2011	242	76.8	6.5	4.0	12.4	76.8	0.3	0.0	80.0	73.1
	2015	301	70.3	6.2	7.1	16.0	70.3	0.2	0.2	68.6	71.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_03 (M052078): Number / Applying Type: MC Key: B
Label: Percentage of money John saves

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	46.7	20.3	46.7	25.9	5.6	1.5	0.0	42.6	50.6
	2015	1456	48.4	22.9	48.4	22.5	3.1	2.9	0.2	46.0	50.9
Bahrain	2011	661	25.4	47.0	25.4	19.2	6.5	1.6	0.2	21.5	29.6
	2015	706	24.8	30.9	24.8	33.9	9.1	1.3	0.0	21.4	27.8
Botswana	2011	773	26.8	25.1	26.8	41.0	6.0	1.1	0.0	26.6	27.0
	2015	851	25.6	25.1	25.6	43.6	3.9	1.7	0.0	24.4	26.8
Chile	2011	827	38.6	33.0	38.6	20.7	4.8	2.8	0.2	36.2	41.1
	2015	678	38.1	28.6	38.1	22.9	6.4	3.8	0.3	33.5	42.0
Chinese Taipei	2011	716	48.7	36.6	48.7	11.8	2.5	0.5	0.0	44.0	53.2
	2015	808	55.8	29.4	55.8	11.6	3.2	0.1	0.0	51.4	59.8
England	2011	554	47.3	26.0	47.3	22.7	3.6	0.2	0.1	43.3	51.3
	2015	686	45.0	23.6	45.0	22.7	5.9	2.7	0.0	43.5	46.6
Georgia	2011	655	27.5	51.3	27.5	15.0	2.9	3.2	0.1	23.8	30.9
	2015	581	33.7	40.3	33.7	18.4	3.6	4.2	0.0	24.7	40.6
Hong Kong SAR	2011	576	59.8	13.7	59.8	22.9	2.9	0.5	0.2	57.1	62.4
	2015	590	63.2	9.1	63.2	24.6	2.5	0.5	0.0	61.3	64.8
Hungary	2011	737	47.8	21.8	47.8	26.6	2.5	1.3	0.0	47.1	48.4
	2015	691	45.9	17.8	45.9	33.0	2.1	1.2	0.1	42.3	49.1
Iran, Islamic Rep. of	2011	847	26.0	54.4	26.0	11.9	5.5	2.0	0.1	21.9	29.5
	2015	871	27.9	48.0	27.9	14.1	6.1	3.2	0.7	22.4	33.0
Israel	2011	677	43.2	26.3	43.2	25.2	2.9	1.5	0.8	40.5	45.9
	2015	790	40.2	21.8	40.2	29.3	6.0	2.5	0.2	35.0	45.0
Italy	2011	566	35.8	38.5	35.8	21.8	2.9	1.0	0.2	29.6	41.6
	2015	627	42.4	34.3	42.4	20.1	1.7	1.5	0.0	38.4	46.0
Japan	2011	628	50.0	17.3	50.0	26.2	5.4	1.1	0.0	45.9	53.7
	2015	670	53.4	14.3	53.4	28.4	3.4	0.6	0.0	49.5	57.4
Jordan	2011	1100	25.1	51.4	25.1	15.7	5.6	2.2	0.0	21.7	28.6
	2015	1122	22.5	52.6	22.5	15.2	7.1	2.4	0.2	19.2	26.1
Kazakhstan	2011	633	40.7	41.9	40.7	13.9	2.4	1.3	0.0	28.8	53.1
	2015	696	46.1	31.4	46.1	19.4	2.3	0.8	0.0	46.7	45.5
Korea, Rep. of	2011	736	62.6	14.9	62.6	20.3	1.8	0.4	0.0	59.1	66.3
	2015	749	59.7	15.1	59.7	22.8	2.3	0.1	0.0	61.8	57.6
Lebanon	2011	565	23.4	54.3	23.4	16.2	2.2	3.9	0.0	21.0	26.1
	2015	543	13.9	30.7	13.9	24.6	24.2	5.9	0.6	13.9	13.9
Lithuania	2011	672	46.9	28.4	46.9	20.1	4.2	0.4	0.0	41.9	52.6
	2015	619	43.9	27.9	43.9	24.3	2.6	1.3	0.0	39.2	48.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_03 (M052078): Number / Applying Type: MC Key: B
Label: Percentage of money John saves

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	32.6	42.6	32.6	18.8	4.4	1.6	0.0	31.4	33.9
	2015	1389	38.4	41.5	38.4	14.7	3.4	1.8	0.2	38.5	38.2
Morocco	2011	1286	21.8	52.4	21.8	16.9	4.8	3.7	0.5	20.7	22.7
	2015	1881	20.3	53.5	20.3	18.9	4.5	2.7	0.1	18.9	21.8
New Zealand	2011	745	43.6	24.2	43.6	23.3	7.3	1.6	0.0	43.2	44.0
	2015	1179	45.0	24.6	45.0	22.8	5.7	1.7	0.2	43.3	46.9
Oman	2011	1364	19.9	58.5	19.9	13.0	6.1	2.3	0.3	15.4	24.6
	2015	1273	22.6	56.1	22.6	14.0	4.9	2.2	0.2	16.5	28.0
Qatar	2011	633	28.0	41.6	28.0	22.1	6.2	2.1	0.0	24.6	31.4
	2015	762	31.8	33.6	31.8	26.6	4.9	2.6	0.5	26.6	37.2
Russian Federation	2011	708	52.2	25.5	52.2	17.8	2.0	2.2	0.3	47.3	57.5
	2015	686	50.5	22.6	50.5	21.9	3.1	1.9	0.0	47.8	52.8
Saudi Arabia	2011	610	24.5	46.4	24.5	20.7	7.3	1.1	0.0	19.2	29.6
	2015	540	25.1	48.2	25.1	17.8	8.6	0.3	0.0	21.0	29.3
Singapore	2011	843	78.5	4.0	78.5	15.7	1.5	0.3	0.0	81.3	75.9
	2015	870	78.9	3.8	78.9	15.9	1.2	0.2	0.0	81.7	76.2
Slovenia	2011	621	47.1	17.7	47.1	29.7	2.9	2.6	0.0	47.1	47.2
	2015	613	42.9	17.2	42.9	34.8	3.6	1.6	0.0	41.0	44.6
South Africa	2011	1697	19.3	50.3	19.3	21.5	7.3	1.6	0.0	19.2	19.4
	2015	1793	21.9	52.8	21.9	19.2	4.7	1.2	0.2	20.3	23.5
Sweden	2011	784	39.7	17.1	39.7	34.2	7.1	1.8	0.2	35.6	43.2
	2015	585	44.3	14.8	44.3	32.4	6.3	2.0	0.2	42.4	46.4
Thailand	2011	886	26.5	49.0	26.5	15.5	5.4	3.6	0.1	24.8	28.5
	2015	928	32.1	43.4	32.1	15.0	7.3	2.1	0.1	30.6	33.8
Turkey	2011	988	31.5	44.6	31.5	15.8	5.5	2.5	0.0	27.3	35.6
	2015	869	37.1	42.9	37.1	14.6	4.9	0.6	0.0	33.2	40.6
United Arab Emirates	2011	2005	30.3	43.9	30.3	20.6	4.2	1.0	0.0	24.4	36.0
	2015	2589	32.8	39.7	32.8	20.3	4.5	2.5	0.3	29.8	35.8
United States	2011	1485	42.8	27.9	42.8	26.1	2.7	0.5	0.1	39.2	46.3
	2015	1463	40.6	28.9	40.6	26.5	3.0	0.6	0.3	36.1	45.4
International Avg (n=33)	2011	28497	38.2	34.8	38.2	20.9	4.4	1.7	0.1	34.9	41.4
	2015	31154	39.2	31.1	39.2	22.6	5.0	1.8	0.1	36.4	41.9
Ontario, Canada	2011	670	43.5	23.3	43.5	28.5	3.7	1.0	0.1	40.4	46.4
	2015	643	41.3	21.0	41.3	33.3	3.9	0.2	0.3	38.1	44.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_03 (M052078): Number / Applying Type: MC Key: B
Label: Percentage of money John saves

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	50.6	17.5	50.6	28.5	1.8	1.5	0.0	49.4	52.1
	2015	565	48.4	11.5	48.4	35.9	2.1	1.0	1.1	44.4	52.6
Norway (8)	2011	551	38.7	16.7	38.7	33.3	8.8	2.3	0.2	34.7	42.4
	2015	691	43.5	17.5	43.5	28.3	6.7	3.8	0.3	37.7	48.8
Abu Dhabi, UAE	2011	626	29.7	47.6	29.7	16.7	5.3	0.6	0.0	22.3	36.2
	2015	699	31.5	40.7	31.5	19.7	5.1	2.7	0.2	28.8	34.1
Dubai, UAE	2011	793	37.0	35.4	37.0	21.8	4.7	1.1	0.1	32.6	41.2
	2015	885	43.3	29.8	43.3	20.9	4.4	1.4	0.1	38.8	48.2
Florida, US	2011	242	38.7	35.1	38.7	21.2	4.2	0.8	0.0	30.6	48.0
	2015	301	40.8	31.4	40.8	22.3	4.5	0.6	0.4	38.5	42.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_04 (M052034): Number / Knowing Type: MC Key: C
Label: Fraction wanting to go on a trip

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	52.8	6.5	11.8	52.8	28.0	0.9	0.0	51.1	54.4
	2015	1456	56.7	7.8	11.8	56.7	22.5	0.9	0.2	56.6	56.8
Bahrain	2011	661	44.7	11.6	14.9	44.7	26.7	1.9	0.2	48.4	40.8
	2015	706	50.7	14.9	15.5	50.7	17.3	1.5	0.0	52.4	49.3
Botswana	2011	773	36.5	16.1	12.1	36.5	33.9	1.4	0.0	36.8	36.2
	2015	851	38.5	11.6	15.3	38.5	31.8	2.6	0.0	43.4	33.9
Chile	2011	827	41.6	11.0	16.5	41.6	26.7	3.6	0.5	40.8	42.5
	2015	677	44.0	9.0	19.4	44.0	22.0	5.3	0.3	44.5	43.5
Chinese Taipei	2011	716	69.4	5.4	5.8	69.4	19.1	0.4	0.0	69.3	69.4
	2015	808	69.6	5.2	6.4	69.6	18.7	0.1	0.0	70.4	68.9
England	2011	554	58.8	8.4	11.8	58.8	20.4	0.5	0.1	54.2	63.3
	2015	686	54.0	9.0	14.7	54.0	21.8	0.6	0.0	52.6	55.4
Georgia	2011	654	34.6	23.2	16.1	34.6	21.7	4.3	0.1	31.4	37.4
	2015	581	38.1	19.7	17.5	38.1	22.5	2.3	0.0	35.2	40.3
Hong Kong SAR	2011	576	76.2	4.6	4.6	76.2	14.2	0.2	0.2	77.0	75.3
	2015	590	77.5	5.8	3.9	77.5	12.4	0.4	0.0	78.8	76.4
Hungary	2011	737	51.6	7.4	16.0	51.6	23.7	1.3	0.0	50.1	52.9
	2015	691	49.6	9.5	15.9	49.6	24.0	1.0	0.1	46.3	52.5
Iran, Islamic Rep. of	2011	847	41.0	10.1	12.2	41.0	34.8	1.8	0.1	38.1	43.5
	2015	871	49.3	8.6	14.3	49.3	24.0	3.1	0.8	51.7	47.0
Israel	2011	677	58.5	7.7	13.5	58.5	18.1	1.4	0.8	56.8	60.2
	2015	790	61.2	6.8	13.6	61.2	16.0	2.2	0.2	59.0	63.2
Italy	2011	566	53.0	7.3	8.6	53.0	29.5	1.4	0.2	49.7	56.1
	2015	627	46.2	6.7	15.1	46.2	29.3	2.6	0.0	48.1	44.6
Japan	2011	628	67.3	4.9	6.1	67.3	21.3	0.5	0.0	70.9	64.0
	2015	670	67.6	2.5	4.2	67.6	25.0	0.7	0.0	71.0	64.1
Jordan	2011	1100	44.3	10.6	14.8	44.3	28.5	1.8	0.0	44.9	43.7
	2015	1122	43.6	12.3	15.2	43.6	25.6	3.2	0.2	46.5	40.6
Kazakhstan	2011	633	38.3	18.9	10.9	38.3	29.5	2.3	0.0	37.3	39.5
	2015	696	55.2	10.4	12.7	55.2	19.7	2.0	0.0	57.7	52.9
Korea, Rep. of	2011	736	80.4	6.8	3.7	80.4	9.0	0.1	0.0	82.6	78.0
	2015	749	74.9	7.8	5.4	74.9	11.9	0.0	0.0	75.7	74.1
Lebanon	2011	565	44.7	9.2	12.6	44.7	28.1	5.1	0.2	46.4	42.8
	2015	543	27.4	22.1	20.5	27.4	20.2	9.1	0.6	26.1	28.9
Lithuania	2011	672	45.0	14.5	14.9	45.0	24.7	0.9	0.0	40.3	50.5
	2015	619	48.2	11.6	15.6	48.2	21.6	2.9	0.0	46.6	49.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_04 (M052034): Number / Knowing Type: MC Key: C
Label: Fraction wanting to go on a trip

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	50.8	10.9	13.9	50.8	21.6	2.8	0.0	51.1	50.4
	2015	1389	55.5	9.5	13.2	55.5	20.7	0.8	0.3	56.8	54.3
Morocco	2011	1286	39.0	12.0	22.5	39.0	19.7	6.2	0.5	42.7	35.6
	2015	1887	36.4	13.5	20.3	36.4	24.0	5.5	0.2	38.9	34.0
New Zealand	2011	745	55.2	6.9	11.8	55.2	24.5	1.6	0.0	54.8	55.5
	2015	1179	56.0	9.3	11.8	56.0	22.2	0.5	0.3	54.4	57.6
Oman	2011	1364	38.0	12.9	20.8	38.0	23.2	4.8	0.3	39.5	36.4
	2015	1273	41.6	12.6	18.5	41.6	24.0	3.2	0.2	44.1	39.3
Qatar	2011	633	45.2	12.1	16.5	45.2	23.4	2.8	0.0	44.7	45.7
	2015	761	40.6	10.7	18.2	40.6	24.8	5.1	0.5	39.7	41.7
Russian Federation	2011	708	57.4	10.9	9.4	57.4	19.5	2.6	0.3	59.4	55.3
	2015	686	52.4	10.4	10.5	52.4	24.7	2.2	0.0	47.5	56.5
Saudi Arabia	2011	610	43.9	11.8	19.2	43.9	24.5	0.6	0.0	44.4	43.5
	2015	540	36.6	10.6	21.9	36.6	29.3	1.7	0.0	39.4	33.7
Singapore	2011	843	85.6	2.6	4.7	85.6	6.7	0.3	0.0	88.7	82.7
	2015	870	88.4	1.6	4.9	88.4	5.0	0.1	0.0	90.5	86.3
Slovenia	2011	621	57.7	5.4	10.1	57.7	24.8	2.0	0.0	58.5	56.9
	2015	613	60.9	6.3	6.7	60.9	24.5	1.6	0.0	58.8	62.8
South Africa	2011	1697	38.9	13.8	19.9	38.9	24.3	3.0	0.1	39.5	38.3
	2015	1793	35.0	11.2	16.0	35.0	35.4	2.2	0.2	34.0	36.1
Sweden	2011	784	58.1	7.7	10.9	58.1	20.9	2.1	0.3	54.6	61.1
	2015	585	56.8	7.3	10.6	56.8	21.0	4.1	0.2	58.5	54.9
Thailand	2011	886	34.7	12.0	17.2	34.7	32.9	3.2	0.1	34.6	34.8
	2015	928	33.0	15.8	19.2	33.0	29.0	2.8	0.2	32.9	33.1
Turkey	2011	988	46.9	11.7	12.9	46.9	25.2	3.3	0.0	46.6	47.2
	2015	869	48.5	11.6	13.3	48.5	26.0	0.7	0.0	53.3	44.1
United Arab Emirates	2011	2005	50.0	6.0	11.5	50.0	30.6	1.8	0.0	49.5	50.5
	2015	2589	49.0	6.5	12.1	49.0	29.8	2.2	0.4	51.3	46.7
United States	2011	1485	57.5	8.6	9.5	57.5	23.3	1.1	0.1	56.4	58.5
	2015	1463	53.5	8.3	9.4	53.5	27.3	1.3	0.3	52.8	54.1
International Avg (n=33)	2011	28496	51.4	10.0	12.7	51.4	23.7	2.1	0.1	51.2	51.6
	2015	31158	51.4	9.9	13.4	51.4	22.9	2.3	0.2	52.0	50.8
Ontario, Canada	2011	670	60.9	4.4	8.6	60.9	23.9	1.8	0.2	61.4	60.5
	2015	641	59.1	5.4	10.4	59.1	24.6	0.2	0.3	59.0	59.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_04 (M052034): Number / Knowing Type: MC Key: C
Label: Fraction wanting to go on a trip

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	64.6	4.9	6.8	64.6	22.7	1.0	0.0	67.0	61.9
	2015	565	70.1	4.9	4.3	70.1	17.9	1.7	1.1	73.1	66.9
Norway (8)	2011	551	58.8	4.0	11.8	58.8	23.0	2.1	0.2	60.9	56.9
	2015	691	52.9	4.6	14.6	52.9	25.0	2.6	0.3	52.5	53.4
Abu Dhabi, UAE	2011	626	49.1	5.4	13.0	49.1	31.5	1.1	0.0	48.1	50.0
	2015	699	47.8	7.2	12.3	47.8	29.1	3.3	0.2	52.9	43.1
Dubai, UAE	2011	793	53.4	6.3	9.9	53.4	27.8	2.6	0.1	55.5	51.2
	2015	885	56.6	6.0	10.2	56.6	26.3	0.9	0.1	58.4	54.6
Florida, US	2011	242	53.8	7.3	16.0	53.8	20.7	2.2	0.0	55.7	51.5
	2015	301	47.3	10.1	13.4	47.3	27.4	1.4	0.4	48.2	46.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_05A (M052174A): Number / Applying Type: CR 1 Point
Label: How many kilocalories used

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	52.7	44.3	3.0	0.0	52.7	51.2	54.1
	2015	1456	52.3	43.7	3.8	0.2	52.3	49.8	54.8
Bahrain	2011	661	20.7	63.4	15.7	0.2	20.7	22.6	18.6
	2015	706	21.1	69.7	9.2	0.0	21.1	16.9	24.7
Botswana	2011	772	9.7	87.1	3.2	0.0	9.7	11.1	8.2
	2015	851	9.6	87.4	2.9	0.1	9.6	10.1	9.1
Chile	2011	827	39.4	53.8	6.2	0.5	39.4	32.6	46.9
	2015	677	40.7	49.4	9.6	0.3	40.7	37.8	43.2
Chinese Taipei	2011	716	75.3	23.0	1.7	0.0	75.3	73.3	77.3
	2015	808	77.3	21.7	1.0	0.0	77.3	77.0	77.5
England	2011	554	58.0	39.0	2.9	0.1	58.0	52.7	63.2
	2015	686	57.0	40.3	2.8	0.0	57.0	53.8	60.3
Georgia	2011	655	29.6	48.5	21.5	0.3	29.6	28.4	30.7
	2015	581	35.8	49.3	14.5	0.4	35.8	35.2	36.2
Hong Kong SAR	2011	576	73.2	23.5	3.1	0.2	73.2	72.8	73.6
	2015	590	79.4	19.2	1.4	0.0	79.4	78.6	80.1
Hungary	2011	737	54.6	40.7	4.7	0.0	54.6	51.8	57.0
	2015	691	53.1	43.9	2.9	0.1	53.1	50.6	55.5
Iran, Islamic Rep. of	2011	841	17.9	69.8	12.2	0.1	17.9	13.0	22.0
	2015	871	26.0	61.8	11.3	0.9	26.0	20.7	30.9
Israel	2011	677	55.7	38.3	5.2	0.8	55.7	54.0	57.5
	2015	790	52.6	42.0	5.1	0.2	52.6	45.9	58.7
Italy	2011	566	46.6	46.2	7.0	0.2	46.6	42.7	50.3
	2015	627	45.5	47.1	7.4	0.0	45.5	45.1	45.9
Japan	2011	629	70.1	27.6	2.3	0.0	70.1	70.2	69.9
	2015	670	74.4	24.2	1.5	0.0	74.4	71.8	77.0
Jordan	2011	1100	9.3	81.4	9.3	0.0	9.3	10.0	8.7
	2015	1122	18.9	73.1	7.9	0.2	18.9	16.0	22.1
Kazakhstan	2011	633	36.9	47.5	15.6	0.0	36.9	31.3	42.8
	2015	696	41.0	52.7	6.3	0.0	41.0	36.8	44.7
Korea, Rep. of	2011	736	84.7	13.5	1.8	0.0	84.7	83.3	86.1
	2015	749	81.5	17.7	0.9	0.0	81.5	80.1	82.8
Lebanon	2011	567	26.0	57.3	16.5	0.2	26.0	24.2	28.0
	2015	543	24.8	52.7	21.7	0.7	24.8	22.5	27.7
Lithuania	2011	672	49.9	47.1	3.0	0.0	49.9	49.7	50.1
	2015	619	57.7	39.4	3.0	0.0	57.7	52.4	63.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_05A (M052174A): Number / Applying Type: CR 1 Point
Label: How many kilocalories used

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	26.7	66.2	7.2	0.0	26.7	24.3	29.1
	2015	1389	35.9	58.4	5.4	0.3	35.9	32.0	39.5
Morocco	2011	1288	7.5	67.2	24.6	0.7	7.5	5.0	9.8
	2015	1885	12.0	67.1	20.8	0.2	12.0	11.0	12.9
New Zealand	2011	745	52.9	42.7	4.4	0.0	52.9	48.4	56.5
	2015	1179	48.3	46.8	4.7	0.3	48.3	47.5	49.1
Oman	2011	1364	8.5	78.6	12.5	0.4	8.5	9.0	8.0
	2015	1273	18.5	75.2	6.1	0.2	18.5	17.9	19.0
Qatar	2011	633	21.2	66.7	12.0	0.1	21.2	20.3	22.0
	2015	762	25.8	66.5	6.7	1.0	25.8	26.2	25.5
Russian Federation	2011	708	59.4	32.6	7.8	0.3	59.4	60.7	57.9
	2015	686	65.2	29.4	5.4	0.0	65.2	62.6	67.3
Saudi Arabia	2011	610	18.5	74.7	6.8	0.0	18.5	13.5	23.4
	2015	540	10.3	79.4	10.3	0.0	10.3	10.3	10.3
Singapore	2011	843	76.9	22.2	1.0	0.0	76.9	80.1	73.8
	2015	870	78.9	19.6	1.5	0.0	78.9	79.0	78.9
Slovenia	2011	621	50.3	46.9	2.8	0.0	50.3	48.0	52.8
	2015	613	56.3	40.1	3.6	0.0	56.3	53.4	59.1
South Africa	2011	1697	7.2	88.9	3.5	0.4	7.2	5.7	8.7
	2015	1793	10.9	85.4	3.1	0.5	10.9	10.9	11.1
Sweden	2011	784	55.5	37.4	6.8	0.3	55.5	52.1	58.6
	2015	585	58.2	35.2	6.3	0.4	58.2	55.7	60.9
Thailand	2011	886	30.7	61.4	7.8	0.1	30.7	28.0	34.0
	2015	928	35.2	58.9	5.6	0.4	35.2	33.4	37.2
Turkey	2011	988	36.3	55.5	8.3	0.0	36.3	34.6	37.9
	2015	869	37.2	58.5	4.3	0.0	37.2	34.7	39.5
United Arab Emirates	2011	2006	28.3	64.7	7.0	0.1	28.3	25.1	31.4
	2015	2589	30.8	62.9	5.9	0.4	30.8	30.2	31.3
United States	2011	1485	45.2	51.6	3.1	0.1	45.2	44.0	46.3
	2015	1463	46.6	50.6	2.5	0.3	46.6	44.3	49.1
International Avg (n=33)	2011	28496	40.5	51.8	7.6	0.2	40.5	38.6	42.3
	2015	31157	43.0	50.6	6.2	0.2	43.0	40.9	45.0
Ontario, Canada	2011	670	50.6	45.2	3.8	0.4	50.6	48.7	52.5
	2015	643	55.2	42.2	2.3	0.3	55.2	54.0	56.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_05A (M052174A): Number / Applying Type: CR 1 Point
Label: How many kilocalories used

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	66.9	28.5	4.6	0.0	66.9	64.7	69.5
	2015	568	69.0	26.0	2.8	2.2	69.0	70.6	67.4
Norway (8)	2011	551	54.0	41.1	4.6	0.2	54.0	53.7	54.2
	2015	691	50.2	45.0	4.5	0.3	50.2	52.2	48.3
Abu Dhabi, UAE	2011	626	26.7	67.3	5.9	0.0	26.7	21.5	31.3
	2015	699	25.7	67.9	6.1	0.2	25.7	28.6	23.0
Dubai, UAE	2011	793	36.9	55.6	7.3	0.2	36.9	34.6	39.1
	2015	885	42.6	51.6	5.7	0.1	42.6	41.6	43.7
Florida, US	2011	242	49.9	41.1	9.0	0.0	49.9	47.3	52.9
	2015	301	43.5	52.8	3.0	0.7	43.5	41.9	45.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_05B (M052174B): Number / Applying Type: CR 1 Point
Label: How many minutes of soccer played

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	27.0	2.0	57.8	13.2	0.0	27.0	23.7	30.0
	2015	1456	24.9	3.2	59.5	12.1	0.2	24.9	24.4	25.5
Bahrain	2011	661	6.7	0.7	70.2	21.9	0.4	6.7	7.1	6.3
	2015	706	6.6	0.8	78.5	14.1	0.1	6.6	5.7	7.4
Botswana	2011	772	2.1	0.9	90.3	6.3	0.4	2.1	2.3	1.9
	2015	851	2.6	1.1	88.7	7.5	0.1	2.6	2.7	2.5
Chile	2011	827	12.4	1.0	66.5	19.6	0.5	12.4	9.8	15.3
	2015	677	16.2	0.2	62.1	20.9	0.7	16.2	15.0	17.2
Chinese Taipei	2011	716	51.2	19.1	24.4	5.3	0.0	51.2	48.9	53.3
	2015	808	55.6	17.8	21.0	5.5	0.0	55.6	54.9	56.3
England	2011	554	31.6	3.0	56.1	8.8	0.5	31.6	27.8	35.4
	2015	686	28.7	1.2	58.2	11.7	0.2	28.7	26.0	31.5
Georgia	2011	655	6.3	3.5	48.6	40.7	0.9	6.3	4.6	7.8
	2015	581	13.5	3.8	46.4	35.9	0.4	13.5	11.6	15.0
Hong Kong SAR	2011	576	39.9	10.6	42.7	6.5	0.3	39.9	32.3	47.2
	2015	590	46.9	9.4	39.2	4.5	0.0	46.9	44.5	48.9
Hungary	2011	737	24.1	5.4	48.8	21.7	0.0	24.1	20.1	27.5
	2015	691	25.5	7.4	50.2	16.8	0.1	25.5	22.4	28.3
Iran, Islamic Rep. of	2011	841	4.1	1.2	68.4	26.1	0.3	4.1	2.1	5.7
	2015	871	6.1	1.2	63.1	28.5	1.1	6.1	3.2	8.8
Israel	2011	677	26.5	7.3	47.3	18.1	0.8	26.5	20.7	32.3
	2015	790	29.5	6.7	47.5	15.7	0.5	29.5	23.3	35.1
Italy	2011	566	16.9	4.7	47.3	30.9	0.2	16.9	12.8	20.7
	2015	627	18.7	3.0	51.3	27.0	0.0	18.7	16.0	21.0
Japan	2011	629	53.2	14.3	26.0	6.5	0.0	53.2	51.5	54.7
	2015	670	58.1	13.6	22.8	5.5	0.0	58.1	56.4	59.8
Jordan	2011	1100	3.2	0.6	79.9	16.3	0.0	3.2	2.0	4.4
	2015	1122	4.0	2.0	78.5	15.3	0.2	4.0	3.7	4.4
Kazakhstan	2011	633	13.7	3.3	57.3	25.7	0.0	13.7	10.6	17.0
	2015	696	25.6	2.5	59.1	12.8	0.0	25.6	27.1	24.3
Korea, Rep. of	2011	736	73.6	5.9	18.1	2.4	0.0	73.6	71.3	76.1
	2015	749	69.5	10.2	18.2	2.1	0.0	69.5	67.4	71.5
Lebanon	2011	567	8.1	0.5	56.1	35.1	0.2	8.1	6.7	9.5
	2015	543	6.0	1.5	55.9	35.4	1.3	6.0	3.4	9.3
Lithuania	2011	672	22.5	4.8	54.7	18.0	0.0	22.5	18.0	27.7
	2015	619	26.2	4.3	48.4	21.2	0.0	26.2	22.2	30.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_05B (M052174B): Number / Applying Type: CR 1 Point
Label: How many minutes of soccer played

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	8.6	1.6	77.9	11.7	0.2	8.6	9.1	8.1
	2015	1389	13.4	2.0	72.4	11.7	0.5	13.4	11.0	15.6
Morocco	2011	1288	2.4	0.0	57.9	38.7	1.0	2.4	2.3	2.5
	2015	1885	2.4	0.5	63.8	33.1	0.2	2.4	2.3	2.6
New Zealand	2011	745	25.8	2.5	58.5	12.8	0.4	25.8	22.4	28.6
	2015	1179	26.2	2.3	59.5	11.5	0.5	26.2	27.2	25.2
Oman	2011	1364	2.6	2.1	75.6	18.9	0.8	2.6	2.1	3.2
	2015	1270	4.5	2.3	80.2	12.8	0.2	4.5	4.0	4.9
Qatar	2011	633	8.8	0.7	70.4	20.0	0.1	8.8	8.5	9.1
	2015	762	10.9	2.2	72.9	13.0	1.1	10.9	8.2	13.6
Russian Federation	2011	708	24.5	10.9	41.1	23.2	0.3	24.5	22.0	27.2
	2015	686	27.2	7.8	40.1	24.6	0.3	27.2	22.5	31.2
Saudi Arabia	2011	610	6.0	0.5	80.9	12.6	0.0	6.0	4.3	7.7
	2015	540	4.3	0.6	79.7	15.3	0.0	4.3	4.8	3.9
Singapore	2011	843	46.8	12.4	38.1	2.7	0.0	46.8	47.8	46.0
	2015	870	55.5	11.6	29.6	3.2	0.1	55.5	54.5	56.5
Slovenia	2011	621	24.4	1.3	55.5	18.7	0.0	24.4	20.5	28.4
	2015	613	30.6	2.1	49.0	18.3	0.0	30.6	27.7	33.3
South Africa	2011	1697	2.0	0.3	90.8	6.5	0.4	2.0	2.1	1.9
	2015	1793	4.0	0.4	87.8	7.1	0.7	4.0	2.9	5.2
Sweden	2011	784	28.3	1.1	50.5	19.6	0.5	28.3	27.7	28.8
	2015	585	28.2	1.7	49.8	19.9	0.4	28.2	28.3	28.2
Thailand	2011	886	15.7	2.1	63.5	18.6	0.1	15.7	13.4	18.4
	2015	928	19.7	2.1	64.9	12.8	0.5	19.7	17.6	22.2
Turkey	2011	988	13.0	2.8	62.0	22.2	0.0	13.0	11.2	14.8
	2015	869	12.1	2.8	72.7	12.4	0.0	12.1	7.8	15.9
United Arab Emirates	2011	2006	9.0	1.9	74.2	14.6	0.2	9.0	7.8	10.3
	2015	2588	11.3	3.2	72.8	12.1	0.5	11.3	8.7	13.9
United States	2011	1485	25.6	3.1	64.5	6.6	0.1	25.6	22.0	29.1
	2015	1463	28.3	3.2	65.7	2.4	0.4	28.3	25.6	31.2
International Avg (n=33)	2011	28496	20.2	4.0	58.2	17.3	0.3	20.2	18.0	22.3
	2015	31153	22.5	4.1	57.9	15.2	0.3	22.5	20.7	24.3
Ontario, Canada	2011	670	28.1	2.0	58.8	10.1	0.9	28.1	28.1	28.1
	2015	643	27.3	3.9	59.0	9.2	0.6	27.3	25.4	28.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_05B (M052174B): Number / Applying Type: CR 1 Point
Label: How many minutes of soccer played

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	32.4	1.1	49.2	17.2	0.0	32.4	29.9	35.3
	2015	568	37.7	3.4	49.7	6.7	2.5	37.7	38.8	36.6
Norway (8)	2011	551	20.7	2.1	55.6	21.3	0.2	20.7	15.6	25.6
	2015	691	22.8	1.7	53.5	21.7	0.4	22.8	22.9	22.9
Abu Dhabi, UAE	2011	626	9.4	2.3	76.5	11.6	0.2	9.4	8.4	10.2
	2015	699	9.0	2.8	76.8	11.0	0.4	9.0	5.4	12.5
Dubai, UAE	2011	793	14.5	2.2	67.5	15.5	0.3	14.5	12.1	16.9
	2015	885	17.0	4.4	66.3	12.2	0.1	17.0	15.7	18.3
Florida, US	2011	242	22.9	3.2	62.5	11.4	0.0	22.9	21.2	24.9
	2015	301	24.3	3.1	68.8	3.0	0.7	24.3	23.6	25.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_06 (M052130): Algebra / Knowing Type: MC Key: B
Label: Equivalent algebraic expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	15.9	15.5	15.9	59.8	7.2	1.6	0.0	14.4	17.3
	2015	1456	19.9	17.8	19.9	52.1	7.4	2.5	0.3	21.7	18.0
Bahrain	2011	661	22.0	15.1	22.0	44.7	15.4	2.0	0.8	21.1	23.0
	2015	706	36.1	10.1	36.1	40.9	12.1	0.5	0.2	34.6	37.5
Botswana	2011	773	9.9	14.1	9.9	56.9	17.3	1.2	0.6	11.4	8.3
	2015	851	11.7	12.6	11.7	59.5	15.4	0.6	0.1	11.2	12.2
Chile	2011	827	7.3	7.8	7.3	64.7	16.1	3.4	0.6	5.6	9.1
	2015	677	11.4	9.4	11.4	59.2	14.7	4.5	0.8	11.4	11.4
Chinese Taipei	2011	716	66.4	6.8	66.4	11.4	15.4	0.0	0.0	66.4	66.3
	2015	808	65.4	9.2	65.4	9.4	15.9	0.1	0.0	66.9	64.0
England	2011	554	14.8	18.9	14.8	53.3	9.7	2.8	0.5	15.4	14.3
	2015	686	23.3	18.9	23.3	46.3	7.8	3.3	0.4	26.2	20.3
Georgia	2011	655	32.1	11.7	32.1	38.2	15.0	1.8	1.3	31.9	32.2
	2015	581	32.9	16.2	32.9	29.7	18.5	2.2	0.6	32.9	32.9
Hong Kong SAR	2011	576	57.7	12.2	57.7	9.3	19.6	0.8	0.3	55.0	60.3
	2015	590	64.6	13.7	64.6	6.1	15.0	0.6	0.0	69.4	60.6
Hungary	2011	737	41.2	12.2	41.2	30.0	15.5	0.9	0.2	45.8	37.2
	2015	691	44.4	14.3	44.4	24.5	15.8	0.9	0.1	48.4	40.8
Iran, Islamic Rep. of	2011	841	23.7	6.8	23.7	49.6	16.6	3.0	0.3	24.6	22.9
	2015	871	33.8	8.9	33.8	37.7	15.7	2.6	1.3	35.4	32.4
Israel	2011	677	51.1	15.3	51.1	19.1	12.6	1.2	0.8	54.3	47.9
	2015	790	49.4	15.2	49.4	21.9	11.2	1.6	0.7	48.1	50.6
Italy	2011	566	37.2	6.4	37.2	38.9	15.5	1.8	0.2	36.2	38.2
	2015	627	33.8	9.3	33.8	39.1	14.6	2.5	0.6	35.2	32.6
Japan	2011	629	66.9	7.0	66.9	11.2	14.1	0.6	0.2	65.0	68.6
	2015	670	73.0	3.6	73.0	10.4	12.2	0.7	0.0	73.6	72.4
Jordan	2011	1100	29.8	8.9	29.8	47.0	12.1	2.0	0.2	30.9	28.7
	2015	1122	25.2	8.0	25.2	47.0	17.4	2.1	0.3	28.1	22.0
Kazakhstan	2011	633	49.3	12.3	49.3	19.7	17.3	1.4	0.0	50.0	48.6
	2015	696	55.3	10.4	55.3	19.3	13.8	1.1	0.0	59.0	52.1
Korea, Rep. of	2011	736	70.9	5.1	70.9	9.2	13.9	0.9	0.0	69.8	72.1
	2015	749	69.4	6.0	69.4	10.1	14.3	0.1	0.0	72.7	66.4
Lebanon	2011	563	61.1	8.1	61.1	14.9	14.4	1.0	0.5	60.6	61.6
	2015	543	62.6	10.1	62.6	9.1	12.4	4.3	1.5	60.4	65.4
Lithuania	2011	672	33.1	15.9	33.1	33.0	17.2	0.7	0.0	33.2	33.0
	2015	619	34.5	15.9	34.5	34.4	13.9	1.3	0.0	37.1	31.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_06 (M052130): Algebra / Knowing Type: MC Key: B
Label: Equivalent algebraic expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	23.3	14.1	23.3	38.0	23.0	1.5	0.2	22.5	24.0
	2015	1389	27.0	17.8	27.0	37.0	16.6	1.0	0.6	28.0	26.0
Morocco	2011	1285	21.1	9.1	21.1	45.6	20.2	2.8	1.2	21.7	20.6
	2015	1887	25.5	10.1	25.5	42.3	19.9	1.8	0.5	28.7	22.3
New Zealand	2011	745	11.5	19.1	11.5	59.2	7.3	2.5	0.4	8.7	13.9
	2015	1179	14.6	20.2	14.6	50.7	9.9	4.1	0.5	12.8	16.5
Oman	2011	1363	26.8	14.1	26.8	37.3	18.3	2.7	0.8	25.4	28.2
	2015	1273	27.3	17.1	27.3	34.5	17.8	3.1	0.2	27.3	27.3
Qatar	2011	633	25.1	13.4	25.1	44.0	14.9	2.2	0.4	24.9	25.3
	2015	762	34.6	18.2	34.6	30.5	13.5	2.1	1.2	35.7	33.4
Russian Federation	2011	708	63.7	8.3	63.7	13.8	13.2	0.5	0.6	68.1	58.9
	2015	686	60.3	9.2	60.3	14.1	14.8	1.0	0.6	58.1	62.2
Saudi Arabia	2011	610	18.7	8.1	18.7	54.6	17.7	1.0	0.0	15.7	21.5
	2015	540	13.6	10.5	13.6	51.3	22.6	2.0	0.0	12.3	14.8
Singapore	2011	843	73.0	8.2	73.0	5.4	13.1	0.3	0.0	74.7	71.3
	2015	870	74.4	8.1	74.4	4.8	11.9	0.6	0.1	79.0	70.1
Slovenia	2011	621	22.6	10.4	22.6	50.7	13.2	3.1	0.0	22.7	22.5
	2015	613	22.9	14.7	22.9	49.8	10.5	2.1	0.0	25.9	20.3
South Africa	2011	1697	16.1	8.7	16.1	50.7	21.1	3.1	0.5	14.8	17.3
	2015	1793	20.0	10.8	20.0	48.2	19.0	1.3	0.7	20.9	19.2
Sweden	2011	784	14.1	11.2	14.1	42.1	26.6	5.1	0.8	13.3	14.9
	2015	585	22.1	13.5	22.1	33.8	24.7	5.4	0.5	24.3	19.7
Thailand	2011	886	20.7	9.6	20.7	48.7	19.0	1.9	0.2	21.3	19.9
	2015	927	20.7	12.4	20.7	45.0	19.8	1.7	0.5	21.6	19.6
Turkey	2011	988	27.0	13.1	27.0	38.2	19.2	2.5	0.0	29.5	24.5
	2015	869	27.7	15.2	27.7	36.7	19.5	0.9	0.0	30.1	25.5
United Arab Emirates	2011	2006	26.6	10.6	26.6	47.0	13.9	1.7	0.2	24.8	28.4
	2015	2589	34.2	13.3	34.2	38.3	12.6	1.0	0.6	34.0	34.4
United States	2011	1485	32.1	18.3	32.1	40.3	7.8	1.3	0.2	34.4	29.9
	2015	1463	35.4	21.9	35.4	32.7	8.3	1.3	0.4	38.2	32.4
International Avg (n=33)	2011	28489	33.7	11.4	33.7	37.2	15.6	1.8	0.4	33.8	33.7
	2015	31158	36.6	12.8	36.6	33.5	14.8	1.8	0.4	37.9	35.4
Ontario, Canada	2011	670	9.8	13.2	9.8	62.8	9.9	3.0	1.2	9.0	10.7
	2015	642	19.3	17.1	19.3	50.8	9.5	2.1	1.1	21.6	17.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_06 (M052130): Algebra / Knowing Type: MC Key: B
Label: Equivalent algebraic expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	29.5	19.8	29.5	35.9	12.5	2.3	0.0	28.0	31.2
	2015	565	38.2	19.9	38.2	26.2	11.7	1.4	2.6	36.4	40.0
Norway (8)	2011	551	13.9	9.1	13.9	50.9	19.4	6.1	0.7	12.1	15.5
	2015	691	13.6	10.2	13.6	50.2	16.9	8.3	0.8	14.4	12.9
Abu Dhabi, UAE	2011	626	23.6	10.5	23.6	50.3	13.4	2.1	0.2	20.8	26.0
	2015	699	32.3	10.9	32.3	42.9	12.5	0.9	0.4	33.9	30.8
Dubai, UAE	2011	793	36.7	12.5	36.7	32.1	15.8	2.6	0.4	35.9	37.5
	2015	885	42.8	15.9	42.8	27.8	12.5	0.7	0.2	43.1	42.5
Florida, US	2011	242	27.4	19.0	27.4	42.0	7.7	3.9	0.0	27.3	27.5
	2015	301	34.0	17.5	34.0	35.9	9.5	2.4	0.7	39.6	28.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_07 (M052073): Algebra / Knowing Type: MC Key: C
Label: Value of fractional expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	36.3	34.8	24.8	36.3	2.2	1.9	0.0	38.7	34.1
	2015	1456	39.3	31.8	22.5	39.3	2.5	3.6	0.3	43.4	35.0
Bahrain	2011	661	28.2	31.3	29.0	28.2	6.4	4.0	1.1	31.1	25.1
	2015	706	57.1	16.6	20.0	57.1	4.6	1.4	0.2	58.9	55.5
Botswana	2011	772	15.9	45.5	30.0	15.9	4.5	3.0	1.1	17.1	14.6
	2015	851	23.7	40.3	29.7	23.7	4.7	1.6	0.1	24.4	23.0
Chile	2011	827	15.3	38.1	34.4	15.3	5.0	6.5	0.8	15.3	15.2
	2015	677	19.8	39.5	28.7	19.8	4.6	6.2	1.2	24.7	15.5
Chinese Taipei	2011	716	79.8	10.2	7.1	79.8	2.1	0.7	0.0	82.4	77.4
	2015	808	78.3	11.7	7.3	78.3	2.4	0.3	0.0	81.3	75.6
England	2011	554	32.3	39.8	20.1	32.3	2.7	4.6	0.5	28.3	36.4
	2015	686	37.9	33.9	22.1	37.9	2.8	2.9	0.4	41.6	34.0
Georgia	2011	655	34.6	28.8	27.4	34.6	4.0	3.8	1.4	32.5	36.6
	2015	581	39.1	27.9	27.7	39.1	3.2	1.3	0.7	38.0	39.9
Hong Kong SAR	2011	576	76.4	13.1	6.6	76.4	2.6	0.9	0.3	79.0	73.9
	2015	590	80.5	10.6	5.3	80.5	2.6	1.0	0.0	82.6	78.8
Hungary	2011	737	46.7	25.2	22.9	46.7	3.3	1.7	0.2	48.7	44.9
	2015	691	47.9	26.3	21.8	47.9	1.9	2.0	0.1	50.7	45.4
Iran, Islamic Rep. of	2011	841	30.1	30.0	32.3	30.1	4.4	2.6	0.5	34.9	26.1
	2015	871	34.5	25.8	28.0	34.5	6.2	4.1	1.4	38.1	31.1
Israel	2011	677	51.9	24.9	14.2	51.9	4.6	3.6	0.8	55.8	48.1
	2015	790	50.1	24.6	17.2	50.1	4.0	3.3	0.9	52.1	48.2
Italy	2011	565	43.9	25.7	21.9	43.9	3.9	4.2	0.4	45.4	42.5
	2015	627	39.5	29.6	22.0	39.5	3.9	4.6	0.6	43.9	35.5
Japan	2011	629	69.0	14.9	10.1	69.0	4.3	1.5	0.2	70.6	67.6
	2015	670	76.6	14.0	6.3	76.6	2.1	1.0	0.0	77.5	75.8
Jordan	2011	1100	33.2	31.9	27.3	33.2	4.7	2.7	0.2	39.0	27.4
	2015	1122	31.6	32.6	28.9	31.6	4.2	2.3	0.3	34.3	28.7
Kazakhstan	2011	633	56.2	19.9	18.3	56.2	4.0	1.4	0.2	59.3	53.0
	2015	696	61.9	20.3	13.8	61.9	2.4	1.3	0.3	66.1	58.2
Korea, Rep. of	2011	736	80.2	9.5	8.1	80.2	1.6	0.6	0.0	80.1	80.3
	2015	749	80.3	11.0	6.9	80.3	1.8	0.0	0.0	84.3	76.5
Lebanon	2011	564	52.3	22.7	18.6	52.3	4.2	1.6	0.5	50.2	54.7
	2015	541	54.7	20.6	16.2	54.7	2.6	4.1	1.8	54.4	55.1
Lithuania	2011	672	44.4	20.1	29.1	44.4	5.0	1.5	0.0	47.9	40.4
	2015	619	49.1	18.8	25.9	49.1	4.3	1.8	0.0	51.1	47.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_07 (M052073): Algebra / Knowing Type: MC Key: C
Label: Value of fractional expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	39.9	30.4	24.5	39.9	2.7	2.4	0.2	41.3	38.3
	2015	1389	47.5	22.5	22.4	47.5	5.0	1.7	0.9	52.8	42.6
Morocco	2011	1284	16.9	42.5	29.8	16.9	4.0	5.5	1.2	14.0	19.7
	2015	1887	20.6	43.0	27.2	20.6	5.1	3.5	0.6	22.4	19.0
New Zealand	2011	745	21.6	45.1	27.2	21.6	2.3	3.1	0.5	19.4	23.5
	2015	1179	31.8	35.2	26.0	31.8	2.4	4.0	0.6	32.3	31.3
Oman	2011	1364	27.2	28.9	33.3	27.2	7.0	2.7	0.9	29.7	24.6
	2015	1273	33.1	29.3	29.6	33.1	5.6	2.3	0.2	39.7	27.3
Qatar	2011	633	28.7	32.4	25.5	28.7	9.9	3.1	0.4	24.6	32.8
	2015	762	35.7	25.9	25.0	35.7	9.2	3.0	1.2	35.6	35.8
Russian Federation	2011	708	70.5	10.5	12.7	70.5	3.8	1.8	0.6	75.1	65.6
	2015	686	68.1	13.2	13.9	68.1	3.1	1.1	0.6	68.2	68.0
Saudi Arabia	2011	609	26.1	34.6	31.2	26.1	7.1	1.0	0.0	26.8	25.4
	2015	540	23.3	32.2	34.4	23.3	9.1	1.0	0.0	19.4	27.2
Singapore	2011	843	84.0	8.0	5.6	84.0	1.9	0.5	0.0	85.5	82.7
	2015	870	87.4	8.1	3.1	87.4	0.8	0.4	0.1	90.1	84.8
Slovenia	2011	621	45.4	29.4	19.3	45.4	2.7	3.2	0.0	48.0	42.7
	2015	613	49.5	28.8	16.1	49.5	3.1	2.5	0.0	51.6	47.6
South Africa	2011	1697	18.7	38.8	33.7	18.7	5.7	2.5	0.7	18.3	18.9
	2015	1793	28.1	35.6	29.6	28.1	4.3	1.6	0.8	30.0	26.1
Sweden	2011	784	25.5	41.1	24.5	25.5	3.2	4.9	0.8	25.6	25.5
	2015	585	34.7	37.1	17.5	34.7	2.8	6.7	1.1	35.9	33.4
Thailand	2011	886	24.2	30.0	36.2	24.2	6.6	2.9	0.2	23.6	24.8
	2015	928	24.9	33.1	35.3	24.9	3.9	2.1	0.6	27.9	21.5
Turkey	2011	988	31.8	28.3	29.0	31.8	5.5	5.3	0.0	31.4	32.3
	2015	869	34.1	31.3	25.6	34.1	7.1	1.9	0.0	35.6	32.7
United Arab Emirates	2011	2006	41.5	27.9	24.2	41.5	4.2	1.9	0.3	44.1	39.0
	2015	2589	49.1	25.7	17.7	49.1	4.9	2.0	0.6	51.7	46.6
United States	2011	1485	49.0	23.2	20.3	49.0	6.2	1.1	0.2	50.2	47.9
	2015	1463	58.5	18.4	15.5	58.5	5.7	1.2	0.8	58.6	58.3
International Avg (n=33)	2011	28487	41.8	27.8	23.0	41.8	4.3	2.7	0.4	42.8	40.7
	2015	31157	46.3	25.9	20.9	46.3	4.0	2.4	0.5	48.5	44.3
Ontario, Canada	2011	670	23.4	44.6	23.3	23.4	3.4	3.2	2.0	24.1	22.8
	2015	643	29.2	40.4	24.4	29.2	3.6	0.9	1.5	29.6	28.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_07 (M052073): Algebra / Knowing Type: MC Key: C
Label: Value of fractional expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	46.7	25.9	21.6	46.7	2.1	3.6	0.0	48.8	44.3
	2015	565	52.2	22.8	18.4	52.2	1.6	2.1	2.9	53.3	51.1
Norway (8)	2011	551	16.5	35.6	37.2	16.5	3.7	6.3	0.7	16.6	16.4
	2015	691	20.7	30.4	37.4	20.7	2.5	8.2	0.8	20.7	20.5
Abu Dhabi, UAE	2011	626	41.2	27.1	25.7	41.2	3.9	1.6	0.4	42.3	40.2
	2015	699	47.1	25.7	19.0	47.1	6.2	1.5	0.4	55.0	39.8
Dubai, UAE	2011	793	44.4	27.4	21.3	44.4	4.3	2.2	0.4	47.0	41.8
	2015	885	54.6	25.7	16.2	54.6	2.1	1.2	0.2	55.5	53.5
Florida, US	2011	242	45.4	19.0	22.1	45.4	9.8	3.7	0.0	47.7	42.7
	2015	301	42.9	18.2	26.1	42.9	9.8	1.8	1.2	44.2	41.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_08 (M052110): Algebra / Knowing Type: CR 1 Point
Label: Convert Celsius into Fahrenheit

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	29.1	53.1	17.6	0.2	29.1	28.8	29.4
	2015	1456	30.7	54.3	14.7	0.3	30.7	33.2	28.1
Bahrain	2011	661	18.3	56.8	23.6	1.3	18.3	24.2	12.1
	2015	706	16.3	65.1	18.2	0.4	16.3	17.1	15.7
Botswana	2011	772	5.2	87.2	6.1	1.5	5.2	5.4	5.0
	2015	851	11.9	84.0	3.9	0.1	11.9	15.0	9.0
Chile	2011	827	4.5	50.0	44.5	1.0	4.5	3.7	5.4
	2015	677	6.2	51.9	40.4	1.4	6.2	7.6	4.9
Chinese Taipei	2011	716	72.9	18.3	8.8	0.0	72.9	75.8	70.0
	2015	808	72.7	20.0	7.3	0.0	72.7	75.2	70.4
England	2011	554	26.5	52.9	20.1	0.5	26.5	23.1	29.9
	2015	686	28.3	52.1	19.0	0.6	28.3	28.3	28.2
Georgia	2011	655	18.6	33.5	46.4	1.6	18.6	19.2	18.0
	2015	581	24.4	39.9	35.0	0.7	24.4	27.9	21.7
Hong Kong SAR	2011	576	63.0	29.6	7.1	0.3	63.0	62.7	63.3
	2015	590	69.2	26.3	4.4	0.0	69.2	71.7	67.2
Hungary	2011	737	32.3	44.5	22.9	0.4	32.3	37.5	27.7
	2015	691	25.9	49.7	24.2	0.2	25.9	27.9	24.0
Iran, Islamic Rep. of	2011	841	12.7	54.3	32.5	0.5	12.7	12.7	12.7
	2015	871	14.0	53.0	31.6	1.4	14.0	14.9	13.1
Israel	2011	677	36.7	34.6	27.7	1.0	36.7	39.8	33.7
	2015	790	32.9	40.1	25.9	1.1	32.9	31.2	34.4
Italy	2011	566	33.1	34.7	31.7	0.5	33.1	29.4	36.6
	2015	627	25.4	41.0	32.9	0.7	25.4	26.6	24.3
Japan	2011	629	43.7	36.4	19.7	0.2	43.7	46.4	41.2
	2015	670	56.6	30.4	12.9	0.0	56.6	59.3	53.9
Jordan	2011	1100	15.8	69.2	14.6	0.4	15.8	19.8	11.8
	2015	1122	16.4	66.1	16.9	0.6	16.4	20.9	11.5
Kazakhstan	2011	633	36.9	41.1	21.8	0.2	36.9	38.5	35.3
	2015	696	51.0	36.2	12.6	0.3	51.0	55.9	46.6
Korea, Rep. of	2011	736	71.0	25.5	3.5	0.0	71.0	71.5	70.5
	2015	749	71.9	23.6	4.5	0.0	71.9	76.8	67.2
Lebanon	2011	567	25.1	45.7	28.7	0.5	25.1	24.0	26.2
	2015	543	24.5	36.9	36.3	2.2	24.5	22.9	26.5
Lithuania	2011	672	32.0	48.7	19.3	0.0	32.0	33.8	29.9
	2015	619	35.6	41.5	22.9	0.0	35.6	38.3	32.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_08 (M052110): Algebra / Knowing Type: CR 1 Point
Label: Convert Celsius into Fahrenheit

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	11.1	73.3	15.5	0.2	11.1	11.2	11.0
	2015	1389	20.0	65.7	13.3	1.0	20.0	23.4	16.9
Morocco	2011	1288	3.3	52.9	42.3	1.5	3.3	3.4	3.2
	2015	1884	4.9	61.5	32.9	0.6	4.9	6.0	3.9
New Zealand	2011	745	21.3	56.8	21.3	0.6	21.3	16.1	25.6
	2015	1179	25.4	55.7	18.3	0.6	25.4	26.7	24.0
Oman	2011	1364	15.8	64.5	18.5	1.2	15.8	21.8	9.4
	2015	1272	25.2	64.4	10.2	0.2	25.2	30.1	20.9
Qatar	2011	633	18.3	60.6	20.7	0.4	18.3	17.1	19.6
	2015	762	32.7	52.2	13.7	1.3	32.7	31.0	34.5
Russian Federation	2011	708	58.2	25.0	15.8	1.0	58.2	63.3	52.7
	2015	686	51.7	31.0	16.7	0.6	51.7	51.0	52.2
Saudi Arabia	2011	611	15.6	68.6	15.8	0.0	15.6	18.5	12.9
	2015	541	9.5	73.6	16.8	0.0	9.5	7.7	11.5
Singapore	2011	843	69.9	27.3	2.8	0.0	69.9	74.0	66.0
	2015	870	70.9	26.2	2.8	0.1	70.9	72.7	69.2
Slovenia	2011	621	16.4	58.3	25.3	0.0	16.4	16.2	16.7
	2015	613	15.5	57.3	27.2	0.0	15.5	16.9	14.2
South Africa	2011	1697	4.3	87.1	7.7	0.9	4.3	3.4	5.2
	2015	1793	9.6	84.5	4.8	1.1	9.6	9.9	9.3
Sweden	2011	784	11.4	54.5	33.2	1.0	11.4	11.9	11.0
	2015	585	15.4	56.7	26.2	1.6	15.4	16.2	14.6
Thailand	2011	886	12.8	61.1	25.9	0.2	12.8	13.8	11.6
	2015	928	14.3	69.1	16.0	0.6	14.3	16.8	11.5
Turkey	2011	986	17.0	54.3	28.7	0.0	17.0	18.8	15.3
	2015	869	12.6	70.2	17.2	0.0	12.6	14.0	11.3
United Arab Emirates	2011	2006	32.3	56.4	11.0	0.3	32.3	36.4	28.3
	2015	2588	37.0	53.8	8.6	0.6	37.0	40.1	34.1
United States	2011	1485	46.1	47.1	6.5	0.3	46.1	49.8	42.6
	2015	1463	52.3	42.2	4.7	0.8	52.3	53.0	51.7
International Avg (n=33)	2011	28495	28.2	50.4	20.8	0.5	28.2	29.5	27.0
	2015	31155	30.6	50.8	18.0	0.6	30.6	32.3	29.1
Ontario, Canada	2011	670	27.7	54.2	16.1	2.0	27.7	30.0	25.4
	2015	643	33.7	54.5	10.2	1.5	33.7	34.7	33.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_08 (M052110): Algebra / Knowing Type: CR 1 Point
Label: Convert Celsius into Fahrenheit

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	41.1	40.4	18.5	0.0	41.1	43.8	38.0
	2015	568	43.2	45.0	9.0	2.8	43.2	39.6	46.7
Norway (8)	2011	551	7.8	59.9	31.5	0.8	7.8	7.0	8.6
	2015	691	6.8	56.5	36.0	0.8	6.8	7.4	6.3
Abu Dhabi, UAE	2011	626	27.2	62.5	9.9	0.4	27.2	31.2	23.6
	2015	698	29.6	61.1	8.8	0.4	29.6	35.5	24.1
Dubai, UAE	2011	793	41.7	45.3	12.5	0.5	41.7	44.4	39.1
	2015	885	49.3	41.8	8.6	0.2	49.3	49.7	49.0
Florida, US	2011	242	51.2	41.1	7.7	0.0	51.2	54.1	47.9
	2015	301	42.7	52.7	3.4	1.2	42.7	51.6	34.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_09 (M052105): Algebra / Applying Type: CR 1 Point
Label: Which slope has a greater value

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	12.7	75.4	11.6	0.4	12.7	9.8	15.4
	2015	1456	16.5	72.7	10.2	0.6	16.5	17.2	15.6
Bahrain	2011	661	6.9	71.2	20.6	1.3	6.9	8.9	4.8
	2015	706	7.4	78.1	14.1	0.4	7.4	7.9	6.9
Botswana	2011	772	2.5	90.6	5.0	1.8	2.5	2.4	2.6
	2015	851	0.4	92.4	7.0	0.1	0.4	0.3	0.5
Chile	2011	827	0.3	78.2	20.3	1.2	0.3	0.1	0.5
	2015	678	1.4	71.7	25.3	1.7	1.4	1.1	1.6
Chinese Taipei	2011	716	32.5	58.2	9.3	0.0	32.5	33.9	31.2
	2015	808	33.5	59.4	7.1	0.0	33.5	35.2	32.0
England	2011	554	24.8	64.5	9.9	0.8	24.8	22.0	27.7
	2015	686	28.7	58.4	12.3	0.6	28.7	28.7	28.7
Georgia	2011	655	3.5	62.8	31.1	2.6	3.5	3.6	3.5
	2015	581	2.0	73.6	23.3	1.2	2.0	1.5	2.3
Hong Kong SAR	2011	576	13.3	82.3	4.1	0.3	13.3	15.1	11.6
	2015	590	13.6	83.2	3.2	0.0	13.6	14.0	13.3
Hungary	2011	737	13.7	76.1	9.9	0.4	13.7	14.4	13.0
	2015	691	16.5	75.9	6.9	0.7	16.5	16.1	16.8
Iran, Islamic Rep. of	2011	841	6.6	79.3	13.3	0.8	6.6	7.0	6.3
	2015	871	1.0	76.8	20.6	1.6	1.0	1.0	0.9
Israel	2011	677	24.5	64.9	9.0	1.7	24.5	20.9	28.0
	2015	790	26.1	63.9	8.7	1.3	26.1	24.2	27.8
Italy	2011	566	5.6	68.1	25.7	0.7	5.6	5.4	5.7
	2015	625	1.5	75.0	22.4	1.1	1.5	2.3	0.9
Japan	2011	629	56.1	39.5	4.2	0.2	56.1	57.7	54.7
	2015	670	56.2	41.7	2.1	0.0	56.2	55.6	56.8
Jordan	2011	1100	6.4	81.5	11.7	0.4	6.4	8.8	4.0
	2015	1122	3.5	84.1	11.5	0.9	3.5	4.1	2.8
Kazakhstan	2011	633	19.5	61.3	18.9	0.3	19.5	20.2	18.8
	2015	696	30.7	57.4	11.7	0.3	30.7	32.8	28.9
Korea, Rep. of	2011	736	49.1	45.5	5.5	0.0	49.1	50.1	48.0
	2015	749	45.6	50.3	4.1	0.0	45.6	46.8	44.5
Lebanon	2011	567	5.8	74.4	18.9	0.9	5.8	5.1	6.5
	2015	543	3.2	64.8	29.1	3.0	3.2	2.4	4.1
Lithuania	2011	672	2.6	89.1	8.3	0.0	2.6	2.5	2.7
	2015	619	4.9	81.5	13.5	0.0	4.9	3.7	6.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_09 (M052105): Algebra / Applying Type: CR 1 Point
Label: Which slope has a greater value

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	1.0	87.2	11.3	0.5	1.0	1.6	0.5
	2015	1389	5.5	81.6	11.8	1.1	5.5	5.4	5.5
Morocco	2011	1288	18.7	52.3	27.0	2.0	18.7	18.1	19.2
	2015	1887	0.8	79.7	18.6	1.0	0.8	0.4	1.1
New Zealand	2011	745	13.0	73.2	13.3	0.6	13.0	9.7	15.7
	2015	1179	11.2	78.1	9.9	0.8	11.2	10.3	12.2
Oman	2011	1364	1.0	79.6	17.7	1.7	1.0	1.2	0.9
	2015	1273	2.3	86.4	11.0	0.3	2.3	3.6	1.2
Qatar	2011	633	2.5	76.9	20.0	0.7	2.5	3.5	1.4
	2015	762	6.2	78.4	13.5	1.8	6.2	6.7	5.7
Russian Federation	2011	708	17.2	63.0	18.8	1.1	17.2	20.1	14.1
	2015	686	10.3	69.1	19.6	1.0	10.3	6.8	13.3
Saudi Arabia	2011	611	3.5	86.9	9.6	0.0	3.5	3.2	3.8
	2015	542	3.5	81.9	14.4	0.3	3.5	3.8	3.1
Singapore	2011	843	39.7	56.5	3.8	0.0	39.7	43.2	36.4
	2015	870	38.2	57.9	3.8	0.1	38.2	40.9	35.6
Slovenia	2011	621	6.1	87.8	6.1	0.0	6.1	6.0	6.2
	2015	613	13.7	80.6	5.5	0.2	13.7	14.2	13.3
South Africa	2011	1697	4.3	89.9	4.7	1.1	4.3	3.2	5.4
	2015	1793	2.9	91.6	4.5	1.1	2.9	2.8	2.9
Sweden	2011	784	4.3	80.1	14.1	1.5	4.3	4.4	4.2
	2015	585	12.3	73.4	11.8	2.5	12.3	11.6	13.0
Thailand	2011	886	0.8	75.3	23.6	0.4	0.8	1.0	0.5
	2015	927	1.9	84.1	13.2	0.7	1.9	2.6	1.2
Turkey	2011	986	3.5	74.6	21.9	0.0	3.5	4.8	2.2
	2015	868	9.7	76.7	13.6	0.0	9.7	11.8	7.8
United Arab Emirates	2011	2006	6.5	80.3	12.9	0.3	6.5	6.1	6.9
	2015	2589	7.8	79.6	11.8	0.8	7.8	6.6	8.9
United States	2011	1485	21.8	71.8	5.8	0.6	21.8	19.5	24.0
	2015	1463	30.6	64.0	4.6	0.8	30.6	29.5	31.8
International Avg (n=33)	2011	28495	13.0	72.7	13.6	0.7	13.0	13.1	12.9
	2015	31158	13.6	73.4	12.1	0.8	13.6	13.7	13.6
Ontario, Canada	2011	670	10.6	70.2	16.6	2.7	10.6	12.4	8.8
	2015	643	10.6	74.4	13.0	2.0	10.6	10.3	10.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_09 (M052105): Algebra / Applying Type: CR 1 Point
Label: Which slope has a greater value

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	9.9	71.4	18.4	0.3	9.9	9.4	10.4
	2015	568	7.4	79.2	10.3	3.1	7.4	6.7	8.1
Norway (8)	2011	551	5.6	84.2	9.5	0.8	5.6	6.3	4.9
	2015	691	11.2	76.1	10.9	1.8	11.2	12.4	10.2
Abu Dhabi, UAE	2011	626	5.8	82.4	11.4	0.4	5.8	5.1	6.4
	2015	699	5.6	81.9	11.7	0.7	5.6	3.2	7.9
Dubai, UAE	2011	793	8.1	75.8	15.6	0.5	8.1	9.7	6.7
	2015	885	13.9	73.6	12.0	0.5	13.9	13.5	14.4
Florida, US	2011	242	15.5	74.2	10.3	0.0	15.5	16.0	14.9
	2015	301	18.0	75.2	5.7	1.2	18.0	16.2	19.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_10 (M052407): Geometry / Applying Type: MC Key: A
Label: What is the value of angle a

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	61.6	61.6	6.8	11.6	17.5	2.0	0.4	59.4	63.7
	2015	1456	56.0	56.0	9.2	13.1	18.9	2.1	0.8	56.3	55.6
Bahrain	2011	661	49.4	49.4	7.6	12.9	28.0	0.9	1.3	51.1	47.6
	2015	706	58.3	58.3	9.3	11.6	18.6	1.7	0.5	59.7	57.1
Botswana	2011	773	51.0	51.0	3.4	14.0	27.3	1.8	2.5	51.4	50.6
	2015	850	61.5	61.5	3.2	11.4	22.3	1.1	0.5	61.7	61.2
Chile	2011	827	50.6	50.6	4.9	13.3	27.6	2.4	1.2	50.8	50.4
	2015	674	48.4	48.4	8.1	14.0	24.5	3.6	1.5	45.5	50.9
Chinese Taipei	2011	716	86.4	86.4	2.2	3.1	7.9	0.3	0.0	87.9	85.1
	2015	808	84.7	84.7	2.4	2.4	10.2	0.2	0.0	86.8	82.9
England	2011	554	62.5	62.5	5.8	8.1	22.1	0.8	0.8	61.0	63.9
	2015	686	62.0	62.0	5.9	6.1	24.2	1.2	0.6	62.8	61.0
Georgia	2011	654	60.3	60.3	2.9	9.7	22.6	1.9	2.6	56.7	63.7
	2015	581	64.4	64.4	2.3	5.5	24.9	1.7	1.2	59.5	68.2
Hong Kong SAR	2011	576	80.0	80.0	1.5	2.1	15.7	0.3	0.3	79.6	80.4
	2015	590	81.5	81.5	1.8	1.3	14.7	0.6	0.0	82.4	80.9
Hungary	2011	737	69.2	69.2	5.8	8.9	13.6	2.1	0.4	69.4	69.0
	2015	691	70.1	70.1	6.1	9.0	13.8	0.2	0.7	68.8	71.3
Iran, Islamic Rep. of	2011	847	62.1	62.1	4.8	7.0	23.4	1.7	1.0	60.6	63.3
	2015	871	72.8	72.8	3.4	5.3	16.1	0.8	1.6	76.9	69.0
Israel	2011	677	57.7	57.7	3.6	7.1	28.7	1.2	1.7	56.7	58.8
	2015	790	57.7	57.7	4.2	5.6	29.5	1.3	1.6	55.1	60.1
Italy	2011	566	65.4	65.4	6.6	14.9	11.0	1.4	0.7	62.3	68.3
	2015	627	59.9	59.9	9.2	10.4	13.8	5.6	1.1	57.9	61.6
Japan	2011	629	91.0	91.0	1.1	1.2	6.0	0.5	0.2	93.3	88.9
	2015	670	91.8	91.8	1.2	1.1	5.6	0.2	0.0	92.7	90.8
Jordan	2011	1100	54.6	54.6	3.6	8.0	31.7	1.7	0.4	54.6	54.5
	2015	1122	52.2	52.2	3.6	9.0	32.9	1.3	0.9	53.3	51.1
Kazakhstan	2011	633	68.7	68.7	1.4	7.9	19.2	2.6	0.3	68.7	68.7
	2015	696	72.5	72.5	3.3	6.5	16.9	0.5	0.3	70.1	74.6
Korea, Rep. of	2011	736	93.4	93.4	0.8	1.7	4.1	0.0	0.0	93.5	93.2
	2015	749	93.6	93.6	1.2	0.9	4.0	0.2	0.0	94.8	92.5
Lebanon	2011	564	47.9	47.9	1.8	0.4	48.3	0.7	0.9	47.4	48.4
	2015	543	47.5	47.5	1.0	1.7	43.5	3.0	3.3	48.1	46.7
Lithuania	2011	672	68.0	68.0	3.0	10.3	18.2	0.5	0.0	69.3	66.5
	2015	619	69.5	69.5	3.4	7.5	18.6	0.7	0.2	71.6	67.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_10 (M052407): Geometry / Applying Type: MC Key: A
Label: What is the value of angle a

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	51.9	51.9	5.0	16.2	25.3	1.0	0.5	53.0	50.8
	2015	1389	52.8	52.8	4.8	13.1	26.9	0.8	1.7	52.7	53.0
Morocco	2011	1288	70.9	70.9	8.8	14.8	0.3	3.0	2.2	71.2	70.6
	2015	1884	51.5	51.5	4.8	10.7	29.1	2.8	1.0	48.9	54.1
New Zealand	2011	745	49.8	49.8	7.4	11.4	28.7	2.1	0.7	42.7	55.5
	2015	1179	51.3	51.3	8.1	9.5	28.2	2.2	0.8	47.4	55.3
Oman	2011	1364	49.0	49.0	6.9	10.8	29.2	2.1	1.9	49.8	48.2
	2015	1273	52.3	52.3	5.0	9.1	32.4	0.8	0.3	53.0	51.7
Qatar	2011	633	49.3	49.3	5.1	7.0	36.7	1.3	0.7	49.0	49.5
	2015	762	49.0	49.0	7.0	9.3	31.8	0.9	2.0	50.0	48.0
Russian Federation	2011	708	71.6	71.6	2.3	3.9	20.0	1.0	1.1	71.1	72.1
	2015	686	70.0	70.0	2.7	7.2	17.8	1.2	1.0	70.9	69.2
Saudi Arabia	2011	610	50.8	50.8	5.7	12.1	31.1	0.3	0.0	44.7	56.8
	2015	542	42.9	42.9	6.9	17.4	31.4	1.1	0.3	39.7	46.3
Singapore	2011	843	85.3	85.3	0.6	0.7	13.2	0.2	0.0	88.0	82.7
	2015	870	85.5	85.5	0.6	0.7	13.0	0.2	0.1	86.9	84.0
Slovenia	2011	621	71.5	71.5	3.4	5.6	19.0	0.5	0.0	69.8	73.2
	2015	613	76.0	76.0	3.5	3.4	16.1	0.4	0.6	72.8	79.0
South Africa	2011	1697	44.7	44.7	4.2	14.3	33.5	2.0	1.3	45.3	44.0
	2015	1793	44.7	44.7	2.2	13.5	37.4	1.0	1.2	45.2	44.2
Sweden	2011	784	54.4	54.4	15.6	15.8	9.2	3.5	1.6	55.7	53.2
	2015	585	57.5	57.5	10.1	15.7	9.7	4.0	3.0	56.7	58.4
Thailand	2011	886	62.1	62.1	5.8	13.8	16.2	1.6	0.4	61.8	62.4
	2015	927	53.6	53.6	4.5	16.4	24.1	0.4	1.0	55.9	50.9
Turkey	2011	988	55.3	55.3	3.4	6.9	33.2	1.2	0.0	56.2	54.4
	2015	869	52.1	52.1	4.0	9.5	33.1	1.1	0.2	51.1	53.0
United Arab Emirates	2011	2006	56.0	56.0	4.1	5.5	33.5	0.4	0.5	57.2	54.8
	2015	2589	53.8	53.8	4.2	7.9	31.8	1.4	0.8	54.0	53.7
United States	2011	1485	62.5	62.5	7.0	12.3	16.2	1.1	0.8	62.8	62.3
	2015	1463	65.4	65.4	6.9	8.6	17.0	1.1	1.1	63.9	66.9
International Avg (n=33)	2011	28499	62.6	62.6	4.6	8.9	21.8	1.3	0.8	62.2	62.9
	2015	31153	62.5	62.5	4.7	8.3	22.2	1.4	0.9	62.2	62.8
Ontario, Canada	2011	670	65.6	65.6	7.6	6.3	16.0	1.6	2.9	65.9	65.2
	2015	643	67.0	67.0	7.0	6.9	16.0	1.0	2.1	65.7	68.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_10 (M052407): Geometry / Applying Type: MC Key: A
Label: What is the value of angle a

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	77.2	77.2	5.4	4.7	10.6	1.3	0.7	76.9	77.7
	2015	565	77.5	77.5	3.0	3.5	12.5	0.1	3.4	74.0	81.2
Norway (8)	2011	551	66.4	66.4	8.3	9.9	11.3	3.3	0.9	64.8	67.9
	2015	691	67.7	67.7	8.7	7.5	11.8	2.5	1.8	69.0	66.3
Abu Dhabi, UAE	2011	626	51.2	51.2	4.9	5.8	36.8	0.4	0.9	47.2	54.7
	2015	699	52.6	52.6	5.2	9.4	29.9	2.2	0.7	55.7	49.6
Dubai, UAE	2011	793	56.9	56.9	2.6	4.9	34.4	0.6	0.6	59.5	54.3
	2015	885	58.4	58.4	3.0	4.8	32.3	1.0	0.5	55.5	61.6
Florida, US	2011	242	66.9	66.9	3.1	10.0	18.0	1.9	0.0	62.1	72.4
	2015	301	54.4	54.4	10.0	14.5	18.7	1.1	1.2	56.5	52.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_11 (M052036): Geometry / Applying Type: CR 1 Point
Label: Draw an angle ABC of 135 degrees

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	42.0	44.4	13.2	0.4	42.0	40.6	43.3
	2015	1456	37.9	48.0	13.3	0.8	37.9	38.7	37.1
Bahrain	2011	661	34.6	39.5	24.6	1.3	34.6	37.3	31.9
	2015	706	29.5	51.6	18.4	0.5	29.5	29.6	29.4
Botswana	2011	773	19.1	66.9	10.7	3.3	19.1	20.6	17.6
	2015	851	24.2	65.7	9.1	1.1	24.2	22.3	25.9
Chile	2011	827	22.4	44.6	31.6	1.4	22.4	19.1	25.9
	2015	674	31.3	34.6	32.7	1.5	31.3	31.8	30.8
Chinese Taipei	2011	716	66.2	20.2	13.6	0.0	66.2	70.4	62.2
	2015	808	71.0	17.1	11.9	0.0	71.0	72.2	69.9
England	2011	554	38.9	46.7	13.4	1.0	38.9	37.3	40.4
	2015	686	41.7	43.7	13.8	0.8	41.7	38.1	45.5
Georgia	2011	654	28.2	32.7	36.5	2.6	28.2	25.7	30.6
	2015	581	36.4	31.1	30.9	1.6	36.4	28.9	42.3
Hong Kong SAR	2011	576	58.2	35.4	6.0	0.3	58.2	57.9	58.5
	2015	590	58.0	37.8	4.2	0.0	58.0	59.4	56.8
Hungary	2011	737	33.4	40.0	26.2	0.4	33.4	35.3	31.8
	2015	691	35.0	40.5	23.8	0.7	35.0	31.8	37.9
Iran, Islamic Rep. of	2011	847	36.6	35.1	26.9	1.4	36.6	33.2	39.5
	2015	871	29.7	46.0	22.3	2.0	29.7	32.6	27.0
Israel	2011	677	38.0	44.7	15.7	1.7	38.0	36.0	40.0
	2015	790	43.5	38.0	16.7	1.8	43.5	38.5	48.1
Italy	2011	566	37.4	43.4	18.4	0.7	37.4	36.6	38.2
	2015	627	40.5	41.9	16.4	1.1	40.5	41.8	39.3
Japan	2011	629	59.6	30.4	9.9	0.2	59.6	59.3	59.9
	2015	670	64.8	25.9	9.3	0.0	64.8	64.2	65.5
Jordan	2011	1100	51.9	39.8	7.9	0.4	51.9	55.1	48.8
	2015	1122	36.2	51.3	11.7	0.9	36.2	40.3	31.7
Kazakhstan	2011	632	65.0	25.9	8.8	0.3	65.0	63.0	67.1
	2015	696	50.8	37.8	11.2	0.3	50.8	52.1	49.6
Korea, Rep. of	2011	736	61.9	34.8	3.3	0.0	61.9	60.7	63.2
	2015	749	72.9	23.6	3.5	0.0	72.9	73.6	72.1
Lebanon	2011	567	50.3	39.3	9.5	0.9	50.3	46.9	54.0
	2015	542	53.0	29.5	14.2	3.3	53.0	51.2	55.2
Lithuania	2011	672	37.6	50.5	11.9	0.0	37.6	36.0	39.5
	2015	619	45.9	40.1	13.8	0.2	45.9	48.0	43.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_11 (M052036): Geometry / Applying Type: CR 1 Point
Label: Draw an angle ABC of 135 degrees

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	28.9	48.4	22.0	0.7	28.9	31.8	25.8
	2015	1389	31.0	47.6	19.5	1.9	31.0	28.2	33.5
Morocco	2011	1288	29.2	48.1	20.3	2.4	29.2	25.6	32.5
	2015	1884	24.4	56.5	17.8	1.2	24.4	21.9	26.9
New Zealand	2011	745	38.7	45.1	15.4	0.8	38.7	36.1	40.8
	2015	1179	34.4	49.6	15.3	0.8	34.4	33.6	35.2
Oman	2011	1364	29.3	47.1	21.5	2.2	29.3	37.7	20.3
	2015	1273	41.6	44.8	13.3	0.3	41.6	44.2	39.3
Qatar	2011	633	28.6	50.7	19.4	1.3	28.6	30.8	26.4
	2015	762	29.5	53.2	15.2	2.0	29.5	32.3	26.7
Russian Federation	2011	708	56.2	34.4	8.2	1.2	56.2	55.9	56.4
	2015	686	48.9	38.5	11.6	1.0	48.9	46.2	51.2
Saudi Arabia	2011	611	23.2	58.9	17.8	0.0	23.2	21.9	24.5
	2015	542	18.3	55.2	26.3	0.3	18.3	14.9	21.7
Singapore	2011	843	70.0	25.4	4.7	0.0	70.0	72.0	68.1
	2015	870	67.9	26.4	5.6	0.1	67.9	67.0	68.8
Slovenia	2011	621	46.1	38.2	15.7	0.0	46.1	47.2	44.9
	2015	613	48.6	35.7	15.1	0.6	48.6	50.3	47.1
South Africa	2011	1697	13.7	64.2	20.3	1.8	13.7	10.6	16.6
	2015	1793	15.6	70.3	12.9	1.2	15.6	14.0	17.4
Sweden	2011	784	29.7	45.5	22.7	2.1	29.7	32.1	27.6
	2015	585	29.7	46.6	20.1	3.5	29.7	30.7	28.7
Thailand	2011	886	37.7	33.5	28.3	0.6	37.7	37.5	37.8
	2015	927	26.5	48.5	23.7	1.3	26.5	28.8	23.9
Turkey	2011	985	26.5	56.0	17.5	0.0	26.5	28.7	24.4
	2015	869	32.5	52.7	14.4	0.3	32.5	33.7	31.5
United Arab Emirates	2011	2006	29.8	56.4	13.3	0.5	29.8	30.1	29.5
	2015	2589	38.3	47.2	13.7	0.9	38.3	41.2	35.5
United States	2011	1485	42.7	50.7	5.7	0.9	42.7	40.5	44.7
	2015	1463	37.9	55.5	5.3	1.3	37.9	37.6	38.2
International Avg (n=33)	2011	28499	39.7	42.9	16.4	0.9	39.7	39.7	39.8
	2015	31153	40.2	43.4	15.4	1.0	40.2	40.0	40.4
Ontario, Canada	2011	670	46.0	40.3	10.4	3.3	46.0	48.1	44.0
	2015	643	49.3	40.5	8.0	2.2	49.3	51.8	47.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_11 (M052036): Geometry / Applying Type: CR 1 Point
Label: Draw an angle ABC of 135 degrees

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	52.6	31.9	14.7	0.8	52.6	55.1	49.8
	2015	568	50.7	33.1	12.9	3.3	50.7	45.6	55.9
Norway (8)	2011	551	31.5	51.0	16.1	1.4	31.5	32.6	30.5
	2015	691	33.4	44.4	20.4	1.8	33.4	37.2	29.8
Abu Dhabi, UAE	2011	626	26.0	59.0	14.1	0.9	26.0	25.2	26.7
	2015	699	32.5	54.0	12.8	0.7	32.5	36.6	28.6
Dubai, UAE	2011	793	35.8	49.3	14.3	0.6	35.8	34.5	37.0
	2015	885	49.0	38.3	12.1	0.6	49.0	48.2	49.8
Florida, US	2011	242	47.4	44.2	8.4	0.0	47.4	44.7	50.4
	2015	301	31.5	60.3	6.6	1.6	31.5	32.2	30.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_12 (M052502): Data and Chance / Applying Type: CR 1 Point
Label: Store with lowest price per pair

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	65.8	27.8	6.0	0.4	65.8	65.7	65.8
	2015	1456	64.1	27.3	7.0	1.6	64.1	68.1	59.9
Bahrain	2011	661	31.8	49.7	17.0	1.5	31.8	39.4	23.8
	2015	706	32.5	54.3	12.2	1.0	32.5	36.3	29.2
Botswana	2011	773	34.8	57.9	3.6	3.7	34.8	40.4	29.1
	2015	851	39.7	55.2	3.6	1.4	39.7	50.6	29.2
Chile	2011	827	37.4	43.2	17.0	2.3	37.4	33.5	41.7
	2015	674	32.5	45.9	18.8	2.8	32.5	30.1	34.6
Chinese Taipei	2011	716	82.0	16.3	1.7	0.0	82.0	82.9	81.1
	2015	808	85.4	13.0	1.6	0.0	85.4	87.7	83.3
England	2011	554	66.9	27.3	4.3	1.5	66.9	67.1	66.7
	2015	686	69.5	26.3	3.2	0.9	69.5	73.3	65.6
Georgia	2011	653	43.6	28.6	24.7	3.1	43.6	47.1	40.5
	2015	581	51.6	27.1	18.7	2.7	51.6	53.8	49.9
Hong Kong SAR	2011	576	86.5	10.7	2.5	0.3	86.5	87.2	85.8
	2015	590	86.6	11.4	2.1	0.0	86.6	87.1	86.1
Hungary	2011	737	71.1	22.6	5.5	0.8	71.1	74.5	68.1
	2015	691	70.8	23.6	4.7	0.9	70.8	72.8	69.0
Iran, Islamic Rep. of	2011	847	36.1	46.4	15.8	1.7	36.1	35.0	37.1
	2015	871	35.1	43.8	17.5	3.6	35.1	32.7	37.3
Israel	2011	677	63.4	26.3	7.8	2.6	63.4	64.8	61.9
	2015	790	63.9	26.3	6.4	3.4	63.9	62.5	65.1
Italy	2011	566	73.3	17.3	8.7	0.8	73.3	73.0	73.6
	2015	627	68.9	25.3	4.5	1.3	68.9	74.8	63.8
Japan	2011	629	79.1	16.1	4.5	0.3	79.1	82.2	76.4
	2015	670	80.0	16.2	3.8	0.0	80.0	82.3	77.8
Jordan	2011	1100	28.5	59.9	11.1	0.5	28.5	30.3	26.7
	2015	1122	23.8	64.6	9.9	1.7	23.8	22.0	25.7
Kazakhstan	2011	633	63.9	20.6	14.8	0.7	63.9	63.8	63.9
	2015	696	69.6	23.7	6.4	0.3	69.6	71.5	68.0
Korea, Rep. of	2011	736	84.1	14.4	1.5	0.0	84.1	80.7	87.6
	2015	749	84.7	13.2	2.1	0.0	84.7	87.5	82.1
Lebanon	2011	567	50.0	30.9	17.6	1.4	50.0	53.0	46.8
	2015	543	48.0	20.7	27.2	4.0	48.0	50.8	44.6
Lithuania	2011	672	78.6	19.4	2.0	0.0	78.6	80.2	76.8
	2015	619	81.4	15.8	2.4	0.3	81.4	83.4	79.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_12 (M052502): Data and Chance / Applying Type: CR 1 Point
Label: Store with lowest price per pair

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	56.9	34.3	7.5	1.2	56.9	67.2	45.9
	2015	1389	68.4	23.0	6.2	2.4	68.4	72.0	65.1
Morocco	2011	1288	28.3	45.6	22.9	3.2	28.3	31.8	25.0
	2015	1887	27.0	55.6	15.8	1.7	27.0	29.4	24.6
New Zealand	2011	745	61.9	30.4	6.8	0.8	61.9	59.5	63.9
	2015	1179	63.3	31.0	4.9	0.8	63.3	63.8	62.8
Oman	2011	1364	19.0	60.6	17.0	3.4	19.0	25.6	11.9
	2015	1272	29.5	61.6	7.8	1.1	29.5	33.9	25.7
Qatar	2011	633	35.8	47.6	15.1	1.5	35.8	34.9	36.6
	2015	762	43.6	46.2	8.0	2.2	43.6	46.0	41.2
Russian Federation	2011	708	78.7	14.6	5.6	1.2	78.7	80.9	76.2
	2015	686	73.2	18.4	6.7	1.7	73.2	70.3	75.6
Saudi Arabia	2011	611	26.2	62.9	10.9	0.0	26.2	27.4	25.1
	2015	542	3.5	76.7	19.2	0.6	3.5	2.9	4.1
Singapore	2011	843	88.5	10.9	0.6	0.0	88.5	92.4	84.9
	2015	870	90.0	8.2	1.7	0.1	90.0	92.4	87.7
Slovenia	2011	621	75.6	20.6	3.7	0.1	75.6	78.3	72.7
	2015	613	76.7	19.2	3.4	0.7	76.7	77.6	75.9
South Africa	2011	1697	28.2	61.2	8.2	2.4	28.2	30.1	26.4
	2015	1793	30.7	64.2	3.4	1.8	30.7	32.8	28.5
Sweden	2011	784	62.5	25.5	9.7	2.3	62.5	67.9	57.8
	2015	585	69.3	20.7	6.0	3.9	69.3	70.1	68.5
Thailand	2011	886	46.5	38.5	13.9	1.1	46.5	54.8	36.5
	2015	927	44.0	45.1	9.3	1.6	44.0	49.5	37.7
Turkey	2011	985	48.5	43.2	8.3	0.1	48.5	46.7	50.3
	2015	869	49.9	43.0	6.5	0.5	49.9	50.8	49.0
United Arab Emirates	2011	2006	52.6	39.4	7.1	0.9	52.6	56.8	48.5
	2015	2589	51.0	40.3	7.1	1.6	51.0	54.5	47.6
United States	2011	1485	65.9	27.7	5.2	1.2	65.9	70.0	62.0
	2015	1463	69.5	25.4	3.7	1.4	69.5	72.4	66.4
International Avg (n=33)	2011	28499	56.1	33.3	9.4	1.2	56.1	58.3	53.9
	2015	31156	56.9	33.7	7.9	1.5	56.9	59.0	54.9
Ontario, Canada	2011	670	65.5	22.6	7.9	4.0	65.5	68.4	62.8
	2015	643	71.1	20.7	5.2	3.0	71.1	73.6	69.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_12 (M052502): Data and Chance / Applying Type: CR 1 Point
Label: Store with lowest price per pair

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	83.0	12.4	3.3	1.2	83.0	82.6	83.5
	2015	568	84.4	8.6	2.9	4.1	84.4	82.9	85.9
Norway (8)	2011	551	67.9	26.9	3.6	1.7	67.9	69.2	66.6
	2015	691	62.4	27.6	8.1	1.9	62.4	65.9	59.2
Abu Dhabi, UAE	2011	626	49.4	41.8	7.8	1.0	49.4	52.7	46.6
	2015	699	44.4	47.4	6.6	1.6	44.4	51.5	37.8
Dubai, UAE	2011	793	63.0	29.0	7.1	0.8	63.0	67.2	58.9
	2015	885	66.0	25.9	6.6	1.6	66.0	65.8	66.2
Florida, US	2011	242	64.0	26.8	9.2	0.0	64.0	68.5	58.8
	2015	301	59.8	33.9	4.4	1.9	59.8	65.7	54.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_13 (M052117): Data and Chance / Applying Type: CR 1 Point
Label: Is Jesse's bar graph correct

COUNTRY	Year	N	10 %	11 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	25.9	0.6	54.4	17.8	0.9	0.4	26.5	29.3	23.9
	2015	1456	19.2	0.9	58.3	19.3	0.5	1.8	20.2	22.8	17.5
Bahrain	2011	661	11.1	0.0	42.0	43.4	1.9	1.5	11.1	14.2	7.9
	2015	706	8.2	1.2	69.4	18.3	1.9	1.0	9.4	11.0	8.0
Botswana	2011	773	2.4	0.6	60.0	29.9	2.7	4.3	3.1	3.5	2.6
	2015	851	2.7	0.9	61.8	30.4	2.2	1.9	3.6	4.3	2.9
Chile	2011	827	5.8	1.1	56.8	30.1	3.0	3.2	6.9	6.9	6.8
	2015	674	8.0	1.8	61.2	21.6	4.5	3.0	9.9	10.5	9.3
Chinese Taipei	2011	716	16.9	1.1	57.9	23.4	0.4	0.1	18.1	20.7	15.6
	2015	808	17.9	6.3	54.6	21.2	0.0	0.0	24.2	25.3	23.2
England	2011	554	20.6	1.8	44.7	28.7	2.3	1.9	22.4	25.7	19.2
	2015	686	30.8	1.7	43.7	21.4	1.4	1.0	32.5	35.6	29.3
Georgia	2011	655	4.2	0.3	38.8	47.4	6.1	3.3	4.5	4.0	5.0
	2015	581	2.4	1.1	78.5	13.3	1.3	3.4	3.4	5.1	2.1
Hong Kong SAR	2011	576	33.6	2.5	18.0	45.1	0.4	0.3	36.2	40.0	32.5
	2015	590	23.0	1.3	23.5	52.0	0.2	0.0	24.3	25.6	23.3
Hungary	2011	737	11.1	1.3	65.5	19.9	1.5	0.8	12.4	13.1	11.8
	2015	691	9.2	1.0	69.7	17.8	1.3	1.0	10.2	10.8	9.8
Iran, Islamic Rep. of	2011	847	7.3	0.4	67.5	19.2	3.7	1.9	7.8	8.3	7.3
	2015	871	8.0	3.1	40.9	41.0	2.6	4.4	11.0	12.2	10.0
Israel	2011	677	9.0	0.5	61.9	23.3	1.6	3.8	9.5	10.0	8.9
	2015	790	9.4	0.9	59.2	24.8	1.9	3.9	10.2	8.0	12.3
Italy	2011	566	14.6	1.4	61.4	17.9	3.8	0.8	16.1	15.3	16.8
	2015	627	11.8	1.8	69.1	13.9	2.0	1.4	13.6	17.2	10.4
Japan	2011	629	14.5	2.0	50.5	31.8	0.9	0.3	16.5	20.0	13.4
	2015	670	15.6	1.6	46.7	34.5	1.4	0.1	17.2	18.3	16.2
Jordan	2011	1100	6.5	1.4	33.1	57.1	1.0	0.8	7.9	7.3	8.5
	2015	1122	3.8	0.0	68.5	23.6	1.6	2.5	3.8	4.6	2.9
Kazakhstan	2011	633	7.4	3.9	36.7	40.1	10.2	1.6	11.3	10.1	12.6
	2015	696	30.2	0.6	31.0	33.3	3.8	1.1	30.8	32.9	29.0
Korea, Rep. of	2011	736	14.3	0.6	58.2	26.5	0.5	0.0	14.8	14.4	15.3
	2015	749	13.0	0.2	68.2	18.4	0.2	0.0	13.2	11.5	14.9
Lebanon	2011	567	6.3	0.9	38.0	48.5	3.7	2.6	7.3	9.8	4.5
	2015	543	10.1	0.7	5.9	73.2	5.1	5.0	10.8	10.0	11.8
Lithuania	2011	672	12.7	0.0	69.1	17.6	0.5	0.2	12.7	13.1	12.3
	2015	619	15.2	0.2	61.8	21.1	1.4	0.3	15.4	18.5	12.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_13 (M052117): Data and Chance / Applying Type: CR 1 Point
Label: Is Jesse's bar graph correct

COUNTRY	Year	N	10 %	11 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	6.1	1.7	58.5	24.7	7.7	1.4	7.8	10.0	5.4
	2015	1389	9.1	1.2	47.4	36.3	3.1	3.0	10.3	10.9	9.7
Morocco	2011	1288	9.8	3.6	0.3	78.2	4.0	4.1	13.5	14.3	12.6
	2015	1886	3.9	1.3	64.1	26.0	2.7	2.0	5.2	6.3	4.2
New Zealand	2011	745	30.8	0.1	39.1	27.3	1.8	1.0	30.9	30.3	31.4
	2015	1179	25.4	0.2	45.6	26.7	1.0	1.1	25.6	26.6	24.5
Oman	2011	1364	5.8	0.4	65.7	21.4	2.8	4.0	6.2	8.6	3.5
	2015	1270	6.0	1.8	59.5	30.2	1.2	1.3	7.8	9.9	5.9
Qatar	2011	633	6.7	1.3	65.4	22.5	2.4	1.7	8.0	8.4	7.5
	2015	762	9.6	0.4	64.3	22.3	1.2	2.3	10.0	10.7	9.2
Russian Federation	2011	708	6.4	1.9	52.2	21.9	15.9	1.8	8.2	8.0	8.5
	2015	686	3.9	0.8	66.1	24.6	2.5	2.1	4.7	2.9	6.2
Saudi Arabia	2011	610	7.0	0.7	71.1	20.6	0.4	0.1	7.8	8.0	7.6
	2015	542	23.9	0.2	55.8	17.5	1.9	0.7	24.1	29.3	18.7
Singapore	2011	843	22.3	0.4	52.1	25.1	0.1	0.0	22.7	25.8	19.7
	2015	870	22.4	1.4	51.2	24.7	0.1	0.1	23.8	22.5	25.1
Slovenia	2011	621	18.4	1.1	61.2	17.7	1.3	0.4	19.5	20.6	18.3
	2015	613	17.6	0.8	51.1	27.6	2.0	0.8	18.4	21.2	15.9
South Africa	2011	1697	10.3	4.9	14.9	59.7	7.1	3.0	15.2	15.7	14.8
	2015	1793	2.3	0.2	15.7	77.9	1.6	2.2	2.6	2.5	2.6
Sweden	2011	784	13.8	1.5	45.8	34.2	2.1	2.7	15.3	19.4	11.6
	2015	584	15.9	2.0	42.3	33.7	1.1	4.9	17.9	20.3	15.3
Thailand	2011	886	7.2	0.1	32.3	48.8	10.3	1.2	7.3	9.6	4.7
	2015	927	6.9	0.0	68.4	18.6	4.5	1.6	6.9	6.9	6.8
Turkey	2011	985	1.7	0.8	80.4	14.7	1.9	0.3	2.6	2.4	2.8
	2015	869	1.9	0.6	82.4	13.5	1.1	0.5	2.5	3.0	2.0
United Arab Emirates	2011	2006	16.4	1.0	48.0	31.7	1.8	1.1	17.4	22.5	12.6
	2015	2589	15.6	2.5	60.0	19.1	1.2	1.7	18.1	22.0	14.3
United States	2011	1485	17.0	1.2	64.3	14.5	1.3	1.7	18.2	22.2	14.4
	2015	1463	11.9	1.4	69.9	14.3	0.9	1.7	13.3	14.8	11.6
International Avg (n=33)	2011	28500	12.2	1.3	50.5	31.2	3.2	1.6	13.5	14.9	12.1
	2015	31152	12.6	1.2	55.0	27.6	1.8	1.8	13.8	15.0	12.6
Ontario, Canada	2011	670	33.2	2.1	38.2	18.8	2.3	5.4	35.3	39.8	30.9
	2015	643	25.9	4.4	48.9	16.4	1.0	3.5	30.3	33.5	27.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_13 (M052117): Data and Chance / Applying Type: CR 1 Point
Label: Is Jesse's bar graph correct

COUNTRY	Year	N	10 %	11 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	42.5	2.2	24.6	26.8	2.6	1.3	44.7	50.9	37.6
	2015	568	34.1	4.8	33.8	21.0	1.7	4.5	38.9	39.0	38.8
Norway (8)	2011	551	13.9	1.9	47.3	33.7	1.6	1.7	15.7	16.7	14.9
	2015	691	14.9	1.1	53.5	26.8	1.6	2.0	16.1	18.8	13.4
Abu Dhabi, UAE	2011	626	12.9	1.3	50.1	32.6	2.2	1.0	14.2	16.2	12.5
	2015	699	13.4	1.8	65.7	15.9	1.6	1.6	15.2	19.5	11.2
Dubai, UAE	2011	793	17.8	1.4	50.7	27.1	1.9	1.1	19.2	25.3	13.2
	2015	885	20.3	3.5	49.1	24.5	1.0	1.6	23.9	26.9	20.5
Florida, US	2011	242	20.8	1.2	59.4	17.4	1.3	0.0	21.9	20.9	23.1
	2015	301	8.7	1.1	75.8	11.5	1.0	1.9	9.7	11.7	7.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M09_14 (M052426): Data and Chance / Knowing Type: MC Key: D
Label: Number of goals of 4 soccer teams

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1100	78.1	5.4	3.2	10.3	78.1	2.2	0.8	77.2	79.0
	2015	1456	78.8	4.0	4.1	10.0	78.8	1.3	1.8	82.3	75.2
Bahrain	2011	661	58.1	11.3	9.5	16.1	58.1	3.4	1.7	60.6	55.5
	2015	706	76.9	5.7	4.2	10.9	76.9	1.1	1.3	78.9	75.2
Botswana	2011	773	60.5	8.7	6.3	15.2	60.5	3.2	6.0	61.0	60.1
	2015	851	59.3	11.6	8.1	15.5	59.3	2.2	3.3	60.9	57.8
Chile	2011	827	73.2	6.3	3.4	10.0	73.2	3.2	4.0	70.3	76.3
	2015	674	69.4	7.3	7.1	11.1	69.4	2.1	3.1	66.3	72.0
Chinese Taipei	2011	716	87.6	3.1	2.3	6.6	87.6	0.2	0.1	88.6	86.7
	2015	808	90.7	2.5	1.6	5.0	90.7	0.1	0.0	91.7	89.8
England	2011	554	80.1	5.0	2.0	8.6	80.1	2.4	1.9	80.1	80.2
	2015	686	74.7	6.5	3.3	11.9	74.7	2.1	1.4	75.0	74.5
Georgia	2011	653	68.3	7.8	6.2	11.0	68.3	3.3	3.4	68.1	68.4
	2015	581	64.6	8.2	9.1	11.5	64.6	3.0	3.6	65.9	63.5
Hong Kong SAR	2011	576	86.6	3.7	2.5	6.2	86.6	0.7	0.3	85.6	87.6
	2015	590	87.3	3.2	3.5	5.7	87.3	0.4	0.0	87.1	87.4
Hungary	2011	737	87.2	3.2	3.4	4.6	87.2	0.6	1.1	89.0	85.6
	2015	691	84.6	2.0	3.6	6.7	84.6	1.6	1.5	85.5	83.9
Iran, Islamic Rep. of	2011	847	59.9	11.6	8.3	14.2	59.9	4.1	2.0	60.5	59.3
	2015	871	58.3	10.5	6.2	15.1	58.3	4.8	5.1	58.7	57.9
Israel	2011	677	77.1	5.4	3.1	7.8	77.1	2.3	4.2	77.3	76.8
	2015	790	71.4	6.3	4.9	9.9	71.4	3.0	4.5	68.9	73.5
Italy	2011	566	81.4	4.3	3.0	8.2	81.4	2.0	1.0	78.0	84.7
	2015	627	80.3	3.9	2.6	8.7	80.3	2.7	1.7	82.4	78.5
Japan	2011	629	89.7	2.8	1.1	3.9	89.7	2.1	0.5	89.4	90.0
	2015	670	89.0	1.7	2.2	5.8	89.0	0.9	0.5	89.0	88.9
Jordan	2011	1100	62.4	10.8	7.6	16.5	62.4	1.9	0.8	62.8	62.0
	2015	1122	53.1	13.2	9.3	17.8	53.1	3.9	2.6	54.6	51.6
Kazakhstan	2011	633	74.3	7.1	5.7	7.6	74.3	3.8	1.6	75.8	72.7
	2015	696	83.8	5.1	4.0	5.0	83.8	0.7	1.5	86.0	81.8
Korea, Rep. of	2011	736	94.5	2.0	0.5	2.9	94.5	0.1	0.0	93.0	95.9
	2015	749	90.7	1.2	2.2	5.7	90.7	0.2	0.0	90.2	91.1
Lebanon	2011	558	67.8	5.0	4.6	13.5	67.8	6.4	2.6	71.1	64.3
	2015	543	64.1	5.6	4.1	9.6	64.1	11.4	5.2	63.5	64.8
Lithuania	2011	672	83.7	4.1	1.6	8.1	83.7	2.0	0.5	84.7	82.5
	2015	619	85.2	3.4	2.5	5.9	85.2	2.4	0.6	85.9	84.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_14 (M052426): Data and Chance / Knowing Type: MC Key: D
Label: Number of goals of 4 soccer teams

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	819	78.7	5.4	4.4	8.3	78.7	0.5	2.6	82.8	74.3
	2015	1389	80.7	4.4	3.3	7.2	80.7	0.9	3.5	80.4	80.9
Morocco	2011	1282	53.2	12.2	9.4	11.3	53.2	9.5	4.4	53.3	53.0
	2015	1887	57.1	13.0	8.8	13.4	57.1	5.1	2.6	56.0	58.2
New Zealand	2011	745	76.3	6.1	2.9	10.1	76.3	3.5	1.1	76.1	76.5
	2015	1179	78.4	5.4	3.7	9.4	78.4	1.6	1.4	78.9	78.0
Oman	2011	1364	45.6	17.5	11.7	17.1	45.6	3.8	4.3	50.0	41.0
	2015	1273	56.8	13.6	9.1	16.5	56.8	2.6	1.4	56.2	57.2
Qatar	2011	633	63.2	10.3	6.4	15.8	63.2	2.5	1.9	64.9	61.4
	2015	762	62.6	12.1	7.2	13.2	62.6	2.2	2.7	65.2	59.9
Russian Federation	2011	708	88.3	3.5	1.2	3.3	88.3	1.6	2.3	88.1	88.4
	2015	686	82.8	2.9	1.4	5.8	82.8	4.5	2.6	84.1	81.6
Saudi Arabia	2011	611	61.4	16.4	8.3	13.2	61.4	0.6	0.1	58.7	63.9
	2015	542	48.8	16.1	14.1	17.7	48.8	2.1	1.3	47.9	49.6
Singapore	2011	843	89.5	3.2	2.3	4.3	89.5	0.7	0.0	92.3	86.9
	2015	870	89.8	2.7	2.0	5.2	89.8	0.4	0.1	90.7	88.9
Slovenia	2011	621	82.4	3.8	1.1	10.2	82.4	1.8	0.8	82.8	81.9
	2015	613	81.5	4.0	2.7	7.4	81.5	3.4	1.2	78.9	83.8
South Africa	2011	1697	44.8	16.2	9.0	15.2	44.8	11.1	3.7	42.3	46.9
	2015	1793	55.0	14.3	7.6	14.5	55.0	5.5	3.0	55.1	54.9
Sweden	2011	784	75.6	3.6	3.4	8.3	75.6	6.2	3.0	76.7	74.6
	2015	585	77.3	2.9	3.5	6.3	77.3	4.6	5.3	77.9	76.6
Thailand	2011	886	77.9	4.3	6.0	7.5	77.9	2.4	2.0	82.0	73.0
	2015	927	74.8	4.0	6.7	10.7	74.8	2.0	1.8	77.4	71.8
Turkey	2011	988	74.7	8.6	4.5	11.1	74.7	0.8	0.4	71.9	77.3
	2015	869	74.4	6.5	5.2	12.3	74.4	0.9	0.7	74.7	74.3
United Arab Emirates	2011	2006	69.6	8.4	4.8	14.2	69.6	1.8	1.3	72.4	66.8
	2015	2589	67.6	8.2	6.0	14.2	67.6	2.0	2.0	71.6	63.6
United States	2011	1485	77.3	5.1	4.2	10.1	77.3	1.3	2.0	77.3	77.2
	2015	1463	75.2	5.9	4.2	11.3	75.2	1.4	2.1	74.2	76.2
International Avg (n=33)	2011	28487	73.6	7.0	4.7	10.0	73.6	2.8	1.9	74.1	73.1
	2015	31157	73.5	6.6	5.1	10.2	73.5	2.5	2.1	74.0	72.9
Ontario, Canada	2011	670	74.4	5.8	1.8	9.9	74.4	2.3	5.8	76.4	72.5
	2015	640	75.3	5.1	3.3	11.0	75.3	1.1	4.2	75.7	75.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M09_14 (M052426): Data and Chance / Knowing Type: MC Key: D
Label: Number of goals of 4 soccer teams

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	873	83.7	3.2	2.7	6.5	83.7	2.2	1.7	83.6	83.9
	2015	563	79.3	3.7	1.4	7.4	79.3	2.8	5.4	76.1	82.6
Norway (8)	2011	551	71.4	6.3	2.5	10.9	71.4	6.5	2.3	73.4	69.6
	2015	691	73.2	6.1	4.0	8.7	73.2	5.6	2.4	78.1	68.5
Abu Dhabi, UAE	2011	626	66.4	9.0	5.1	16.6	66.4	1.7	1.2	68.1	65.0
	2015	699	65.2	9.0	6.3	15.7	65.2	1.8	2.1	71.6	59.1
Dubai, UAE	2011	793	76.5	5.5	3.2	10.3	76.5	3.2	1.4	78.1	75.0
	2015	885	75.1	6.1	5.1	9.3	75.1	2.6	1.8	75.4	74.8
Florida, US	2011	242	74.1	7.4	5.8	10.9	74.1	1.8	0.0	76.1	71.8
	2015	301	72.7	7.4	4.4	12.7	72.7	0.9	1.9	76.9	68.8

DIFF = Percent correct
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M11_01 (M052079): Number / Applying Type: MC Key: B
Label: Length of shorter string piece

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	61.2	19.6	61.2	10.5	6.5	2.2	0.0	61.8	60.5
	2015	1474	62.7	17.9	62.7	10.4	5.6	3.4	0.0	64.2	61.0
Bahrain	2011	653	39.2	31.1	39.2	15.4	7.9	6.5	0.0	39.2	39.1
	2015	695	46.8	26.1	46.8	16.8	8.8	1.5	0.0	43.7	49.7
Botswana	2011	766	41.4	30.2	41.4	17.4	7.4	3.4	0.1	38.2	44.9
	2015	855	46.9	23.9	46.9	19.0	7.5	2.7	0.0	45.7	48.1
Chile	2011	825	50.0	28.8	50.0	8.0	4.7	8.1	0.4	49.9	50.1
	2015	701	56.2	26.5	56.2	8.8	3.7	4.7	0.1	53.4	58.6
Chinese Taipei	2011	716	80.1	9.8	80.1	5.9	3.9	0.3	0.0	79.1	81.1
	2015	819	77.7	11.1	77.7	4.9	6.0	0.2	0.0	78.2	77.3
England	2011	549	65.4	16.5	65.4	9.7	4.9	3.2	0.2	62.1	68.3
	2015	694	62.0	17.9	62.0	11.0	5.7	3.3	0.0	59.5	64.8
Georgia	2011	657	49.7	24.8	49.7	15.8	5.4	4.4	0.0	49.4	50.1
	2015	574	53.1	27.2	53.1	12.1	4.2	3.4	0.0	50.8	55.0
Hong Kong SAR	2011	569	68.1	12.1	68.1	5.3	13.4	1.0	0.0	69.3	66.9
	2015	581	69.8	8.4	69.8	8.0	12.6	1.1	0.0	72.2	67.4
Hungary	2011	740	66.5	19.3	66.5	8.7	5.1	0.4	0.0	65.4	67.5
	2015	706	67.3	15.6	67.3	9.8	6.1	1.3	0.0	69.4	65.0
Iran, Islamic Rep. of	2011	861	49.8	15.9	49.8	15.7	14.8	3.8	0.1	46.7	52.4
	2015	863	54.8	14.7	54.8	13.9	10.7	5.9	0.0	52.4	56.9
Israel	2011	677	70.9	12.8	70.9	5.7	6.7	3.9	0.0	70.6	71.3
	2015	796	66.5	14.2	66.5	9.3	5.4	4.2	0.4	60.8	72.3
Italy	2011	561	51.8	12.7	51.8	6.5	24.0	5.0	0.0	44.7	58.6
	2015	640	49.0	17.1	49.0	8.6	21.5	3.7	0.0	49.4	48.7
Japan	2011	636	79.1	3.7	79.1	11.9	5.3	0.0	0.0	79.7	78.4
	2015	683	79.6	3.1	79.6	10.8	6.3	0.2	0.0	78.0	81.4
Jordan	2011	1080	42.9	31.3	42.9	13.0	9.6	3.2	0.0	38.3	47.2
	2015	1122	36.5	34.7	36.5	15.7	9.4	3.5	0.1	35.0	38.2
Kazakhstan	2011	624	48.6	20.8	48.6	11.2	16.7	2.5	0.2	41.4	55.9
	2015	695	62.2	13.3	62.2	11.4	11.1	1.9	0.1	59.0	65.0
Korea, Rep. of	2011	741	88.7	2.8	88.7	2.1	6.4	0.0	0.0	87.9	89.5
	2015	766	85.3	4.2	85.3	4.4	6.0	0.0	0.0	86.6	84.0
Lebanon	2011	570	33.6	30.4	33.6	17.1	7.6	11.2	0.0	30.3	37.4
	2015	552	35.8	28.6	35.8	12.0	9.0	14.2	0.4	33.6	38.2
Lithuania	2011	681	56.3	25.7	56.3	7.7	7.4	2.9	0.0	58.9	53.9
	2015	611	58.6	19.3	58.6	9.7	9.4	3.0	0.0	58.8	58.4

DIFF = Percent correct
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M11_01 (M052079): Number / Applying Type: MC Key: B
Label: Length of shorter string piece

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	47.0	23.0	47.0	19.6	7.7	2.6	0.0	47.5	46.6
	2015	1394	51.4	22.1	51.4	17.2	6.8	2.5	0.0	51.2	51.6
Morocco	2011	1153	26.3	32.8	26.3	16.4	18.0	6.1	0.4	25.7	26.9
	2015	1893	30.5	33.7	30.5	18.0	11.6	6.2	0.0	23.5	36.4
New Zealand	2011	761	57.9	21.2	57.9	13.5	4.4	3.1	0.0	51.8	63.2
	2015	1144	57.4	19.2	57.4	14.2	5.0	3.9	0.2	60.0	55.1
Oman	2011	1370	30.6	23.9	30.6	23.7	14.0	7.5	0.3	26.3	35.0
	2015	1263	31.9	26.3	31.9	20.9	16.7	4.0	0.2	27.2	36.0
Qatar	2011	632	42.3	25.5	42.3	18.4	10.7	3.1	0.1	40.2	44.4
	2015	772	50.7	20.3	50.7	14.4	10.7	3.8	0.2	51.6	49.7
Russian Federation	2011	695	64.3	11.6	64.3	6.6	14.1	3.4	0.0	62.9	65.6
	2015	675	65.9	11.7	65.9	7.1	11.0	3.9	0.3	62.7	69.0
Saudi Arabia	2011	602	37.0	24.6	37.0	18.1	16.6	3.7	0.1	33.8	40.0
	2015	543	35.1	31.3	35.1	22.1	10.1	1.3	0.1	31.1	39.1
Singapore	2011	835	89.2	6.3	89.2	1.7	2.7	0.1	0.0	90.2	88.3
	2015	870	90.7	4.6	90.7	2.4	2.2	0.2	0.0	91.8	89.5
Slovenia	2011	631	58.5	22.3	58.5	8.2	7.4	3.6	0.0	56.8	60.1
	2015	603	61.3	20.7	61.3	8.3	7.3	2.3	0.0	60.4	62.0
South Africa	2011	1706	31.8	38.4	31.8	21.3	6.1	2.4	0.1	28.0	35.6
	2015	1797	35.5	34.5	35.5	22.4	5.3	2.3	0.0	38.1	32.5
Sweden	2011	797	56.8	22.2	56.8	10.1	6.1	4.8	0.0	58.4	55.5
	2015	583	50.4	24.5	50.4	10.9	8.3	5.8	0.1	48.7	51.8
Thailand	2011	885	50.3	19.2	50.3	16.3	10.6	3.6	0.1	48.6	52.3
	2015	923	47.7	16.5	47.7	23.2	10.9	1.6	0.1	47.3	48.3
Turkey	2011	982	37.6	25.8	37.6	11.5	18.0	7.2	0.0	35.5	39.4
	2015	864	36.5	26.5	36.5	15.7	19.5	1.7	0.0	35.6	37.6
United Arab Emirates	2011	2006	44.3	28.5	44.3	10.9	12.0	4.3	0.1	43.7	44.9
	2015	2568	48.1	23.2	48.1	13.3	12.1	3.3	0.0	47.5	48.7
United States	2011	1518	57.8	21.6	57.8	9.1	9.3	1.8	0.3	56.7	59.1
	2015	1456	58.8	20.3	58.8	10.7	8.3	1.9	0.2	58.6	58.9
International Avg (n=33)	2011	28358	53.8	21.1	53.8	11.9	9.6	3.6	0.1	52.1	55.5
	2015	31175	55.2	20.0	55.2	12.6	8.9	3.1	0.1	54.1	56.3
Ontario, Canada	2011	673	58.3	20.8	58.3	9.5	7.6	3.5	0.3	61.7	55.0
	2015	647	61.0	18.3	61.0	12.7	5.0	2.7	0.2	61.2	60.8

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M11_01 (M052079): Number / Applying Type: MC Key: B
Label: Length of shorter string piece

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	50.4	22.0	50.4	8.1	10.7	8.5	0.3	49.7	51.2
	2015	558	47.2	22.2	47.2	4.4	17.7	8.5	0.0	47.1	47.3
Norway (8)	2011	559	52.7	32.5	52.7	7.7	3.4	3.8	0.0	57.8	47.5
	2015	672	54.9	25.9	54.9	8.4	5.8	4.9	0.1	57.2	52.8
Abu Dhabi, UAE	2011	631	41.3	33.8	41.3	10.4	10.6	4.0	0.0	40.9	41.7
	2015	690	44.4	26.0	44.4	13.9	12.6	3.1	0.0	43.8	45.1
Dubai, UAE	2011	783	58.3	19.1	58.3	9.3	8.9	4.1	0.2	58.1	58.6
	2015	884	61.7	15.6	61.7	9.3	10.7	2.8	0.0	63.3	60.0
Florida, US	2011	229	59.8	18.4	59.8	11.0	8.9	2.0	0.0	59.8	59.7
	2015	302	54.7	20.3	54.7	11.0	12.5	1.6	0.0	60.0	48.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_02 (M052204): Number / Knowing Type: MC Key: C
Label: Which is a prime number

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	55.7	27.4	12.1	55.7	2.3	2.5	0.0	53.6	58.0
	2015	1474	56.1	24.8	14.4	56.1	3.0	1.7	0.0	57.5	54.7
Bahrain	2011	653	33.0	51.6	9.2	33.0	3.2	2.9	0.0	36.9	29.0
	2015	695	66.7	22.0	7.9	66.7	2.1	1.3	0.0	66.5	66.8
Botswana	2011	766	49.1	39.5	8.9	49.1	1.7	0.7	0.1	49.3	48.9
	2015	855	49.1	35.5	10.7	49.1	3.7	1.0	0.0	54.3	44.0
Chile	2011	825	30.3	29.6	31.0	30.3	4.8	3.8	0.5	28.1	33.0
	2015	701	33.7	25.2	34.0	33.7	4.1	3.0	0.1	31.8	35.2
Chinese Taipei	2011	716	84.9	10.5	3.2	84.9	1.4	0.0	0.0	86.4	83.4
	2015	819	85.6	10.5	2.3	85.6	1.5	0.1	0.0	89.9	81.6
England	2011	549	63.3	23.2	8.7	63.3	3.1	1.5	0.2	60.7	65.6
	2015	694	67.5	20.8	7.9	67.5	1.9	1.9	0.0	65.0	70.1
Georgia	2011	657	36.0	51.0	8.8	36.0	2.8	1.4	0.0	40.3	31.5
	2015	574	39.0	42.0	15.4	39.0	2.0	1.6	0.0	42.2	36.5
Hong Kong SAR	2011	569	66.3	24.1	5.5	66.3	3.6	0.3	0.2	66.6	66.0
	2015	581	68.5	24.2	3.7	68.5	3.1	0.4	0.1	68.6	68.4
Hungary	2011	740	59.4	21.9	10.9	59.4	1.7	6.1	0.0	61.0	57.8
	2015	706	61.5	21.9	10.3	61.5	2.6	3.7	0.0	61.1	61.8
Iran, Islamic Rep. of	2011	861	69.0	20.8	7.1	69.0	2.3	0.6	0.1	72.4	66.1
	2015	863	69.2	19.2	6.9	69.2	3.4	1.1	0.1	75.6	63.5
Israel	2011	677	39.9	48.6	6.3	39.9	2.3	2.8	0.0	39.3	40.6
	2015	796	40.6	41.4	9.2	40.6	4.4	4.0	0.4	36.7	44.5
Italy	2011	559	58.9	27.8	7.0	58.9	2.4	3.8	0.0	60.3	57.5
	2015	640	52.1	31.7	12.1	52.1	2.2	1.9	0.0	47.1	57.1
Japan	2011	636	27.9	54.6	9.0	27.9	7.0	1.6	0.0	26.5	29.2
	2015	683	50.6	39.7	5.5	50.6	1.9	2.4	0.0	49.3	52.0
Jordan	2011	1080	34.4	50.8	8.5	34.4	4.8	1.4	0.0	39.5	29.6
	2015	1122	36.2	48.0	8.7	36.2	4.7	2.3	0.1	44.2	27.8
Kazakhstan	2011	624	25.1	64.3	8.3	25.1	1.5	0.7	0.2	24.5	25.6
	2015	695	47.6	44.8	5.1	47.6	1.2	1.1	0.1	41.4	53.2
Korea, Rep. of	2011	741	84.5	12.8	1.9	84.5	0.8	0.0	0.0	82.9	86.2
	2015	766	81.7	13.8	3.2	81.7	0.8	0.5	0.0	82.5	80.8
Lebanon	2011	519	44.4	35.3	13.2	44.4	3.5	3.7	0.0	41.0	48.4
	2015	552	41.5	26.1	12.5	41.5	4.4	15.0	0.6	40.6	42.4
Lithuania	2011	681	15.1	71.2	8.3	15.1	3.5	2.0	0.0	19.0	11.5
	2015	611	18.2	69.2	7.6	18.2	3.7	1.3	0.0	20.2	16.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_02 (M052204): Number / Knowing Type: MC Key: C
Label: Which is a prime number

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	42.1	28.1	17.7	42.1	10.1	1.9	0.1	40.7	43.4
	2015	1394	43.2	25.0	23.4	43.2	7.3	1.2	0.0	43.4	43.0
Morocco	2011	1132	8.9	68.5	11.2	8.9	4.8	6.0	0.7	8.1	9.6
	2015	1893	19.1	58.4	12.2	19.1	5.0	5.3	0.0	19.4	18.8
New Zealand	2011	761	54.9	25.8	12.3	54.9	5.0	1.9	0.0	53.9	55.7
	2015	1144	55.3	24.2	15.5	55.3	3.1	1.7	0.2	56.3	54.4
Oman	2011	1371	40.0	41.7	11.4	40.0	4.4	2.1	0.4	51.2	28.8
	2015	1263	47.9	39.7	8.0	47.9	3.0	1.3	0.2	53.6	42.8
Qatar	2011	632	37.6	42.9	11.0	37.6	5.7	2.7	0.1	35.0	40.3
	2015	772	41.5	38.7	13.9	41.5	3.6	2.0	0.2	43.2	39.8
Russian Federation	2011	695	29.6	60.5	6.4	29.6	0.8	2.7	0.0	30.4	28.9
	2015	675	29.6	60.4	6.5	29.6	0.9	2.2	0.3	33.2	26.1
Saudi Arabia	2011	604	28.5	50.7	14.4	28.5	4.5	1.7	0.1	29.8	27.3
	2015	541	26.3	52.1	14.5	26.3	6.9	0.2	0.1	26.9	25.7
Singapore	2011	835	81.9	11.4	4.2	81.9	2.4	0.1	0.0	83.8	80.0
	2015	870	78.1	15.1	5.2	78.1	1.4	0.2	0.0	80.2	75.7
Slovenia	2011	631	48.7	32.4	4.9	48.7	9.1	4.8	0.0	50.0	47.5
	2015	603	55.7	32.1	3.9	55.7	5.2	3.1	0.0	54.8	56.6
South Africa	2011	1706	26.4	48.3	15.8	26.4	6.5	2.9	0.1	25.8	27.1
	2015	1797	34.6	45.0	14.5	34.6	4.9	0.9	0.0	36.9	32.0
Sweden	2011	797	47.8	21.9	17.6	47.8	8.0	4.7	0.0	48.1	47.6
	2015	583	46.1	21.9	17.6	46.1	5.7	8.5	0.1	47.7	44.6
Thailand	2011	885	51.6	32.4	10.2	51.6	4.0	1.6	0.1	57.2	45.1
	2015	923	56.4	29.3	10.5	56.4	3.7	0.0	0.1	57.8	54.7
Turkey	2011	982	50.3	27.7	9.4	50.3	11.4	1.2	0.0	52.0	48.8
	2015	864	51.1	30.6	8.2	51.1	9.3	0.9	0.0	50.0	52.2
United Arab Emirates	2011	2006	46.9	37.2	10.6	46.9	3.7	1.5	0.1	47.8	46.1
	2015	2568	49.1	32.8	11.6	49.1	4.5	2.0	0.0	48.0	50.2
United States	2011	1518	55.5	28.5	10.4	55.5	3.5	1.6	0.4	57.2	53.7
	2015	1456	48.4	31.4	14.7	48.4	4.1	1.3	0.2	51.1	45.7
International Avg (n=33)	2011	28287	46.3	37.1	10.2	46.3	4.1	2.2	0.1	47.3	45.4
	2015	31173	49.9	33.3	10.8	49.9	3.6	2.3	0.1	50.8	49.1
Ontario, Canada	2011	673	48.0	34.4	13.6	48.0	2.5	1.4	0.3	47.1	48.4
	2015	636	49.1	35.0	11.5	49.1	2.9	1.2	0.2	45.3	53.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_02 (M052204): Number / Knowing Type: MC Key: C
Label: Which is a prime number

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	42.2	43.7	8.6	42.2	2.1	2.8	0.5	44.8	39.2
	2015	552	49.8	37.4	10.2	49.8	1.5	1.1	0.1	47.5	52.5
Norway (8)	2011	559	62.4	17.3	5.6	62.4	1.2	13.5	0.0	64.8	60.0
	2015	672	58.4	15.3	7.1	58.4	1.0	18.0	0.2	55.0	61.5
Abu Dhabi, UAE	2011	631	46.7	38.4	11.0	46.7	2.7	1.2	0.0	45.8	47.4
	2015	690	45.6	31.4	15.0	45.6	5.5	2.6	0.0	46.0	45.1
Dubai, UAE	2011	783	54.8	29.3	9.3	54.8	4.4	2.0	0.2	55.6	54.2
	2015	884	60.2	29.8	5.6	60.2	2.6	1.7	0.0	60.1	60.4
Florida, US	2011	229	51.9	32.2	11.7	51.9	2.5	1.7	0.0	58.1	45.6
	2015	302	42.4	34.6	15.5	42.4	6.0	1.4	0.0	41.4	43.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_03 (M052364): Number / Applying Type: CR 1 Point
Label: Answer to Robert's problem

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	70.3	12.5	13.7	3.5	0.0	70.3	67.7	73.1
	2015	1474	69.4	12.7	13.5	4.4	0.0	69.4	67.8	71.1
Bahrain	2011	653	22.1	29.5	38.4	10.0	0.0	22.1	22.5	21.7
	2015	695	25.0	27.1	39.3	8.6	0.0	25.0	23.4	26.5
Botswana	2011	765	26.4	29.2	42.8	1.4	0.1	26.4	27.4	25.4
	2015	855	27.8	26.9	43.2	2.1	0.0	27.8	29.3	26.2
Chile	2011	825	45.8	13.1	27.5	13.1	0.5	45.8	44.2	47.7
	2015	701	49.0	5.6	27.0	18.4	0.1	49.0	47.0	50.6
Chinese Taipei	2011	716	85.0	6.0	6.8	2.2	0.0	85.0	86.0	84.1
	2015	819	85.6	3.7	7.1	3.6	0.0	85.6	84.7	86.4
England	2011	549	75.7	8.9	11.3	3.8	0.2	75.7	75.9	75.6
	2015	694	77.2	5.2	14.0	3.5	0.0	77.2	77.0	77.5
Georgia	2011	657	49.6	17.1	21.3	12.0	0.0	49.6	45.3	54.1
	2015	574	51.5	11.8	26.3	10.4	0.0	51.5	54.3	49.3
Hong Kong SAR	2011	569	70.3	15.6	11.3	2.6	0.2	70.3	69.1	71.5
	2015	581	75.3	15.0	8.4	1.2	0.1	75.3	72.9	77.7
Hungary	2011	740	71.5	11.5	13.4	3.6	0.0	71.5	68.0	74.9
	2015	706	68.5	11.2	13.6	6.6	0.0	68.5	68.9	68.2
Iran, Islamic Rep. of	2011	861	24.4	40.9	23.0	11.6	0.1	24.4	22.9	25.7
	2015	863	28.0	41.9	19.9	10.0	0.1	28.0	29.0	27.1
Israel	2011	677	53.9	16.6	21.2	8.3	0.0	53.9	53.3	54.5
	2015	796	52.8	12.6	25.3	8.9	0.4	52.8	49.2	56.5
Italy	2011	561	73.5	14.5	5.4	6.7	0.0	73.5	70.7	76.1
	2015	640	74.4	14.1	5.2	6.4	0.0	74.4	68.7	80.2
Japan	2011	636	41.9	37.9	19.0	1.1	0.0	41.9	42.6	41.3
	2015	683	50.5	33.5	14.9	1.1	0.0	50.5	50.7	50.2
Jordan	2011	1080	16.9	31.6	43.9	7.7	0.0	16.9	15.1	18.5
	2015	1122	17.1	24.3	49.0	9.4	0.1	17.1	18.3	15.9
Kazakhstan	2011	624	48.2	10.8	31.4	9.4	0.3	48.2	48.1	48.2
	2015	695	55.2	3.2	36.6	5.0	0.1	55.2	54.2	56.0
Korea, Rep. of	2011	741	91.6	2.2	5.7	0.5	0.0	91.6	93.9	89.2
	2015	766	90.1	2.4	5.9	1.5	0.0	90.1	91.4	89.0
Lebanon	2011	570	29.9	14.5	38.5	16.9	0.2	29.9	28.7	31.3
	2015	552	28.2	17.3	30.8	23.2	0.6	28.2	27.1	29.4
Lithuania	2011	681	73.3	9.3	15.8	1.7	0.0	73.3	73.3	73.2
	2015	611	74.6	9.8	11.8	3.9	0.0	74.6	72.2	76.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_03 (M052364): Number / Applying Type: CR 1 Point
Label: Answer to Robert's problem

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	26.6	26.6	38.1	8.5	0.2	26.6	28.2	25.0
	2015	1394	28.7	20.7	39.4	11.1	0.0	28.7	29.0	28.4
Morocco	2011	1156	7.5	27.8	43.4	20.3	1.0	7.5	6.5	8.4
	2015	1893	11.4	34.7	39.9	14.0	0.0	11.4	10.0	12.6
New Zealand	2011	761	70.4	11.0	14.3	4.3	0.0	70.4	66.8	73.5
	2015	1144	68.6	9.9	16.5	4.8	0.2	68.6	69.4	67.8
Oman	2011	1371	13.9	19.6	52.0	14.2	0.4	13.9	15.6	12.2
	2015	1258	17.3	22.4	51.6	8.5	0.2	17.3	18.7	16.0
Qatar	2011	632	29.0	19.1	43.4	8.4	0.1	29.0	31.5	26.4
	2015	772	35.1	25.3	32.8	6.6	0.2	35.1	36.9	33.3
Russian Federation	2011	695	81.7	7.8	7.7	2.8	0.0	81.7	79.7	83.5
	2015	675	77.5	9.7	7.8	4.7	0.3	77.5	74.0	81.0
Saudi Arabia	2011	607	16.0	33.8	42.3	7.8	0.1	16.0	13.2	18.7
	2015	543	14.8	16.7	58.1	10.3	0.1	14.8	17.4	12.2
Singapore	2011	835	79.6	11.9	8.0	0.5	0.0	79.6	80.4	78.8
	2015	870	82.0	11.2	5.6	1.2	0.0	82.0	80.9	83.2
Slovenia	2011	631	52.2	28.8	13.8	5.3	0.0	52.2	51.7	52.6
	2015	603	57.7	26.1	11.5	4.8	0.0	57.7	54.4	60.4
South Africa	2011	1706	13.9	22.0	58.8	5.2	0.1	13.9	13.9	13.9
	2015	1797	22.4	11.8	62.8	3.0	0.0	22.4	23.5	21.1
Sweden	2011	797	55.5	12.9	23.4	8.2	0.0	55.5	53.6	57.2
	2015	582	68.1	11.8	13.4	6.5	0.1	68.1	66.7	69.2
Thailand	2011	885	22.2	23.4	39.4	14.8	0.1	22.2	20.1	24.8
	2015	923	23.7	17.7	48.0	10.5	0.1	23.7	22.7	24.7
Turkey	2011	982	56.6	12.5	22.9	8.0	0.0	56.6	58.8	54.6
	2015	864	54.4	13.2	24.4	8.0	0.0	54.4	56.8	51.7
United Arab Emirates	2011	2006	38.3	26.7	30.0	4.9	0.1	38.3	39.4	37.2
	2015	2568	41.6	23.1	29.7	5.6	0.0	41.6	43.3	39.8
United States	2011	1518	72.9	13.9	10.7	2.2	0.4	72.9	72.8	72.9
	2015	1456	72.7	12.8	12.3	1.9	0.2	72.7	73.6	71.9
International Avg (n=33)	2011	28366	48.7	18.8	25.4	7.0	0.1	48.7	48.1	49.3
	2015	31169	50.8	16.5	25.6	7.0	0.1	50.8	50.4	51.2
Ontario, Canada	2011	673	74.7	8.8	12.4	3.8	0.3	74.7	75.0	74.3
	2015	647	77.0	10.5	9.0	3.2	0.2	77.0	75.5	78.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_03 (M052364): Number / Applying Type: CR 1 Point
Label: Answer to Robert's problem

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	75.6	11.5	10.2	2.2	0.6	75.6	73.6	77.8
	2015	559	73.2	19.4	3.2	4.2	0.1	73.2	70.9	76.0
Norway (8)	2011	559	50.4	24.9	19.6	5.1	0.0	50.4	51.4	49.5
	2015	672	50.8	24.3	18.0	6.7	0.2	50.8	50.3	51.2
Abu Dhabi, UAE	2011	631	36.3	28.1	31.3	4.4	0.0	36.3	35.7	36.8
	2015	690	32.8	25.1	35.4	6.7	0.0	32.8	37.7	27.6
Dubai, UAE	2011	783	49.9	22.8	22.6	4.4	0.2	49.9	50.4	49.5
	2015	884	61.4	15.6	20.3	2.8	0.0	61.4	61.3	61.4
Florida, US	2011	229	73.3	9.6	14.3	2.8	0.0	73.3	74.6	71.9
	2015	302	70.1	12.7	13.9	3.3	0.0	70.1	73.3	66.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_04 (M052215): Number / Knowing Type: CR 1 Point
Label: Fraction of diagram shaded

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	70.8	27.6	1.6	0.0	70.8	71.4	70.1
	2015	1474	66.1	31.8	2.0	0.0	66.1	66.6	65.6
Bahrain	2011	653	35.1	52.4	12.2	0.2	35.1	43.3	26.7
	2015	695	55.7	38.4	5.9	0.0	55.7	61.0	50.7
Botswana	2011	765	41.2	54.8	3.8	0.1	41.2	46.2	35.9
	2015	855	40.3	57.8	1.9	0.0	40.3	47.8	33.0
Chile	2011	825	36.9	47.3	15.3	0.5	36.9	38.4	35.0
	2015	701	46.4	39.8	13.6	0.1	46.4	52.4	41.4
Chinese Taipei	2011	716	82.5	16.6	0.9	0.0	82.5	83.1	82.0
	2015	819	76.0	23.3	0.7	0.0	76.0	77.5	74.6
England	2011	549	65.7	32.9	1.2	0.2	65.7	70.2	61.9
	2015	694	69.1	29.0	1.9	0.0	69.1	72.0	65.9
Georgia	2011	655	32.8	51.9	15.2	0.1	32.8	35.3	30.3
	2015	574	40.4	48.9	10.8	0.0	40.4	43.7	37.7
Hong Kong SAR	2011	569	83.3	15.0	1.5	0.2	83.3	83.1	83.4
	2015	581	86.4	13.2	0.3	0.1	86.4	86.2	86.6
Hungary	2011	740	38.6	56.3	5.0	0.0	38.6	36.5	40.7
	2015	706	41.4	50.1	8.5	0.0	41.4	41.8	41.0
Iran, Islamic Rep. of	2011	861	37.3	53.3	9.3	0.1	37.3	40.7	34.4
	2015	863	63.6	32.8	3.5	0.1	63.6	68.5	59.2
Israel	2011	677	66.4	25.8	7.8	0.0	66.4	69.4	63.3
	2015	796	62.6	31.1	5.9	0.4	62.6	65.9	59.2
Italy	2011	561	65.0	30.6	4.4	0.0	65.0	67.0	63.1
	2015	640	66.6	29.1	4.3	0.0	66.6	69.9	63.3
Japan	2011	636	55.7	41.9	2.3	0.0	55.7	54.6	56.8
	2015	683	57.8	40.2	2.0	0.0	57.8	59.0	56.5
Jordan	2011	1080	49.4	46.8	3.8	0.0	49.4	57.3	41.9
	2015	1122	43.8	50.4	5.8	0.1	43.8	52.4	34.8
Kazakhstan	2011	624	39.3	51.3	9.0	0.3	39.3	39.1	39.6
	2015	695	43.5	51.1	5.3	0.1	43.5	45.7	41.6
Korea, Rep. of	2011	741	92.1	7.6	0.2	0.0	92.1	94.2	90.0
	2015	766	92.6	7.1	0.3	0.0	92.6	94.3	91.0
Lebanon	2011	570	34.5	49.7	15.5	0.3	34.5	33.7	35.3
	2015	552	33.1	49.6	16.3	1.0	33.1	35.7	30.2
Lithuania	2011	681	60.1	36.1	3.8	0.0	60.1	63.1	57.3
	2015	611	62.9	33.9	3.2	0.0	62.9	66.0	59.9

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_04 (M052215): Number / Knowing Type: CR 1 Point
Label: Fraction of diagram shaded

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	55.5	38.6	5.7	0.2	55.5	65.8	45.1
	2015	1394	60.4	35.5	4.1	0.0	60.4	67.3	53.5
Morocco	2011	1152	24.3	61.4	12.9	1.4	24.3	26.1	22.6
	2015	1894	24.1	65.6	10.3	0.0	24.1	24.8	23.4
New Zealand	2011	761	67.2	30.9	1.8	0.0	67.2	69.1	65.6
	2015	1144	67.4	30.9	1.5	0.2	67.4	69.3	65.6
Oman	2011	1371	35.7	54.1	9.8	0.4	35.7	46.8	24.5
	2015	1257	37.9	56.0	5.9	0.2	37.9	46.2	30.5
Qatar	2011	632	47.0	47.6	5.3	0.1	47.0	60.7	32.7
	2015	772	47.8	47.4	4.6	0.3	47.8	53.9	41.6
Russian Federation	2011	695	51.3	40.5	8.2	0.0	51.3	49.1	53.3
	2015	675	53.1	40.4	6.2	0.3	53.1	53.5	52.7
Saudi Arabia	2011	607	38.8	53.9	7.2	0.1	38.8	48.5	29.6
	2015	542	23.7	67.3	9.0	0.1	23.7	30.7	16.7
Singapore	2011	835	88.8	10.8	0.4	0.0	88.8	93.7	84.3
	2015	870	89.2	10.6	0.2	0.0	89.2	89.0	89.5
Slovenia	2011	631	59.6	38.1	2.3	0.0	59.6	57.1	62.0
	2015	603	69.8	27.2	3.0	0.0	69.8	71.4	68.5
South Africa	2011	1706	18.6	71.4	9.8	0.2	18.6	20.4	16.8
	2015	1797	28.2	66.7	5.1	0.0	28.2	34.7	20.6
Sweden	2011	797	70.3	27.7	2.1	0.0	70.3	70.6	69.9
	2015	582	68.1	30.1	1.5	0.3	68.1	65.9	70.0
Thailand	2011	885	50.8	44.2	4.9	0.1	50.8	59.8	40.2
	2015	923	48.8	47.6	3.5	0.1	48.8	55.0	41.4
Turkey	2011	982	44.1	46.1	9.8	0.0	44.1	49.1	39.6
	2015	864	46.7	44.4	8.8	0.0	46.7	55.2	37.7
United Arab Emirates	2011	2006	59.1	38.0	2.8	0.1	59.1	66.3	51.9
	2015	2567	54.9	41.6	3.5	0.0	54.9	61.3	48.0
United States	2011	1518	70.0	28.7	0.8	0.4	70.0	71.9	67.9
	2015	1456	67.0	32.0	0.8	0.2	67.0	70.0	64.0
International Avg (n=33)	2011	28360	53.6	40.3	6.0	0.2	53.6	57.0	50.1
	2015	31167	55.6	39.4	4.9	0.1	55.6	59.2	52.0
Ontario, Canada	2011	673	76.8	20.3	2.7	0.3	76.8	77.2	76.2
	2015	647	77.0	21.1	1.5	0.4	77.0	80.5	73.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_04 (M052215): Number / Knowing Type: CR 1 Point
Label: Fraction of diagram shaded

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	85.0	14.0	0.4	0.6	85.0	84.7	85.4
	2015	559	81.6	17.7	0.6	0.1	81.6	81.3	82.0
Norway (8)	2011	559	69.8	29.5	0.7	0.0	69.8	72.0	67.5
	2015	672	70.0	26.7	3.2	0.2	70.0	76.1	64.7
Abu Dhabi, UAE	2011	631	59.9	37.6	2.5	0.0	59.9	63.8	56.3
	2015	690	50.0	45.4	4.7	0.0	50.0	64.0	35.5
Dubai, UAE	2011	783	59.8	35.9	4.1	0.2	59.8	66.5	53.6
	2015	883	67.0	31.3	1.8	0.0	67.0	67.6	66.2
Florida, US	2011	229	65.9	33.9	0.3	0.0	65.9	80.2	51.5
	2015	302	63.3	35.7	0.9	0.0	63.3	66.8	59.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_05 (M052147): Number / Applying Type: MC Key: B
Label: Which statement is true

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	40.5	10.8	40.5	15.4	30.8	2.4	0.0	40.6	40.4
	2015	1474	40.4	9.2	40.4	15.4	32.7	2.3	0.0	37.2	43.8
Bahrain	2011	653	35.0	15.6	35.0	21.8	22.3	5.0	0.3	39.5	30.3
	2015	695	51.4	10.3	51.4	16.1	20.3	1.8	0.0	47.8	54.8
Botswana	2011	765	41.6	13.7	41.6	21.5	21.4	1.4	0.4	44.8	38.2
	2015	855	41.3	20.7	41.3	22.0	15.3	0.7	0.0	43.4	39.1
Chile	2011	825	35.2	14.6	35.2	17.6	28.2	3.9	0.5	37.1	33.0
	2015	701	34.7	17.3	34.7	16.7	28.9	2.2	0.1	32.8	36.3
Chinese Taipei	2011	716	76.7	6.4	76.7	5.5	11.0	0.4	0.0	79.4	74.0
	2015	819	71.8	7.3	71.8	5.1	15.6	0.2	0.0	73.0	70.7
England	2011	549	47.5	7.2	47.5	13.6	28.1	3.4	0.2	47.0	47.9
	2015	694	50.7	6.3	50.7	9.2	29.0	4.7	0.0	51.7	49.8
Georgia	2011	655	44.7	10.8	44.7	12.6	26.7	5.2	0.1	45.6	43.8
	2015	574	45.8	10.4	45.8	11.5	26.7	5.7	0.0	46.8	44.9
Hong Kong SAR	2011	569	73.6	4.5	73.6	7.8	12.7	1.2	0.2	76.8	70.5
	2015	581	77.7	6.8	77.7	5.8	9.4	0.2	0.1	76.9	78.6
Hungary	2011	740	46.1	8.4	46.1	9.9	31.7	3.8	0.1	47.1	45.0
	2015	706	50.2	7.0	50.2	10.7	29.3	2.8	0.0	51.4	49.1
Iran, Islamic Rep. of	2011	861	22.5	12.5	22.5	30.1	31.1	3.4	0.4	24.0	21.2
	2015	863	24.6	12.4	24.6	26.3	31.4	5.2	0.1	24.8	24.4
Israel	2011	677	53.5	7.4	53.5	9.6	25.0	4.3	0.3	56.7	50.1
	2015	796	54.1	7.5	54.1	10.0	24.2	3.7	0.5	58.8	49.3
Italy	2011	561	46.3	8.3	46.3	14.0	28.9	2.4	0.0	44.7	47.9
	2015	640	42.2	11.1	42.2	13.7	28.7	4.3	0.0	35.9	48.4
Japan	2011	636	49.8	11.5	49.8	9.0	27.7	2.1	0.0	45.6	54.1
	2015	683	56.5	10.2	56.5	9.1	22.3	1.9	0.0	56.4	56.6
Jordan	2011	1080	31.1	15.5	31.1	23.8	26.7	2.8	0.0	31.4	30.9
	2015	1122	30.6	17.6	30.6	23.5	24.3	4.0	0.1	28.6	32.6
Kazakhstan	2011	624	42.5	17.4	42.5	13.7	22.6	3.4	0.3	41.8	43.3
	2015	695	58.9	11.1	58.9	8.2	20.4	1.3	0.1	57.2	60.5
Korea, Rep. of	2011	741	72.7	3.6	72.7	7.2	15.8	0.7	0.0	70.0	75.4
	2015	766	64.8	5.2	64.8	9.1	20.1	0.8	0.0	64.5	65.1
Lebanon	2011	560	35.4	14.4	35.4	25.4	16.1	8.5	0.3	33.0	38.2
	2015	552	31.3	10.8	31.3	17.7	19.5	19.5	1.2	31.5	31.1
Lithuania	2011	681	36.7	17.4	36.7	15.4	28.4	2.1	0.0	40.5	33.2
	2015	611	44.0	15.4	44.0	11.9	25.5	3.1	0.0	47.8	40.4

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Because of missing gender information, some totals may appear inconsistent.

M11_05 (M052147): Number / Applying Type: MC Key: B
Label: Which statement is true

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	46.9	22.0	46.9	14.5	14.5	1.8	0.2	51.0	42.7
	2015	1394	57.2	21.7	57.2	10.7	8.4	2.0	0.1	61.0	53.3
Morocco	2011	1131	31.4	17.7	31.4	21.9	20.2	7.2	1.6	28.2	34.3
	2015	1894	30.3	21.7	30.3	19.5	23.7	4.8	0.0	31.1	29.6
New Zealand	2011	761	37.0	8.9	37.0	15.4	35.8	2.8	0.0	35.0	38.8
	2015	1144	43.1	9.1	43.1	14.2	30.1	3.3	0.2	41.6	44.4
Oman	2011	1371	29.6	17.1	29.6	26.5	22.8	3.6	0.4	31.7	27.5
	2015	1263	35.3	17.7	35.3	24.4	20.1	2.4	0.2	35.9	34.7
Qatar	2011	632	42.5	15.4	42.5	15.8	23.6	2.6	0.1	46.3	38.5
	2015	772	46.4	17.3	46.4	14.4	19.6	2.1	0.3	49.1	43.6
Russian Federation	2011	695	51.9	5.9	51.9	10.3	28.0	3.9	0.0	50.1	53.4
	2015	675	54.1	8.3	54.1	13.1	20.5	3.7	0.3	52.4	55.8
Saudi Arabia	2011	605	37.5	19.9	37.5	19.9	20.1	2.5	0.1	37.8	37.3
	2015	540	28.3	23.2	28.3	26.3	21.4	0.7	0.1	31.0	25.7
Singapore	2011	835	77.7	4.1	77.7	6.3	11.3	0.6	0.0	83.3	72.4
	2015	870	83.7	4.8	83.7	4.5	6.7	0.3	0.0	85.5	81.7
Slovenia	2011	631	41.4	8.4	41.4	13.4	32.5	4.4	0.0	39.6	43.1
	2015	603	47.0	8.3	47.0	11.2	30.2	3.3	0.0	49.0	45.3
South Africa	2011	1706	31.1	15.6	31.1	28.7	20.2	4.1	0.2	32.0	30.2
	2015	1797	34.0	19.7	34.0	25.6	18.1	2.7	0.0	38.0	29.3
Sweden	2011	797	45.0	5.9	45.0	12.5	33.4	3.2	0.0	44.6	45.3
	2015	583	44.2	5.4	44.2	10.8	33.9	5.4	0.3	39.6	48.2
Thailand	2011	885	37.9	15.0	37.9	18.5	23.9	4.5	0.1	38.0	37.9
	2015	923	40.1	15.3	40.1	20.5	21.5	2.5	0.1	42.5	37.2
Turkey	2011	981	34.0	15.1	34.0	15.9	31.9	3.0	0.0	33.4	34.6
	2015	864	33.9	14.3	33.9	16.4	34.2	1.2	0.0	34.3	33.6
United Arab Emirates	2011	2006	47.0	14.6	47.0	16.2	19.7	2.4	0.1	51.9	42.0
	2015	2565	47.3	15.8	47.3	15.5	18.5	3.0	0.0	50.4	44.0
United States	2011	1518	42.7	9.4	42.7	15.2	31.4	0.7	0.5	44.9	40.3
	2015	1456	45.1	8.8	45.1	12.7	32.0	1.2	0.3	44.9	45.2
International Avg (n=33)	2011	28326	44.4	12.0	44.4	15.9	24.4	3.1	0.2	45.3	43.5
	2015	31170	46.7	12.4	46.7	14.6	23.1	3.1	0.1	47.0	46.3
Ontario, Canada	2011	673	40.0	7.3	40.0	13.4	35.5	3.0	0.8	38.2	41.4
	2015	642	44.3	7.9	44.3	13.6	32.2	1.6	0.4	47.0	41.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_05 (M052147): Number / Applying Type: MC Key: B
Label: Which statement is true

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	57.3	6.7	57.3	9.8	20.7	4.9	0.6	60.8	53.4
	2015	551	65.0	6.1	65.0	9.4	16.5	3.0	0.1	68.7	60.7
Norway (8)	2011	559	37.2	6.7	37.2	11.5	40.4	4.2	0.0	39.7	34.6
	2015	672	40.5	8.4	40.5	8.5	38.5	3.9	0.2	38.7	42.2
Abu Dhabi, UAE	2011	631	45.1	15.2	45.1	17.1	20.5	2.2	0.0	47.6	42.8
	2015	690	41.9	19.2	41.9	18.0	19.4	1.6	0.0	46.9	36.6
Dubai, UAE	2011	783	49.2	11.0	49.2	15.5	22.0	1.8	0.5	55.1	43.8
	2015	881	58.1	10.3	58.1	10.7	18.8	2.2	0.0	62.4	53.2
Florida, US	2011	229	47.4	12.7	47.4	9.3	30.7	0.0	0.0	46.8	47.9
	2015	302	40.6	15.3	40.6	15.2	27.9	1.0	0.0	41.1	39.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_06 (M052067): Algebra / Knowing Type: MC Key: B
Label: Value of given expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	61.8	2.7	61.8	9.1	25.4	1.0	0.0	64.6	58.8
	2015	1474	58.1	2.7	58.1	9.7	26.7	2.8	0.0	56.1	60.0
Bahrain	2011	653	48.5	8.8	48.5	10.9	27.6	4.0	0.3	56.0	40.7
	2015	695	65.2	5.5	65.2	5.7	21.0	2.6	0.0	65.0	65.4
Botswana	2011	765	22.2	7.2	22.2	7.0	60.3	2.9	0.6	21.7	22.7
	2015	855	25.2	6.7	25.2	9.0	57.0	2.2	0.0	27.5	23.0
Chile	2011	825	44.9	8.0	44.9	7.4	33.7	5.4	0.5	45.7	44.0
	2015	701	47.6	9.0	47.6	9.3	29.7	4.2	0.1	44.9	49.8
Chinese Taipei	2011	716	85.4	2.1	85.4	4.1	8.3	0.1	0.0	88.8	82.1
	2015	819	86.2	1.9	86.2	5.0	6.8	0.1	0.0	87.3	85.3
England	2011	549	66.6	1.8	66.6	4.9	24.5	2.0	0.2	68.9	64.6
	2015	694	66.3	1.5	66.3	6.6	23.0	2.7	0.0	71.5	60.6
Georgia	2011	657	63.3	4.2	63.3	8.2	21.3	2.8	0.3	70.9	55.4
	2015	574	69.9	4.3	69.9	6.4	16.9	2.5	0.0	77.5	63.8
Hong Kong SAR	2011	569	85.2	3.3	85.2	6.0	4.9	0.4	0.2	86.3	84.0
	2015	581	87.1	1.7	87.1	6.0	4.2	0.9	0.1	88.5	85.8
Hungary	2011	740	63.0	1.9	63.0	7.0	26.2	1.8	0.1	67.0	59.0
	2015	706	63.2	2.5	63.2	8.8	24.3	1.3	0.0	61.3	65.1
Iran, Islamic Rep. of	2011	861	52.6	5.5	52.6	8.6	30.9	2.0	0.4	57.7	48.2
	2015	863	56.1	5.2	56.1	8.8	26.7	3.1	0.2	61.3	51.4
Israel	2011	677	66.8	2.1	66.8	9.5	17.2	4.1	0.3	65.2	68.3
	2015	796	66.6	3.9	66.6	9.4	15.1	4.4	0.6	68.3	64.8
Italy	2011	561	75.0	4.3	75.0	6.8	10.1	3.8	0.0	76.0	74.1
	2015	640	69.8	5.4	69.8	6.9	14.7	2.9	0.3	68.6	71.0
Japan	2011	636	59.5	1.9	59.5	10.4	27.3	0.9	0.0	59.9	59.1
	2015	683	56.4	2.2	56.4	9.9	31.1	0.4	0.0	59.5	53.0
Jordan	2011	1080	54.2	6.5	54.2	11.6	24.8	3.0	0.0	58.5	50.1
	2015	1122	47.5	9.1	47.5	11.5	29.2	2.6	0.1	55.5	39.2
Kazakhstan	2011	624	71.4	4.6	71.4	5.4	13.8	4.3	0.3	74.3	68.5
	2015	695	78.8	4.3	78.8	4.0	10.9	1.8	0.1	83.1	75.1
Korea, Rep. of	2011	741	85.9	0.4	85.9	5.7	7.3	0.7	0.0	87.1	84.6
	2015	766	83.1	0.9	83.1	8.1	7.0	0.8	0.0	87.1	79.3
Lebanon	2011	570	72.4	6.8	72.4	4.9	12.8	2.7	0.5	70.8	74.2
	2015	552	73.3	3.8	73.3	5.0	10.1	6.6	1.3	71.8	74.9
Lithuania	2011	681	64.2	5.0	64.2	8.7	20.2	1.9	0.0	71.3	57.6
	2015	611	66.1	4.7	66.1	8.6	17.7	2.9	0.0	66.8	65.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_06 (M052067): Algebra / Knowing Type: MC Key: B
Label: Value of given expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	55.1	9.2	55.1	11.5	21.9	1.9	0.3	60.9	49.3
	2015	1394	45.6	10.4	45.6	13.9	27.0	3.0	0.1	48.3	43.0
Morocco	2011	1152	38.7	7.6	38.7	7.2	40.2	4.5	1.7	40.1	37.5
	2015	1894	49.5	6.2	49.5	6.8	34.5	3.0	0.0	52.5	46.9
New Zealand	2011	761	58.9	3.0	58.9	7.1	28.5	2.6	0.0	61.4	56.7
	2015	1144	56.2	3.7	56.2	7.8	29.0	3.0	0.2	58.9	53.7
Oman	2011	1371	41.9	8.1	41.9	13.5	31.8	4.1	0.5	50.0	33.8
	2015	1263	43.2	8.4	43.2	13.3	32.8	2.1	0.2	48.7	38.2
Qatar	2011	632	50.1	8.6	50.1	13.0	24.7	3.4	0.1	54.3	45.8
	2015	772	56.8	5.9	56.8	10.8	23.5	2.7	0.3	60.0	53.5
Russian Federation	2011	695	79.0	2.3	79.0	6.3	9.1	2.8	0.5	82.7	75.8
	2015	675	83.3	1.6	83.3	5.8	6.8	2.1	0.3	85.3	81.4
Saudi Arabia	2011	616	44.6	9.9	44.6	10.2	34.1	1.1	0.1	43.7	45.4
	2015	542	33.0	10.3	33.0	12.9	42.5	1.3	0.1	35.2	30.8
Singapore	2011	835	86.9	2.0	86.9	4.0	6.9	0.2	0.0	86.8	87.0
	2015	870	88.7	1.4	88.7	3.7	5.6	0.6	0.0	89.5	87.8
Slovenia	2011	631	62.2	3.7	62.2	8.2	22.0	3.9	0.0	65.0	59.7
	2015	603	66.6	4.3	66.6	8.7	18.0	2.4	0.0	64.2	68.6
South Africa	2011	1706	25.6	10.2	25.6	9.3	51.9	2.8	0.2	27.4	23.7
	2015	1797	38.3	7.6	38.3	5.5	46.4	2.2	0.0	40.5	35.6
Sweden	2011	797	31.6	2.9	31.6	8.0	54.5	2.7	0.3	32.2	31.1
	2015	583	41.7	2.2	41.7	5.7	45.6	4.5	0.3	41.2	42.2
Thailand	2011	885	53.7	4.7	53.7	7.1	32.0	2.3	0.1	57.1	49.8
	2015	923	52.7	5.3	52.7	7.5	32.9	1.5	0.1	60.7	43.2
Turkey	2011	982	63.8	3.5	63.8	6.5	24.0	2.1	0.1	68.6	59.6
	2015	864	63.3	4.9	63.3	7.7	23.2	0.9	0.0	69.3	56.8
United Arab Emirates	2011	2006	62.3	7.5	62.3	7.9	19.6	2.6	0.1	69.0	55.5
	2015	2567	59.3	8.7	59.3	8.3	20.9	2.7	0.0	65.3	53.0
United States	2011	1518	74.0	2.5	74.0	8.3	13.5	1.2	0.6	74.7	73.2
	2015	1456	70.8	3.3	70.8	9.1	15.2	1.4	0.3	73.8	67.8
International Avg (n=33)	2011	28371	59.7	4.9	59.7	8.0	24.6	2.5	0.3	62.6	57.0
	2015	31174	61.1	4.8	61.1	8.1	23.5	2.4	0.1	63.5	58.7
Ontario, Canada	2011	673	68.8	0.9	68.8	6.1	21.8	1.6	0.8	67.8	69.6
	2015	647	66.0	3.5	66.0	9.4	19.3	1.4	0.4	66.3	65.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_06 (M052067): Algebra / Knowing Type: MC Key: B
Label: Value of given expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	74.0	1.6	74.0	6.5	13.3	4.1	0.6	75.7	72.0
	2015	558	67.7	3.0	67.7	6.7	15.7	5.8	1.1	66.5	69.2
Norway (8)	2011	559	18.1	1.2	18.1	7.9	68.5	4.4	0.0	20.7	15.4
	2015	672	28.5	2.8	28.5	10.6	52.7	5.3	0.2	29.6	27.5
Abu Dhabi, UAE	2011	631	57.5	8.1	57.5	7.7	23.1	3.7	0.0	63.0	52.4
	2015	690	53.8	9.5	53.8	11.1	23.0	2.6	0.0	61.3	46.1
Dubai, UAE	2011	783	68.4	4.8	68.4	8.1	15.4	2.8	0.5	73.0	64.2
	2015	883	74.0	4.8	74.0	5.0	14.6	1.6	0.0	78.5	68.9
Florida, US	2011	229	71.5	4.4	71.5	13.7	10.1	0.3	0.0	71.2	71.8
	2015	302	66.1	5.0	66.1	12.3	15.4	1.2	0.0	70.9	60.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_07 (M052068): Algebra / Knowing Type: MC Key: A
Label: Identify an equivalent expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	16.3	16.3	29.7	17.5	32.8	3.7	0.0	18.4	14.1
	2015	1474	11.7	11.7	31.9	21.3	30.3	4.7	0.1	14.2	9.0
Bahrain	2011	653	14.9	14.9	31.4	17.3	29.8	6.1	0.4	15.3	14.4
	2015	695	38.3	38.3	20.3	14.2	25.4	1.6	0.1	32.0	44.2
Botswana	2011	765	13.6	13.6	19.4	19.7	44.3	2.2	0.7	12.3	15.0
	2015	855	11.5	11.5	23.2	19.5	43.6	2.2	0.0	11.3	11.6
Chile	2011	825	10.7	10.7	23.9	21.7	33.3	9.6	0.7	10.2	11.3
	2015	701	13.8	13.8	27.7	21.0	33.0	4.4	0.1	14.7	13.1
Chinese Taipei	2011	716	67.6	67.6	21.5	4.6	6.0	0.4	0.0	75.3	60.1
	2015	819	62.6	62.6	23.6	5.6	7.9	0.3	0.0	67.0	58.6
England	2011	549	9.2	9.2	37.0	15.4	34.3	3.9	0.2	9.0	9.4
	2015	694	14.0	14.0	36.1	14.9	29.4	5.5	0.1	16.7	11.2
Georgia	2011	657	20.1	20.1	32.8	17.5	24.8	4.2	0.6	20.6	19.6
	2015	574	18.0	18.0	29.3	19.0	30.9	2.8	0.1	18.7	17.4
Hong Kong SAR	2011	569	39.9	39.9	36.5	9.4	13.0	0.9	0.2	41.9	37.9
	2015	581	43.6	43.6	37.4	9.9	8.3	0.6	0.1	46.6	40.7
Hungary	2011	740	21.8	21.8	35.7	13.5	27.0	1.8	0.1	21.7	22.0
	2015	706	26.4	26.4	33.3	16.5	22.9	0.9	0.0	25.6	27.2
Iran, Islamic Rep. of	2011	861	16.0	16.0	28.0	21.4	30.2	3.9	0.6	18.3	14.1
	2015	863	22.5	22.5	29.1	20.4	25.0	2.9	0.2	25.9	19.4
Israel	2011	677	37.9	37.9	33.0	12.2	14.1	2.3	0.5	39.6	36.0
	2015	796	31.0	31.0	35.6	11.9	16.6	4.2	0.6	31.9	30.1
Italy	2011	561	20.5	20.5	28.0	20.8	23.2	7.4	0.2	18.5	22.3
	2015	640	18.8	18.8	29.0	21.8	25.6	4.4	0.3	18.6	19.0
Japan	2011	636	66.0	66.0	19.6	6.7	7.1	0.6	0.0	66.8	65.3
	2015	683	65.3	65.3	20.4	5.7	8.3	0.3	0.0	68.8	61.7
Jordan	2011	1080	14.9	14.9	34.1	20.6	26.4	4.0	0.0	13.5	16.2
	2015	1122	15.6	15.6	34.7	20.6	26.2	2.8	0.1	15.7	15.5
Kazakhstan	2011	624	38.8	38.8	24.9	14.3	18.4	3.3	0.3	37.2	40.4
	2015	695	50.7	50.7	24.0	10.1	14.1	1.1	0.1	56.3	45.7
Korea, Rep. of	2011	741	72.0	72.0	16.0	5.8	5.7	0.4	0.0	73.4	70.6
	2015	766	68.8	68.8	15.5	6.9	8.5	0.4	0.0	72.1	65.5
Lebanon	2011	570	34.5	34.5	33.2	12.4	14.8	4.5	0.5	35.3	33.6
	2015	551	34.9	34.9	29.5	11.7	13.7	8.4	1.8	35.3	34.6
Lithuania	2011	681	20.9	20.9	37.9	13.7	23.8	3.7	0.0	23.7	18.3
	2015	611	23.8	23.8	31.4	16.0	24.9	3.9	0.0	24.9	22.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_07 (M052068): Algebra / Knowing Type: MC Key: A
Label: Identify an equivalent expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	19.0	19.0	29.0	18.4	30.8	2.4	0.5	20.1	17.9
	2015	1394	20.6	20.6	29.4	17.9	29.9	2.1	0.1	22.6	18.6
Morocco	2011	1152	10.9	10.9	26.3	22.3	30.3	8.2	2.0	9.8	11.9
	2015	1894	14.1	14.1	26.1	22.7	33.2	3.8	0.1	14.1	14.2
New Zealand	2011	761	13.3	13.3	31.6	18.0	32.3	4.7	0.0	13.5	13.2
	2015	1144	12.2	12.2	34.4	18.5	29.9	4.8	0.2	11.9	12.4
Oman	2011	1371	14.5	14.5	32.9	20.5	28.4	3.3	0.5	16.0	13.0
	2015	1262	13.7	13.7	34.8	21.2	28.3	1.8	0.2	16.5	11.3
Qatar	2011	632	15.2	15.2	32.0	24.1	25.6	2.9	0.2	16.4	13.8
	2015	772	19.0	19.0	34.0	19.5	25.4	1.9	0.3	20.5	17.5
Russian Federation	2011	695	45.0	45.0	30.2	10.5	10.8	2.6	0.8	47.8	42.6
	2015	675	51.0	51.0	27.4	9.1	10.1	2.0	0.4	50.6	51.4
Saudi Arabia	2011	616	14.6	14.6	27.9	18.8	37.2	1.3	0.1	11.7	17.4
	2015	542	17.6	17.6	23.1	23.3	34.2	1.7	0.1	14.2	20.9
Singapore	2011	835	56.1	56.1	31.5	5.3	6.9	0.1	0.0	63.5	49.3
	2015	870	64.2	64.2	27.5	4.3	3.5	0.4	0.0	69.1	58.8
Slovenia	2011	631	15.1	15.1	30.5	18.4	29.2	7.0	0.0	15.1	15.0
	2015	603	20.4	20.4	33.4	18.9	22.4	4.9	0.0	21.3	19.6
South Africa	2011	1706	10.3	10.3	30.4	19.1	36.6	3.2	0.4	9.3	11.3
	2015	1797	11.7	11.7	25.8	22.6	37.1	2.6	0.0	12.6	10.7
Sweden	2011	797	10.8	10.8	38.1	14.2	29.7	6.8	0.4	8.8	12.5
	2015	583	14.0	14.0	43.2	13.0	22.3	7.2	0.3	10.9	16.8
Thailand	2011	885	13.6	13.6	28.3	17.5	33.3	7.1	0.1	13.7	13.4
	2015	923	16.4	16.4	29.2	20.1	30.7	3.4	0.1	16.1	16.8
Turkey	2011	982	21.4	21.4	26.0	20.1	27.6	4.7	0.2	21.3	21.5
	2015	864	18.4	18.4	29.0	19.6	32.2	0.7	0.0	19.0	17.8
United Arab Emirates	2011	2006	17.5	17.5	29.9	19.8	28.1	4.5	0.1	18.0	17.0
	2015	2567	22.7	22.7	29.6	19.6	24.8	3.2	0.1	24.4	20.9
United States	2011	1518	20.4	20.4	33.2	21.2	22.7	1.9	0.6	19.8	21.0
	2015	1456	22.4	22.4	32.4	18.9	23.8	2.2	0.3	23.2	21.6
International Avg (n=33)	2011	28371	25.3	25.3	29.7	16.1	24.8	3.7	0.3	25.9	24.6
	2015	31172	27.6	27.6	29.4	16.2	23.7	2.9	0.2	28.6	26.6
Ontario, Canada	2011	673	13.8	13.8	26.2	25.0	27.3	6.9	0.8	11.7	15.7
	2015	646	16.1	16.1	26.0	27.3	25.6	4.5	0.4	14.7	17.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_07 (M052068): Algebra / Knowing Type: MC Key: A
Label: Identify an equivalent expression

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	21.2	21.2	31.0	20.1	22.5	4.4	0.7	24.3	17.7
	2015	558	26.5	26.5	30.1	14.7	25.0	2.6	1.1	25.9	27.2
Norway (8)	2011	559	10.8	10.8	30.7	21.3	29.0	8.3	0.0	11.9	9.7
	2015	672	12.0	12.0	35.7	23.0	20.4	8.3	0.6	13.6	10.7
Abu Dhabi, UAE	2011	631	16.6	16.6	29.9	21.6	26.2	5.6	0.0	13.0	20.0
	2015	690	21.4	21.4	28.8	20.7	26.2	2.7	0.1	23.9	18.9
Dubai, UAE	2011	783	20.9	20.9	29.5	16.4	28.5	4.2	0.5	25.5	16.7
	2015	883	26.5	26.5	32.9	17.1	20.5	2.9	0.1	28.7	24.1
Florida, US	2011	229	19.1	19.1	33.5	25.1	20.0	2.3	0.0	14.2	23.9
	2015	302	22.9	22.9	32.9	19.3	22.3	2.6	0.0	19.9	26.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_08 (M052087): Algebra / Applying Type: CR 1 Point
Label: Solve for simultaneous equations

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	6.0	1.3	71.7	21.0	0.0	6.0	3.7	8.5
	2015	1474	6.5	1.3	74.8	17.3	0.1	6.5	5.8	7.3
Bahrain	2011	653	2.9	3.8	71.5	21.5	0.4	2.9	1.9	3.9
	2015	695	5.8	1.6	77.5	15.0	0.1	5.8	4.2	7.2
Botswana	2011	765	0.3	2.6	92.0	4.4	0.7	0.3	0.3	0.3
	2015	855	0.7	2.8	92.6	3.9	0.0	0.7	0.7	0.6
Chile	2011	825	0.6	0.2	62.4	36.0	0.8	0.6	0.1	1.2
	2015	701	0.9	1.3	60.1	37.5	0.2	0.9	0.2	1.5
Chinese Taipei	2011	716	67.5	2.0	23.1	7.3	0.0	67.5	70.1	65.0
	2015	819	65.0	2.8	22.7	9.5	0.0	65.0	65.2	64.8
England	2011	549	10.5	1.1	67.7	20.4	0.2	10.5	9.1	11.8
	2015	694	10.7	2.1	66.4	20.7	0.1	10.7	10.4	11.1
Georgia	2011	657	14.0	2.4	42.7	40.2	0.6	14.0	16.3	11.6
	2015	574	13.1	3.9	51.4	31.5	0.1	13.1	13.0	13.3
Hong Kong SAR	2011	569	41.7	2.5	44.9	10.7	0.2	41.7	40.6	42.8
	2015	581	52.2	4.1	39.1	4.5	0.1	52.2	53.8	50.7
Hungary	2011	740	5.8	0.3	55.8	38.0	0.1	5.8	4.4	7.2
	2015	706	9.9	1.1	51.7	37.3	0.0	9.9	9.1	10.7
Iran, Islamic Rep. of	2011	861	9.7	3.3	60.5	26.0	0.6	9.7	10.9	8.6
	2015	863	3.5	0.7	63.0	32.5	0.2	3.5	2.9	4.0
Israel	2011	677	34.3	4.2	38.7	22.4	0.5	34.3	32.6	36.0
	2015	796	22.8	4.1	45.4	27.1	0.6	22.8	22.7	22.9
Italy	2011	561	3.5	2.1	48.2	46.0	0.2	3.5	4.1	2.8
	2015	640	4.1	0.4	50.7	44.5	0.3	4.1	2.6	5.6
Japan	2011	636	71.7	6.4	16.5	5.4	0.0	71.7	70.0	73.4
	2015	683	74.2	4.6	16.8	4.4	0.0	74.2	77.7	70.4
Jordan	2011	1080	10.3	3.6	76.1	10.0	0.0	10.3	12.0	8.7
	2015	1122	8.6	4.4	76.8	9.9	0.3	8.6	10.1	7.1
Kazakhstan	2011	624	27.4	6.4	42.3	23.7	0.3	27.4	27.8	26.9
	2015	695	42.6	8.9	35.6	12.8	0.1	42.6	46.6	39.1
Korea, Rep. of	2011	741	69.7	3.2	23.4	3.6	0.1	69.7	71.9	67.4
	2015	766	63.8	3.0	28.3	4.9	0.0	63.8	65.1	62.6
Lebanon	2011	570	1.6	0.6	61.0	36.3	0.5	1.6	1.0	2.2
	2015	552	4.7	1.0	56.0	36.3	2.1	4.7	6.0	3.3
Lithuania	2011	681	4.0	0.5	59.7	35.7	0.1	4.0	3.8	4.2
	2015	611	4.1	0.6	55.9	39.4	0.0	4.1	3.8	4.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_08 (M052087): Algebra / Applying Type: CR 1 Point
Label: Solve for simultaneous equations

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	2.2	2.3	78.3	16.7	0.5	2.2	2.6	1.9
	2015	1394	11.8	2.0	72.5	13.7	0.1	11.8	13.0	10.5
Morocco	2011	1149	0.4	0.6	55.2	41.3	2.5	0.4	0.6	0.2
	2015	1894	0.5	1.2	64.6	33.5	0.3	0.5	0.6	0.4
New Zealand	2011	761	5.9	1.4	75.8	16.7	0.2	5.9	3.2	8.3
	2015	1144	8.1	1.5	72.6	17.6	0.2	8.1	5.7	10.2
Oman	2011	1371	1.7	1.2	80.7	15.8	0.5	1.7	2.4	1.0
	2015	1259	2.8	3.1	84.5	9.4	0.2	2.8	2.5	3.0
Qatar	2011	632	4.1	4.6	76.2	14.8	0.3	4.1	4.0	4.1
	2015	772	7.7	1.9	74.9	15.3	0.3	7.7	8.4	7.0
Russian Federation	2011	695	34.9	2.2	28.3	33.7	0.8	34.9	35.0	34.8
	2015	675	36.0	4.0	28.1	31.5	0.4	36.0	33.6	38.4
Saudi Arabia	2011	617	2.3	2.1	83.0	12.5	0.1	2.3	0.4	4.0
	2015	542	1.0	1.2	87.0	10.7	0.1	1.0	0.8	1.1
Singapore	2011	835	61.6	4.3	31.7	2.4	0.0	61.6	67.4	56.1
	2015	870	64.9	4.3	28.7	2.0	0.0	64.9	68.6	60.9
Slovenia	2011	631	4.3	0.5	74.1	21.0	0.0	4.3	3.9	4.7
	2015	603	5.0	0.5	71.9	22.6	0.0	5.0	3.4	6.2
South Africa	2011	1706	0.5	1.5	88.8	8.8	0.5	0.5	0.3	0.6
	2015	1797	1.3	1.4	92.0	5.3	0.0	1.3	1.2	1.3
Sweden	2011	797	1.1	0.2	65.2	33.0	0.4	1.1	0.4	1.6
	2015	583	4.6	0.8	58.6	35.7	0.3	4.6	2.8	6.1
Thailand	2011	885	4.2	1.6	70.4	23.3	0.5	4.2	4.9	3.4
	2015	923	7.2	1.0	74.7	17.0	0.1	7.2	6.9	7.7
Turkey	2011	982	16.7	3.5	52.5	27.1	0.2	16.7	17.7	15.9
	2015	864	11.1	5.1	64.2	19.5	0.0	11.1	12.1	10.0
United Arab Emirates	2011	2006	7.6	2.5	74.8	15.0	0.2	7.6	7.1	8.1
	2015	2567	12.0	2.5	73.1	12.4	0.1	12.0	11.4	12.6
United States	2011	1518	13.4	2.3	75.5	8.0	0.8	13.4	12.4	14.5
	2015	1456	17.3	2.8	73.2	6.3	0.3	17.3	18.8	15.9
International Avg (n=33)	2011	28369	16.4	2.3	59.7	21.2	0.4	16.4	16.5	16.4
	2015	31170	17.7	2.5	60.2	19.4	0.2	17.7	17.9	17.5
Ontario, Canada	2011	673	3.8	1.0	76.4	17.9	0.9	3.8	3.0	4.1
	2015	647	4.4	2.7	76.6	15.9	0.4	4.4	2.2	6.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_08 (M052087): Algebra / Applying Type: CR 1 Point
Label: Solve for simultaneous equations

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	4.6	1.5	68.3	25.0	0.7	4.6	4.2	5.0
	2015	559	2.5	4.1	73.8	18.6	1.1	2.5	2.0	3.0
Norway (8)	2011	559	0.8	1.2	75.2	22.8	0.0	0.8	0.7	1.0
	2015	672	0.7	0.7	74.6	23.4	0.6	0.7	0.4	0.9
Abu Dhabi, UAE	2011	631	6.1	2.5	76.8	14.7	0.0	6.1	5.0	7.0
	2015	690	7.4	1.7	76.5	14.3	0.1	7.4	9.2	5.5
Dubai, UAE	2011	783	12.1	2.2	69.8	15.4	0.5	12.1	12.5	11.7
	2015	883	20.8	2.8	67.2	9.0	0.1	20.8	18.7	23.2
Florida, US	2011	229	18.5	2.0	72.5	7.1	0.0	18.5	14.4	22.6
	2015	302	15.2	4.5	72.0	8.2	0.0	15.2	15.3	15.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_09 (M052048): Geometry / Applying Type: CR 1 Point
Label: Lines of symmetry for pentagon

COUNTRY	Year	N	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	31.9	17.3	38.0	8.0	4.7	0.0	31.9	28.8	35.3
	2015	1474	29.8	17.5	32.0	14.8	5.8	0.1	29.8	28.4	31.2
Bahrain	2011	653	4.9	30.2	7.7	32.5	24.3	0.4	4.9	7.3	2.3
	2015	695	11.2	23.6	24.6	25.5	15.0	0.1	11.2	11.6	10.7
Botswana	2011	765	5.1	38.4	27.7	21.8	6.1	0.9	5.1	3.0	7.2
	2015	854	7.1	32.1	32.4	20.0	8.3	0.1	7.1	4.7	9.5
Chile	2011	825	6.4	17.5	10.1	27.1	37.2	1.5	6.4	6.0	7.0
	2015	701	8.5	18.1	12.8	19.7	40.5	0.5	8.5	6.7	10.0
Chinese Taipei	2011	716	61.6	14.8	18.2	3.6	1.9	0.0	61.6	63.7	59.5
	2015	819	62.5	21.1	12.0	1.7	2.7	0.0	62.5	65.9	59.5
England	2011	549	35.5	6.4	50.8	4.8	2.3	0.2	35.5	35.2	35.8
	2015	694	36.7	9.3	46.8	4.0	3.0	0.1	36.7	36.4	37.0
Georgia	2011	657	10.5	13.7	26.2	13.7	35.0	1.0	10.5	11.2	9.8
	2015	574	12.0	19.1	22.7	14.8	31.2	0.1	12.0	9.8	13.8
Hong Kong SAR	2011	569	62.3	11.3	15.0	7.7	3.5	0.2	62.3	65.2	59.4
	2015	581	51.4	14.7	19.3	12.5	2.0	0.1	51.4	54.9	47.9
Hungary	2011	740	31.2	28.1	31.7	4.1	5.0	0.1	31.2	29.1	33.3
	2015	706	35.7	26.6	28.1	3.6	6.0	0.0	35.7	34.9	36.5
Iran, Islamic Rep. of	2011	861	16.5	31.3	30.3	13.5	7.9	0.7	16.5	14.5	18.2
	2015	863	22.0	38.2	27.7	7.0	4.8	0.4	22.0	21.1	22.8
Israel	2011	677	11.8	28.9	7.8	19.6	31.5	0.5	11.8	10.7	13.0
	2015	796	12.3	24.0	7.9	19.4	35.2	1.2	12.3	12.7	11.9
Italy	2011	561	19.5	32.9	19.0	12.9	15.4	0.3	19.5	18.4	20.6
	2015	640	20.1	34.9	14.5	9.7	20.4	0.3	20.1	19.3	21.0
Japan	2011	636	43.3	37.1	8.3	7.7	3.6	0.0	43.3	43.1	43.5
	2015	683	50.0	30.4	8.7	5.7	5.3	0.0	50.0	54.5	45.1
Jordan	2011	1080	5.7	23.7	12.3	45.0	13.3	0.0	5.7	4.5	6.9
	2015	1122	4.2	17.1	10.8	51.2	16.3	0.4	4.2	4.4	3.9
Kazakhstan	2011	624	39.5	11.4	4.9	29.2	14.8	0.3	39.5	40.2	38.6
	2015	695	25.1	3.9	1.5	57.6	11.8	0.1	25.1	23.8	26.3
Korea, Rep. of	2011	741	30.3	55.8	5.0	6.3	2.5	0.1	30.3	31.4	29.1
	2015	766	21.7	66.1	4.0	5.5	2.7	0.0	21.7	24.6	18.9
Lebanon	2011	570	7.6	15.9	7.2	40.9	27.3	1.2	7.6	6.8	8.4
	2015	552	9.8	15.8	0.3	42.1	29.6	2.5	9.8	8.5	11.2
Lithuania	2011	681	20.0	27.2	28.1	11.8	12.7	0.1	20.0	20.5	19.7
	2015	611	19.4	31.1	26.5	9.2	13.7	0.0	19.4	20.8	18.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_09 (M052048): Geometry / Applying Type: CR 1 Point
Label: Lines of symmetry for pentagon

COUNTRY	Year	N	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	7.0	34.8	12.9	25.0	19.5	0.8	7.0	7.1	7.0
	2015	1394	15.7	23.7	32.2	16.0	12.0	0.4	15.7	13.2	18.2
Morocco	2011	1156	12.4	10.8	26.8	27.5	19.3	3.2	12.4	7.9	16.5
	2015	1894	10.7	18.3	33.0	17.6	19.9	0.5	10.7	7.9	13.0
New Zealand	2011	761	34.4	12.4	34.8	13.1	5.2	0.2	34.4	30.4	37.8
	2015	1144	28.0	14.6	29.6	19.4	8.2	0.2	28.0	28.1	27.8
Oman	2011	1371	13.7	30.2	16.2	24.1	15.0	0.8	13.7	16.1	11.3
	2015	1258	13.3	27.2	23.1	24.3	11.8	0.2	13.3	15.4	11.4
Qatar	2011	632	10.2	25.1	15.6	33.9	14.6	0.6	10.2	11.5	8.9
	2015	772	16.6	22.5	21.7	27.5	11.4	0.3	16.6	19.5	13.6
Russian Federation	2011	695	27.8	27.7	23.8	3.6	15.7	1.4	27.8	22.5	32.5
	2015	675	22.5	31.5	20.3	9.6	15.4	0.7	22.5	19.3	25.6
Saudi Arabia	2011	617	2.0	30.3	9.7	38.3	19.4	0.3	2.0	0.3	3.7
	2015	542	3.6	16.8	5.8	51.5	22.3	0.1	3.6	3.6	3.6
Singapore	2011	835	45.2	12.8	32.9	4.8	4.4	0.0	45.2	45.0	45.3
	2015	870	51.5	9.9	26.6	8.1	3.9	0.0	51.5	52.3	50.6
Slovenia	2011	631	22.6	46.0	16.0	8.9	6.5	0.0	22.6	21.3	23.9
	2015	603	22.5	39.3	19.0	10.5	8.6	0.0	22.5	16.9	27.3
South Africa	2011	1706	2.6	3.6	10.0	56.0	27.1	0.7	2.6	2.5	2.7
	2015	1797	4.1	33.3	6.6	32.7	23.3	0.0	4.1	3.8	4.5
Sweden	2011	797	4.9	33.7	2.5	26.0	32.4	0.4	4.9	3.6	5.9
	2015	580	17.5	32.4	8.9	18.6	22.3	0.3	17.5	14.8	19.9
Thailand	2011	885	5.1	21.7	14.6	19.9	38.0	0.7	5.1	4.9	5.3
	2015	923	3.6	22.1	18.9	29.0	26.3	0.1	3.6	2.8	4.6
Turkey	2011	982	14.5	26.5	13.8	27.2	17.8	0.2	14.5	15.3	13.8
	2015	864	11.7	34.5	23.8	17.9	12.1	0.0	11.7	12.4	11.0
United Arab Emirates	2011	2006	12.5	23.1	33.9	19.1	11.2	0.2	12.5	12.5	12.6
	2015	2567	17.1	24.5	27.6	21.2	9.5	0.1	17.1	18.5	15.6
United States	2011	1518	19.3	17.1	44.2	13.2	5.3	0.9	19.3	18.6	20.1
	2015	1456	21.1	22.0	34.2	17.1	5.3	0.4	21.1	20.2	22.1
International Avg (n=33)	2011	28376	20.5	24.2	19.9	19.7	15.2	0.5	20.5	20.0	21.1
	2015	31165	21.2	24.7	20.1	19.6	14.1	0.3	21.2	21.0	21.3
Ontario, Canada	2011	673	39.0	8.9	37.9	9.5	3.8	0.9	39.0	34.6	43.2
	2015	647	45.4	11.8	30.6	7.4	4.4	0.4	45.4	45.3	45.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_09 (M052048): Geometry / Applying Type: CR 1 Point
Label: Lines of symmetry for pentagon

COUNTRY	Year	N	10 %	70 %	71 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	33.5	15.9	19.8	19.7	10.3	0.9	33.5	32.7	34.3
	2015	559	32.7	19.1	18.8	18.2	9.7	1.6	32.7	29.2	37.0
Norway (8)	2011	559	7.9	46.4	11.2	15.1	19.2	0.2	7.9	8.5	7.2
	2015	672	15.8	34.6	11.0	14.8	23.3	0.6	15.8	17.3	14.5
Abu Dhabi, UAE	2011	631	9.8	23.7	34.2	21.4	10.7	0.0	9.8	7.3	12.1
	2015	690	13.3	29.9	20.5	25.5	10.7	0.1	13.3	13.7	12.9
Dubai, UAE	2011	783	17.9	23.4	28.7	15.4	14.2	0.5	17.9	20.9	15.2
	2015	883	25.3	20.5	32.6	14.6	6.8	0.1	25.3	26.1	24.5
Florida, US	2011	229	29.5	14.4	47.4	7.4	1.3	0.0	29.5	28.1	30.9
	2015	302	16.8	20.1	36.0	18.6	8.5	0.0	16.8	18.8	14.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_10 (M052039): Geometry / Applying Type: CR 1 Point
Label: Length of line segment AB

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	35.6	55.2	9.2	0.0	35.6	30.8	40.7
	2015	1474	37.3	54.9	7.7	0.1	37.3	34.9	39.9
Bahrain	2011	653	24.1	62.7	12.5	0.6	24.1	22.7	25.6
	2015	694	29.6	60.7	9.5	0.1	29.6	27.5	31.6
Botswana	2011	766	14.8	81.6	2.6	1.0	14.8	11.9	17.9
	2015	854	15.7	81.1	2.9	0.2	15.7	16.5	15.0
Chile	2011	825	16.1	54.5	27.8	1.5	16.1	10.7	22.5
	2015	701	18.0	48.6	32.8	0.6	18.0	12.8	22.4
Chinese Taipei	2011	716	77.5	19.1	3.4	0.0	77.5	78.9	76.1
	2015	819	78.1	19.1	2.8	0.0	78.1	78.8	77.4
England	2011	549	39.7	45.5	14.5	0.2	39.7	37.9	41.3
	2015	694	40.3	45.9	13.8	0.1	40.3	42.6	37.8
Georgia	2011	655	23.3	48.2	27.5	1.0	23.3	20.7	26.1
	2015	574	26.6	53.0	20.4	0.1	26.6	26.5	26.6
Hong Kong SAR	2011	569	83.1	13.2	3.5	0.2	83.1	87.6	78.6
	2015	581	84.7	13.8	1.4	0.1	84.7	84.5	84.9
Hungary	2011	740	36.9	51.8	11.3	0.1	36.9	31.1	42.6
	2015	706	45.5	41.9	12.7	0.0	45.5	46.4	44.5
Iran, Islamic Rep. of	2011	861	29.9	56.1	13.0	1.0	29.9	27.0	32.4
	2015	863	28.9	56.5	14.3	0.4	28.9	27.0	30.5
Israel	2011	677	65.9	23.2	10.4	0.6	65.9	67.7	64.0
	2015	796	60.9	30.3	7.4	1.4	60.9	61.3	60.5
Italy	2011	561	40.2	40.5	19.0	0.3	40.2	36.7	43.6
	2015	640	38.6	48.0	13.1	0.3	38.6	35.0	42.2
Japan	2011	636	75.1	21.5	3.4	0.0	75.1	71.7	78.4
	2015	683	84.6	13.6	1.7	0.0	84.6	83.6	85.8
Jordan	2011	1080	20.9	74.1	5.0	0.0	20.9	18.5	23.1
	2015	1122	13.8	77.9	7.7	0.6	13.8	14.0	13.5
Kazakhstan	2011	624	41.2	46.3	11.6	0.9	41.2	39.2	43.3
	2015	695	56.7	37.7	5.5	0.1	56.7	58.0	55.6
Korea, Rep. of	2011	741	91.8	7.0	1.0	0.1	91.8	92.5	91.1
	2015	766	89.1	9.8	1.2	0.0	89.1	91.4	86.8
Lebanon	2011	570	26.4	61.3	10.1	2.1	26.4	23.4	29.9
	2015	552	27.0	53.2	17.0	2.7	27.0	22.2	32.2
Lithuania	2011	681	44.3	47.8	7.8	0.1	44.3	45.4	43.3
	2015	611	45.1	49.4	5.5	0.0	45.1	43.8	46.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_10 (M052039): Geometry / Applying Type: CR 1 Point
Label: Length of line segment AB

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	22.4	69.0	7.6	1.0	22.4	20.9	24.0
	2015	1394	32.0	59.5	8.0	0.5	32.0	30.3	33.6
Morocco	2011	1154	15.1	63.8	17.8	3.4	15.1	12.9	17.1
	2015	1894	17.7	71.7	9.9	0.6	17.7	16.8	18.6
New Zealand	2011	761	37.4	52.1	10.3	0.2	37.4	33.7	40.7
	2015	1144	37.5	52.8	9.4	0.3	37.5	39.3	36.0
Oman	2011	1371	18.0	69.1	11.9	1.0	18.0	17.8	18.3
	2015	1254	26.4	66.9	6.5	0.2	26.4	27.9	25.1
Qatar	2011	632	20.7	67.4	11.2	0.6	20.7	21.5	19.8
	2015	772	26.7	64.3	8.6	0.4	26.7	23.8	29.7
Russian Federation	2011	695	58.7	29.6	10.3	1.4	58.7	54.3	62.5
	2015	675	61.2	28.7	9.2	0.9	61.2	58.5	63.8
Saudi Arabia	2011	617	18.6	73.9	7.2	0.3	18.6	14.5	22.4
	2015	542	10.8	80.8	8.3	0.1	10.8	8.7	12.8
Singapore	2011	835	79.6	20.4	0.0	0.0	79.6	78.2	80.9
	2015	870	80.5	18.3	1.1	0.0	80.5	81.7	79.3
Slovenia	2011	631	32.6	53.9	13.5	0.0	32.6	26.9	37.8
	2015	603	40.3	51.9	7.8	0.0	40.3	33.7	45.9
South Africa	2011	1706	9.1	85.3	4.5	1.1	9.1	7.8	10.5
	2015	1797	16.4	81.2	2.2	0.2	16.4	17.9	14.6
Sweden	2011	797	33.2	46.7	19.7	0.4	33.2	35.7	31.0
	2015	581	40.7	41.8	17.1	0.4	40.7	34.1	46.6
Thailand	2011	886	21.9	65.5	11.8	0.8	21.9	21.8	22.1
	2015	923	23.2	68.0	8.7	0.1	23.2	22.9	23.5
Turkey	2011	982	40.3	49.3	10.2	0.2	40.3	40.6	40.0
	2015	864	38.7	54.8	6.5	0.0	38.7	43.1	33.9
United Arab Emirates	2011	2006	32.1	60.5	7.2	0.3	32.1	31.9	32.3
	2015	2567	34.1	59.2	6.6	0.1	34.1	35.1	33.0
United States	2011	1518	54.4	42.0	2.6	1.0	54.4	53.7	55.2
	2015	1456	53.9	43.6	2.0	0.4	53.9	51.3	56.5
International Avg (n=33)	2011	28374	38.8	50.2	10.3	0.7	38.8	37.2	40.5
	2015	31161	41.2	49.7	8.8	0.3	41.2	40.4	42.0
Ontario, Canada	2011	673	41.7	47.5	10.0	0.9	41.7	34.1	48.4
	2015	647	48.3	42.9	8.3	0.5	48.3	50.4	46.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_10 (M052039): Geometry / Applying Type: CR 1 Point
Label: Length of line segment AB

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	64.2	24.5	10.3	1.1	64.2	58.8	70.3
	2015	559	64.6	26.5	7.3	1.6	64.6	62.3	67.5
Norway (8)	2011	559	33.3	51.4	15.0	0.2	33.3	35.0	31.6
	2015	672	35.5	50.8	13.2	0.6	35.5	34.6	36.4
Abu Dhabi, UAE	2011	631	30.7	62.1	6.9	0.3	30.7	28.5	32.7
	2015	690	28.9	63.7	7.3	0.1	28.9	33.2	24.5
Dubai, UAE	2011	783	37.3	54.9	7.2	0.5	37.3	35.8	38.8
	2015	883	46.3	48.0	5.5	0.1	46.3	45.1	47.7
Florida, US	2011	229	61.9	36.8	1.3	0.0	61.9	66.5	57.3
	2015	302	43.4	52.2	4.4	0.0	43.4	43.3	43.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_11 (M052208): Geometry / Reasoning Type: MC Key: D
Label: Number of cubes that fit in a box

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	18.9	37.9	26.8	14.1	18.9	2.2	0.1	16.3	21.6
	2015	1474	17.3	32.2	33.3	15.9	17.3	1.0	0.3	15.9	18.8
Bahrain	2011	653	14.3	43.2	20.3	18.6	14.3	2.9	0.7	17.7	10.8
	2015	694	14.9	41.1	24.2	17.5	14.9	2.1	0.2	13.7	16.1
Botswana	2011	766	11.9	55.2	12.8	16.4	11.9	2.5	1.2	10.3	13.5
	2015	855	12.4	53.8	13.4	18.2	12.4	1.9	0.2	12.6	12.3
Chile	2011	825	6.6	53.7	23.9	9.5	6.6	4.5	1.8	5.8	7.5
	2015	701	6.3	48.7	26.8	13.9	6.3	3.3	1.0	4.9	7.5
Chinese Taipei	2011	716	62.0	15.4	12.0	10.6	62.0	0.1	0.0	63.5	60.5
	2015	819	53.7	19.0	16.4	10.7	53.7	0.2	0.0	57.4	50.2
England	2011	549	12.9	40.3	33.3	11.8	12.9	1.4	0.2	11.2	14.3
	2015	694	13.7	40.1	32.1	12.2	13.7	1.8	0.1	14.1	13.2
Georgia	2011	657	13.9	40.6	26.0	13.3	13.9	4.9	1.3	12.9	14.9
	2015	574	10.0	46.7	28.8	10.8	10.0	3.2	0.6	8.5	11.2
Hong Kong SAR	2011	569	57.5	16.1	17.7	7.5	57.5	0.7	0.5	61.7	53.3
	2015	581	63.1	15.0	13.5	7.6	63.1	0.6	0.1	61.7	64.5
Hungary	2011	740	15.7	43.2	28.7	11.3	15.7	0.9	0.1	15.4	16.1
	2015	706	19.2	36.6	32.9	10.2	19.2	0.8	0.3	18.3	20.1
Iran, Islamic Rep. of	2011	861	12.9	50.1	17.9	14.3	12.9	3.5	1.4	11.8	13.7
	2015	863	18.9	43.1	18.2	15.1	18.9	4.0	0.7	22.2	16.0
Israel	2011	677	26.0	37.8	19.0	11.7	26.0	4.5	0.9	24.5	27.7
	2015	796	27.6	34.9	19.8	12.6	27.6	3.6	1.6	28.8	26.3
Italy	2011	561	17.1	38.5	27.3	11.8	17.1	4.6	0.7	14.0	20.1
	2015	640	11.4	46.6	30.5	9.7	11.4	1.5	0.3	8.5	14.3
Japan	2011	636	38.2	26.5	22.7	11.5	38.2	1.1	0.0	36.3	40.1
	2015	683	46.5	24.4	17.3	11.6	46.5	0.0	0.3	46.8	46.1
Jordan	2011	1080	6.7	54.5	21.2	14.9	6.7	2.7	0.0	8.4	5.1
	2015	1122	8.1	51.6	22.4	16.1	8.1	1.0	0.7	8.9	7.3
Kazakhstan	2011	624	19.2	48.5	17.9	9.7	19.2	3.5	1.2	19.3	19.0
	2015	695	38.8	31.8	14.7	11.3	38.8	3.4	0.1	37.8	39.6
Korea, Rep. of	2011	741	51.9	20.0	15.7	12.3	51.9	0.0	0.1	48.5	55.5
	2015	766	49.1	22.4	16.4	11.9	49.1	0.3	0.0	48.4	49.7
Lebanon	2011	568	8.9	53.4	17.7	12.4	8.9	5.2	2.3	7.8	10.1
	2015	552	12.3	44.5	19.1	12.3	12.3	8.1	3.7	10.8	14.0
Lithuania	2011	681	23.7	38.2	25.2	11.4	23.7	1.3	0.1	24.4	23.0
	2015	611	20.5	40.1	27.1	11.1	20.5	1.1	0.0	18.4	22.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_11 (M052208): Geometry / Reasoning Type: MC Key: D
Label: Number of cubes that fit in a box

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	27.7	30.3	20.8	17.4	27.7	2.7	1.0	29.5	25.9
	2015	1394	29.7	30.7	21.0	15.6	29.7	2.5	0.6	30.5	28.9
Morocco	2011	1149	6.0	49.0	19.5	15.8	6.0	5.0	4.7	6.5	5.6
	2015	1894	9.6	53.0	17.5	16.4	9.6	2.9	0.6	10.2	9.2
New Zealand	2011	761	18.2	36.5	29.9	13.5	18.2	1.7	0.2	15.5	20.6
	2015	1144	15.9	40.3	27.2	13.9	15.9	2.4	0.3	13.4	18.2
Oman	2011	1371	13.0	42.3	21.1	18.6	13.0	3.4	1.5	14.2	11.9
	2015	1263	14.0	46.5	22.3	15.6	14.0	1.3	0.3	15.5	12.7
Qatar	2011	632	12.8	36.0	25.0	21.7	12.8	3.7	0.8	12.3	13.2
	2015	772	17.2	41.1	20.5	17.9	17.2	2.3	1.0	17.7	16.7
Russian Federation	2011	695	27.5	35.5	21.4	10.8	27.5	3.3	1.5	25.6	29.2
	2015	675	27.9	35.1	19.6	12.1	27.9	4.5	0.9	26.7	29.1
Saudi Arabia	2011	613	8.3	54.6	21.6	14.3	8.3	0.9	0.3	7.4	9.1
	2015	542	8.6	44.8	25.2	18.6	8.6	2.7	0.1	9.1	8.1
Singapore	2011	835	66.9	14.8	10.8	6.5	66.9	1.0	0.0	69.1	64.8
	2015	870	71.7	12.0	9.5	6.2	71.7	0.5	0.1	73.3	70.0
Slovenia	2011	631	20.2	40.1	26.2	11.2	20.2	2.3	0.0	16.9	23.2
	2015	603	20.2	34.1	31.9	11.9	20.2	1.3	0.6	18.2	22.0
South Africa	2011	1706	9.5	51.1	15.5	19.7	9.5	3.1	1.1	11.0	8.0
	2015	1797	7.9	56.3	16.5	17.2	7.9	1.8	0.3	8.9	6.6
Sweden	2011	797	10.6	33.1	38.0	14.8	10.6	3.0	0.5	9.2	11.9
	2015	583	19.8	20.2	36.8	16.5	19.8	5.5	1.2	13.7	25.1
Thailand	2011	886	4.3	59.1	17.4	15.4	4.3	2.8	1.1	3.6	5.0
	2015	923	13.7	39.1	25.7	18.0	13.7	3.3	0.2	16.3	10.6
Turkey	2011	982	15.7	45.1	18.4	16.1	15.7	4.4	0.2	14.9	16.5
	2015	864	15.3	42.3	23.7	17.0	15.3	1.6	0.0	16.7	13.8
United Arab Emirates	2011	2006	13.6	47.6	20.7	14.6	13.6	3.1	0.4	14.5	12.7
	2015	2568	16.5	46.0	19.7	15.2	16.5	2.3	0.3	19.2	13.7
United States	2011	1518	16.0	45.5	24.7	10.9	16.0	1.6	1.3	15.5	16.5
	2015	1456	17.1	43.6	24.5	12.8	17.1	1.5	0.5	17.5	16.8
International Avg (n=33)	2011	28365	20.9	40.4	21.7	13.5	20.9	2.7	0.8	20.5	21.2
	2015	31174	22.7	38.1	22.7	13.7	22.7	2.2	0.5	22.6	22.8
Ontario, Canada	2011	673	23.1	36.7	24.0	12.9	23.1	1.9	1.5	22.0	23.5
	2015	647	25.3	33.2	25.2	12.9	25.3	2.4	1.0	23.1	27.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_11 (M052208): Geometry / Reasoning Type: MC Key: D
Label: Number of cubes that fit in a box

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	19.8	35.4	26.7	13.6	19.8	3.2	1.3	17.3	22.8
	2015	558	29.2	31.5	21.0	12.0	29.2	3.5	2.7	26.0	33.2
Norway (8)	2011	559	10.9	33.7	42.5	8.9	10.9	3.8	0.2	8.9	13.0
	2015	672	11.5	31.6	37.3	16.1	11.5	2.9	0.6	8.6	14.0
Abu Dhabi, UAE	2011	631	11.9	50.7	20.8	13.2	11.9	3.1	0.3	12.4	11.5
	2015	690	16.3	44.6	20.8	16.1	16.3	2.0	0.2	21.0	11.3
Dubai, UAE	2011	783	14.6	44.6	22.1	15.3	14.6	2.6	0.8	15.5	13.7
	2015	884	23.4	42.9	17.7	13.5	23.4	2.1	0.4	25.4	21.2
Florida, US	2011	229	24.5	43.5	21.6	10.5	24.5	0.0	0.0	22.5	26.4
	2015	302	14.6	41.0	27.8	15.1	14.6	1.5	0.0	16.6	12.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_12A (M052419A): Data and Chance / Knowing Type: MC Key: C
Label: Girls playing video games

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	77.2	13.1	2.3	77.2	6.6	0.7	0.1	73.8	80.9
	2015	1474	75.4	11.5	3.4	75.4	8.5	1.0	0.3	73.5	77.3
Bahrain	2011	653	46.2	25.0	4.5	46.2	21.8	1.6	0.9	47.0	45.4
	2015	695	56.8	20.9	3.0	56.8	18.8	0.3	0.2	55.9	57.7
Botswana	2011	766	48.1	24.8	2.9	48.1	20.8	1.6	1.9	48.8	47.4
	2015	855	47.7	24.2	2.6	47.7	24.0	1.0	0.5	50.4	45.1
Chile	2011	824	55.2	16.3	2.3	55.2	22.6	1.5	2.1	50.3	60.9
	2015	701	56.5	13.9	3.8	56.5	23.7	1.1	1.0	50.2	61.7
Chinese Taipei	2011	716	82.4	7.7	1.1	82.4	8.9	0.0	0.0	83.4	81.3
	2015	819	80.7	6.8	0.9	80.7	11.4	0.2	0.0	80.0	81.3
England	2011	549	74.8	15.4	3.2	74.8	5.4	1.0	0.2	72.7	76.6
	2015	694	78.0	13.3	2.6	78.0	5.3	0.7	0.1	78.8	77.1
Georgia	2011	654	36.1	23.6	8.1	36.1	26.8	4.0	1.5	32.2	40.2
	2015	574	32.6	35.3	6.2	32.6	22.6	2.7	0.6	27.6	36.7
Hong Kong SAR	2011	569	70.3	9.8	2.6	70.3	16.6	0.2	0.5	72.5	68.2
	2015	581	73.8	11.5	1.9	73.8	12.6	0.2	0.1	73.5	74.2
Hungary	2011	740	72.5	13.3	2.5	72.5	11.3	0.3	0.1	66.3	78.6
	2015	706	74.2	11.5	4.1	74.2	9.8	0.1	0.4	75.5	72.8
Iran, Islamic Rep. of	2011	861	33.8	16.2	10.6	33.8	36.5	1.4	1.4	29.2	37.7
	2015	863	34.4	20.6	7.6	34.4	33.7	2.8	0.9	34.0	34.8
Israel	2011	677	67.4	19.0	2.6	67.4	9.3	0.6	1.1	63.6	71.3
	2015	796	65.6	18.4	3.6	65.6	8.5	1.8	2.1	65.8	65.4
Italy	2011	561	70.3	14.1	2.2	70.3	11.9	0.5	1.0	67.0	73.5
	2015	640	67.0	12.8	2.2	67.0	16.8	0.9	0.3	64.7	69.2
Japan	2011	636	85.8	8.1	1.5	85.8	4.4	0.1	0.0	85.1	86.6
	2015	683	87.9	5.6	0.5	87.9	5.5	0.2	0.3	88.7	86.9
Jordan	2011	1080	34.8	28.0	7.1	34.8	28.8	1.2	0.0	31.6	37.9
	2015	1122	29.1	29.8	7.3	29.1	32.7	0.4	0.7	27.0	31.3
Kazakhstan	2011	624	51.8	17.4	5.8	51.8	20.5	2.9	1.7	49.6	54.0
	2015	695	63.4	14.2	5.1	63.4	15.9	1.0	0.4	62.4	64.3
Korea, Rep. of	2011	741	89.1	6.2	0.9	89.1	3.6	0.1	0.1	88.1	90.2
	2015	766	81.3	8.1	1.3	81.3	9.3	0.0	0.0	81.4	81.2
Lebanon	2011	570	43.6	31.6	2.5	43.6	16.3	3.0	3.1	39.7	48.0
	2015	552	42.8	27.6	4.2	42.8	17.7	3.0	4.7	34.7	51.4
Lithuania	2011	681	71.2	16.7	3.9	71.2	7.8	0.0	0.4	72.0	70.5
	2015	611	77.6	14.9	1.9	77.6	5.5	0.1	0.0	78.9	76.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_12A (M052419A): Data and Chance / Knowing Type: MC Key: C
Label: Girls playing video games

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	57.5	14.7	3.9	57.5	21.4	1.1	1.4	60.8	54.3
	2015	1394	66.6	12.4	2.3	66.6	17.2	1.0	0.6	66.7	66.5
Morocco	2011	1151	24.5	24.1	11.3	24.5	31.2	3.3	5.7	22.9	26.0
	2015	1893	30.4	25.4	6.8	30.4	34.6	1.9	1.0	30.5	30.2
New Zealand	2011	761	74.4	12.4	3.1	74.4	8.0	1.9	0.2	70.5	77.9
	2015	1144	73.7	12.5	2.6	73.7	9.4	1.6	0.3	75.1	72.4
Oman	2011	1371	30.8	26.9	7.9	30.8	30.6	2.1	1.7	32.8	28.7
	2015	1263	36.8	25.1	4.6	36.8	31.9	1.1	0.5	35.6	38.0
Qatar	2011	632	45.0	23.3	7.3	45.0	23.2	0.3	0.9	40.0	50.2
	2015	772	49.5	23.8	4.7	49.5	20.2	0.4	1.4	46.6	52.4
Russian Federation	2011	695	71.2	17.0	1.7	71.2	6.8	1.5	1.7	71.6	70.9
	2015	675	71.3	16.5	2.6	71.3	6.9	1.5	1.2	66.0	76.4
Saudi Arabia	2011	616	34.6	30.8	7.7	34.6	26.0	0.7	0.3	31.7	37.2
	2015	543	33.8	27.4	9.1	33.8	27.5	2.0	0.2	35.5	32.2
Singapore	2011	835	82.1	11.3	2.3	82.1	4.1	0.2	0.0	81.3	82.9
	2015	870	86.1	8.3	1.5	86.1	3.7	0.2	0.2	87.1	85.0
Slovenia	2011	631	74.7	15.8	1.8	74.7	7.5	0.2	0.0	68.4	80.5
	2015	603	79.3	14.7	0.1	79.3	4.9	0.5	0.6	76.1	82.1
South Africa	2011	1706	27.8	18.3	4.0	27.8	46.9	1.6	1.4	27.0	28.6
	2015	1797	34.4	19.9	2.9	34.4	41.6	0.7	0.5	34.0	35.0
Sweden	2011	797	71.1	12.0	4.3	71.1	10.5	1.6	0.5	68.3	73.5
	2015	583	75.9	8.7	2.0	75.9	7.6	4.4	1.3	69.4	81.7
Thailand	2011	886	31.8	13.2	5.1	31.8	46.9	1.5	1.3	32.4	31.2
	2015	923	33.9	9.4	6.8	33.9	48.5	1.0	0.3	34.9	32.9
Turkey	2011	982	54.8	18.4	3.4	54.8	22.8	0.3	0.4	51.5	57.7
	2015	864	54.4	21.6	4.1	54.4	19.7	0.2	0.0	53.7	55.1
United Arab Emirates	2011	2006	53.9	25.7	3.9	53.9	15.4	0.7	0.4	52.7	55.0
	2015	2568	54.5	22.4	3.4	54.5	16.8	2.6	0.3	54.9	54.1
United States	2011	1518	74.7	14.5	2.2	74.7	6.5	0.4	1.6	71.9	77.8
	2015	1456	74.3	15.0	2.6	74.3	6.5	1.1	0.6	73.0	75.5
International Avg (n=33)	2011	28368	58.2	17.7	4.1	58.2	17.8	1.2	1.0	56.3	60.0
	2015	31175	60.0	17.1	3.6	60.0	17.5	1.1	0.7	58.8	61.0
Ontario, Canada	2011	673	79.7	9.5	1.2	79.7	6.6	1.0	2.0	77.3	81.8
	2015	647	79.8	11.1	1.6	79.8	5.8	0.5	1.2	77.6	82.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_12A (M052419A): Data and Chance / Knowing Type: MC Key: C
Label: Girls playing video games

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	78.2	12.0	0.8	78.2	6.2	1.5	1.3	73.4	83.6
	2015	558	81.0	8.4	2.1	81.0	3.5	1.6	3.3	77.7	85.0
Norway (8)	2011	559	74.6	8.1	3.5	74.6	11.8	1.8	0.2	69.6	79.6
	2015	672	74.5	10.2	2.5	74.5	10.6	1.5	0.6	74.8	74.2
Abu Dhabi, UAE	2011	631	53.7	23.3	4.6	53.7	17.5	0.6	0.3	54.6	52.8
	2015	690	49.5	23.1	4.4	49.5	18.8	4.1	0.2	51.3	47.6
Dubai, UAE	2011	783	60.9	22.5	3.0	60.9	12.0	0.7	0.8	57.3	64.3
	2015	884	70.0	15.7	1.7	70.0	10.4	1.7	0.5	69.3	70.9
Florida, US	2011	229	79.5	10.3	7.0	79.5	2.7	0.5	0.0	77.9	81.1
	2015	302	68.7	20.5	3.1	68.7	6.0	1.5	0.2	68.7	68.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_12B (M052419B): Data and Chance / Knowing Type: MC Key: C
Label: Difference in percentages

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	86.8	1.4	3.7	86.8	7.4	0.6	0.1	85.5	88.2
	2015	1474	86.7	1.8	2.6	86.7	7.3	1.2	0.4	87.0	86.3
Bahrain	2011	653	59.1	8.9	10.8	59.1	18.6	1.7	0.9	64.5	53.5
	2015	695	67.5	7.0	8.4	67.5	16.7	0.1	0.2	69.0	66.2
Botswana	2011	766	42.6	7.1	10.4	42.6	35.9	1.6	2.5	43.4	41.8
	2015	855	39.7	7.2	13.2	39.7	38.2	1.2	0.5	43.7	35.8
Chile	2011	825	63.8	2.9	5.0	63.8	24.7	1.1	2.5	60.4	67.8
	2015	701	68.5	3.0	4.2	68.5	22.5	0.6	1.3	66.7	70.0
Chinese Taipei	2011	716	95.2	1.5	0.9	95.2	2.4	0.0	0.0	96.5	94.0
	2015	819	93.9	1.1	1.0	93.9	3.8	0.2	0.0	95.5	92.4
England	2011	549	88.0	3.3	2.7	88.0	4.8	1.0	0.2	88.8	87.3
	2015	694	87.5	2.0	3.9	87.5	6.1	0.3	0.1	89.5	85.4
Georgia	2011	654	55.5	3.7	12.3	55.5	23.4	3.2	1.8	56.8	54.2
	2015	574	56.8	3.8	8.9	56.8	27.2	2.5	0.8	64.3	50.7
Hong Kong SAR	2011	569	91.7	0.8	2.2	91.7	4.8	0.0	0.5	92.7	90.8
	2015	581	92.9	1.7	1.7	92.9	3.3	0.4	0.1	94.2	91.5
Hungary	2011	740	85.3	0.6	4.5	85.3	9.2	0.1	0.1	84.5	86.2
	2015	706	88.4	1.7	3.8	88.4	5.4	0.4	0.4	90.0	86.7
Iran, Islamic Rep. of	2011	861	41.8	6.8	13.5	41.8	35.2	0.9	1.8	39.0	44.3
	2015	863	47.4	7.2	11.1	47.4	30.7	1.8	1.8	47.9	47.0
Israel	2011	677	80.0	3.8	2.4	80.0	11.3	1.3	1.2	80.9	79.1
	2015	796	75.5	2.5	4.5	75.5	13.3	1.6	2.6	77.8	73.2
Italy	2011	561	79.7	2.0	3.4	79.7	13.2	0.7	1.1	77.7	81.6
	2015	640	78.8	2.1	3.7	78.8	13.6	1.4	0.3	78.6	79.1
Japan	2011	636	95.3	0.4	1.1	95.3	3.1	0.1	0.0	95.4	95.1
	2015	683	94.0	1.0	0.9	94.0	3.6	0.1	0.3	95.2	92.7
Jordan	2011	1080	49.5	9.0	12.4	49.5	28.4	0.7	0.1	52.1	47.0
	2015	1122	43.8	9.7	15.3	43.8	29.0	1.3	0.9	44.0	43.6
Kazakhstan	2011	624	63.6	3.1	8.0	63.6	20.7	2.4	2.3	60.7	66.5
	2015	695	69.9	3.0	6.8	69.9	18.5	1.2	0.7	73.2	66.9
Korea, Rep. of	2011	741	97.4	0.4	0.8	97.4	1.3	0.0	0.1	98.0	96.8
	2015	766	97.4	0.8	0.7	97.4	1.1	0.0	0.0	98.5	96.4
Lebanon	2011	570	53.7	3.1	11.5	53.7	26.3	1.8	3.6	53.7	53.8
	2015	552	53.4	4.7	9.3	53.4	24.5	3.0	5.1	51.2	55.7
Lithuania	2011	681	88.8	1.2	3.1	88.8	6.2	0.3	0.4	88.4	89.3
	2015	611	91.6	0.9	1.7	91.6	5.3	0.4	0.0	93.3	90.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_12B (M052419B): Data and Chance / Knowing Type: MC Key: C
Label: Difference in percentages

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	55.6	6.6	7.1	55.6	27.5	1.7	1.5	58.7	52.4
	2015	1394	64.0	5.9	7.5	64.0	21.0	0.7	1.0	66.3	61.7
Morocco	2011	1153	36.8	8.1	20.1	36.8	25.9	2.4	6.6	35.9	37.7
	2015	1893	42.4	8.8	15.6	42.4	30.0	1.8	1.4	40.7	43.8
New Zealand	2011	761	84.8	2.0	3.1	84.8	8.5	1.3	0.3	84.6	85.0
	2015	1144	83.3	2.3	3.8	83.3	8.7	1.6	0.4	85.7	81.1
Oman	2011	1371	44.6	7.6	18.5	44.6	25.3	2.0	1.9	49.9	39.4
	2015	1263	47.1	6.2	17.4	47.1	28.0	0.4	0.8	48.6	45.8
Qatar	2011	632	58.6	9.6	11.2	58.6	18.8	0.9	0.9	60.8	56.4
	2015	772	60.2	5.6	9.9	60.2	22.1	0.5	1.6	61.0	59.4
Russian Federation	2011	695	84.9	1.3	3.1	84.9	8.0	0.9	1.8	86.1	83.8
	2015	675	84.8	1.4	3.8	84.8	7.2	1.4	1.5	83.5	86.1
Saudi Arabia	2011	615	50.7	7.5	17.9	50.7	23.0	0.5	0.4	48.7	52.5
	2015	543	49.7	8.6	13.1	49.7	26.6	1.7	0.2	52.2	47.3
Singapore	2011	835	92.0	0.7	2.7	92.0	4.5	0.2	0.0	93.4	90.6
	2015	870	92.7	1.4	1.2	92.7	4.4	0.1	0.3	95.2	89.9
Slovenia	2011	631	93.7	0.6	1.5	93.7	3.7	0.5	0.0	94.6	92.9
	2015	603	92.8	1.4	1.2	92.8	3.8	0.3	0.6	92.9	92.6
South Africa	2011	1706	25.5	8.5	21.2	25.5	41.6	1.8	1.5	23.6	27.3
	2015	1797	32.6	5.4	19.7	32.6	41.1	0.5	0.7	35.8	28.9
Sweden	2011	797	88.0	2.4	2.7	88.0	4.8	1.5	0.7	91.4	84.9
	2015	583	86.1	2.3	2.3	86.1	4.7	3.0	1.6	85.2	87.0
Thailand	2011	886	59.6	4.8	6.2	59.6	26.0	1.9	1.5	63.7	54.8
	2015	923	55.6	5.9	5.8	55.6	31.2	1.1	0.5	58.3	52.4
Turkey	2011	982	61.1	4.4	7.2	61.1	25.8	1.0	0.4	61.6	60.7
	2015	864	61.4	5.7	6.2	61.4	26.7	0.0	0.0	60.6	62.2
United Arab Emirates	2011	2006	65.5	4.3	7.3	65.5	21.7	0.5	0.6	68.4	62.6
	2015	2568	66.3	5.0	7.2	66.3	18.1	2.9	0.5	69.1	63.3
United States	2011	1518	82.5	3.0	2.2	82.5	10.1	0.6	1.6	83.5	81.4
	2015	1456	82.4	2.3	3.0	82.4	10.4	1.3	0.6	83.8	81.0
International Avg (n=33)	2011	28370	69.8	4.0	7.3	69.8	16.7	1.1	1.2	70.4	69.1
	2015	31175	70.8	3.9	6.7	70.8	16.8	1.1	0.8	72.1	69.5
Ontario, Canada	2011	673	85.7	1.5	1.2	85.7	9.0	0.4	2.2	85.1	86.2
	2015	647	88.1	2.2	1.5	88.1	6.5	0.5	1.2	88.5	87.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_12B (M052419B): Data and Chance / Knowing Type: MC Key: C
Label: Difference in percentages

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	86.1	0.8	2.0	86.1	8.5	0.9	1.7	86.5	85.6
	2015	558	82.5	0.3	2.2	82.5	9.7	1.5	3.7	82.5	82.6
Norway (8)	2011	559	89.9	1.0	2.8	89.9	4.3	1.3	0.7	93.0	86.7
	2015	672	89.2	1.0	2.9	89.2	4.5	1.6	0.8	89.9	88.5
Abu Dhabi, UAE	2011	631	64.5	5.0	6.6	64.5	23.6	0.1	0.3	66.7	62.4
	2015	690	60.1	5.8	9.7	60.1	19.0	4.7	0.8	64.2	55.8
Dubai, UAE	2011	783	71.7	3.6	6.8	71.7	16.2	0.7	1.0	77.0	66.8
	2015	884	79.0	2.7	4.1	79.0	11.4	2.2	0.5	82.0	75.7
Florida, US	2011	229	85.3	3.9	4.1	85.3	6.3	0.4	0.0	82.3	88.3
	2015	302	75.4	3.2	2.9	75.4	16.4	1.9	0.2	81.6	68.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_13 (M052115): Data and Chance / Applying Type: MC Key: D
Label: Raspberry as favorite flavor

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	53.4	5.0	19.6	20.7	53.4	1.2	0.1	53.3	53.5
	2015	1474	51.8	5.5	19.9	20.5	51.8	1.8	0.6	51.7	51.9
Bahrain	2011	653	23.8	4.5	52.5	16.3	23.8	1.9	1.1	22.3	25.2
	2015	694	50.5	4.0	34.3	9.8	50.5	1.2	0.2	50.5	50.4
Botswana	2011	766	18.7	4.9	57.4	13.8	18.7	2.4	2.8	19.7	17.7
	2015	855	20.4	4.7	60.0	13.1	20.4	1.4	0.5	23.1	17.6
Chile	2011	824	22.6	3.8	47.3	21.2	22.6	2.4	2.8	21.3	24.1
	2015	701	24.7	3.4	45.4	24.6	24.7	0.6	1.3	25.5	24.1
Chinese Taipei	2011	716	80.7	3.0	8.2	7.8	80.7	0.3	0.0	82.7	78.6
	2015	819	75.0	5.7	10.2	8.8	75.0	0.2	0.0	77.0	73.1
England	2011	549	63.6	5.3	11.3	18.7	63.6	0.9	0.2	65.1	62.3
	2015	694	65.6	5.7	13.3	14.7	65.6	0.7	0.1	70.1	60.7
Georgia	2011	657	29.5	7.4	38.9	20.3	29.5	2.1	1.8	29.5	29.6
	2015	574	32.8	5.6	38.3	20.7	32.8	1.9	0.8	32.7	32.8
Hong Kong SAR	2011	569	77.0	3.2	8.8	10.5	77.0	0.0	0.5	80.4	73.7
	2015	581	81.9	3.9	5.5	8.0	81.9	0.7	0.1	84.3	79.4
Hungary	2011	740	41.4	3.7	31.7	22.3	41.4	0.8	0.1	36.7	46.0
	2015	706	44.4	2.4	28.2	24.4	44.4	0.3	0.4	47.1	41.6
Iran, Islamic Rep. of	2011	861	20.6	3.2	53.2	19.7	20.6	1.3	2.0	18.6	22.3
	2015	863	32.2	5.7	43.8	14.9	32.2	1.6	1.9	30.7	33.5
Israel	2011	677	51.7	3.7	25.1	17.1	51.7	0.8	1.5	49.8	53.8
	2015	796	52.1	4.2	23.7	14.8	52.1	2.3	2.9	53.0	51.2
Italy	2011	561	45.5	3.4	30.1	18.4	45.5	1.4	1.2	48.8	42.2
	2015	640	46.5	2.8	30.4	18.5	46.5	1.5	0.3	46.2	46.8
Japan	2011	636	70.5	3.7	12.8	12.3	70.5	0.6	0.0	67.9	73.2
	2015	683	74.2	2.8	9.6	12.8	74.2	0.3	0.3	76.1	72.2
Jordan	2011	1080	17.6	3.9	60.5	17.0	17.6	0.9	0.1	16.0	19.2
	2015	1122	15.1	4.3	64.9	14.3	15.1	0.5	0.9	13.8	16.4
Kazakhstan	2011	624	26.3	6.3	38.4	24.3	26.3	2.3	2.4	22.9	29.8
	2015	695	43.6	6.2	29.5	18.6	43.6	1.2	0.9	42.9	44.3
Korea, Rep. of	2011	741	83.5	5.0	4.3	6.9	83.5	0.2	0.1	81.4	85.6
	2015	766	77.6	5.4	8.1	8.4	77.6	0.5	0.0	81.0	74.3
Lebanon	2011	570	15.3	4.0	49.7	24.2	15.3	3.1	3.8	15.1	15.5
	2015	552	12.7	4.7	44.9	26.6	12.7	5.8	5.1	11.1	14.4
Lithuania	2011	681	48.8	3.1	24.0	22.1	48.8	1.6	0.4	51.4	46.5
	2015	611	49.1	4.9	18.5	26.3	49.1	0.9	0.3	49.6	48.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_13 (M052115): Data and Chance / Applying Type: MC Key: D
Label: Raspberry as favorite flavor

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	45.0	8.0	30.2	14.7	45.0	0.6	1.6	49.0	40.9
	2015	1394	45.9	8.8	28.2	15.2	45.9	0.8	1.1	49.9	42.0
Morocco	2011	1154	10.2	5.1	56.4	18.7	10.2	2.8	6.9	9.3	11.1
	2015	1894	11.0	5.7	57.7	22.8	11.0	1.3	1.5	9.3	12.5
New Zealand	2011	761	52.4	8.5	20.6	17.2	52.4	1.1	0.3	51.8	52.9
	2015	1144	50.5	3.9	25.8	18.1	50.5	1.3	0.4	57.4	44.2
Oman	2011	1371	15.3	7.0	57.0	17.0	15.3	1.6	2.2	15.1	15.5
	2015	1262	18.4	5.6	58.8	15.6	18.4	0.8	0.8	16.6	20.1
Qatar	2011	632	25.7	5.9	44.9	20.2	25.7	1.9	1.4	25.6	25.8
	2015	772	27.6	4.7	49.5	15.1	27.6	1.5	1.7	28.4	26.7
Russian Federation	2011	695	43.3	3.9	21.9	25.7	43.3	3.4	1.8	39.0	47.2
	2015	675	44.5	4.9	18.7	26.6	44.5	3.9	1.5	38.7	50.2
Saudi Arabia	2011	617	17.9	7.6	56.6	17.0	17.9	0.2	0.6	13.6	22.0
	2015	543	13.4	4.9	66.2	13.9	13.4	1.3	0.2	13.4	13.5
Singapore	2011	835	87.0	0.7	8.4	3.6	87.0	0.1	0.0	87.5	86.6
	2015	870	87.4	1.2	7.8	2.8	87.4	0.3	0.4	89.2	85.6
Slovenia	2011	631	50.9	5.5	24.2	19.2	50.9	0.2	0.0	50.3	51.3
	2015	603	52.4	6.0	18.7	21.6	52.4	0.7	0.6	52.3	52.5
South Africa	2011	1706	12.2	6.5	62.1	16.7	12.2	0.8	1.8	11.9	12.5
	2015	1797	10.8	4.2	71.6	12.4	10.8	0.2	0.8	12.9	8.4
Sweden	2011	797	37.1	3.3	25.5	31.5	37.1	2.0	0.7	40.9	33.6
	2015	583	44.0	3.1	18.7	26.3	44.0	6.1	1.7	39.6	47.9
Thailand	2011	886	32.2	4.7	28.5	30.5	32.2	2.2	1.9	34.2	29.8
	2015	923	33.5	3.5	32.0	29.0	33.5	1.5	0.5	35.4	31.3
Turkey	2011	982	39.8	5.1	41.2	12.5	39.8	1.0	0.4	40.5	39.1
	2015	864	39.4	5.9	40.1	14.6	39.4	0.0	0.0	41.2	37.6
United Arab Emirates	2011	2006	35.1	4.2	44.2	14.9	35.1	1.0	0.6	38.0	32.3
	2015	2568	37.5	5.1	42.5	13.1	37.5	1.1	0.7	38.7	36.2
United States	2011	1518	58.8	6.2	18.6	14.0	58.8	0.6	1.7	59.6	58.0
	2015	1456	54.4	6.8	22.5	14.2	54.4	1.4	0.7	56.3	52.6
International Avg (n=33)	2011	28375	41.0	4.8	33.8	17.8	41.0	1.3	1.3	40.9	41.1
	2015	31174	43.1	4.7	32.9	17.0	43.1	1.4	0.9	43.8	42.3
Ontario, Canada	2011	673	60.6	7.7	12.6	15.1	60.6	1.9	2.2	59.1	61.9
	2015	647	64.2	5.0	13.0	14.5	64.2	2.1	1.2	65.4	62.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_13 (M052115): Data and Chance / Applying Type: MC Key: D
Label: Raspberry as favorite flavor

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	58.9	4.1	16.1	16.8	58.9	2.3	1.7	54.9	63.4
	2015	558	57.3	5.8	14.4	17.0	57.3	1.6	4.0	54.1	61.1
Norway (8)	2011	559	46.4	7.2	17.3	26.8	46.4	1.6	0.7	50.2	42.5
	2015	672	46.6	5.4	16.9	29.4	46.6	0.9	0.8	50.1	43.6
Abu Dhabi, UAE	2011	631	32.0	4.6	48.4	14.0	32.0	0.7	0.3	35.1	29.2
	2015	690	34.4	6.4	41.8	14.8	34.4	1.5	1.3	37.4	31.3
Dubai, UAE	2011	783	42.2	3.4	36.4	15.3	42.2	1.6	1.0	45.1	39.6
	2015	884	51.6	3.4	28.9	14.5	51.6	0.9	0.8	54.3	48.5
Florida, US	2011	229	57.1	7.2	20.0	15.1	57.1	0.6	0.0	59.3	55.0
	2015	302	51.2	8.4	24.0	15.4	51.2	0.9	0.2	56.0	45.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M11_14 (M052421): Data and Chance / Reasoning Type: CR 1 Point
Label: Explain why Pat is correct

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1071	45.3	45.0	9.6	0.2	45.3	43.1	47.5
	2015	1474	46.2	45.6	7.4	0.9	46.2	49.1	43.1
Bahrain	2011	653	29.7	43.8	24.9	1.5	29.7	40.3	18.9
	2015	695	33.5	47.3	18.7	0.4	33.5	41.1	26.6
Botswana	2011	766	24.2	63.8	8.3	3.7	24.2	27.3	20.9
	2015	855	27.2	54.6	17.4	0.8	27.2	31.6	22.9
Chile	2011	825	12.0	65.1	18.9	4.1	12.0	11.6	12.4
	2015	701	16.0	54.1	28.3	1.6	16.0	18.5	14.0
Chinese Taipei	2011	716	44.3	47.7	7.8	0.1	44.3	45.3	43.3
	2015	819	53.3	38.7	7.8	0.1	53.3	51.0	55.5
England	2011	549	60.8	33.7	4.9	0.6	60.8	60.0	61.6
	2015	694	62.9	30.5	6.0	0.6	62.9	65.9	59.7
Georgia	2011	647	18.7	33.8	44.8	2.7	18.7	21.0	16.4
	2015	574	16.2	45.6	36.6	1.6	16.2	19.1	13.8
Hong Kong SAR	2011	569	54.5	34.7	10.3	0.5	54.5	55.6	53.5
	2015	581	57.1	36.1	6.6	0.3	57.1	59.5	54.6
Hungary	2011	740	56.0	34.5	9.0	0.4	56.0	53.7	58.3
	2015	706	45.9	44.1	9.6	0.4	45.9	48.9	42.9
Iran, Islamic Rep. of	2011	861	6.9	69.1	21.4	2.6	6.9	6.5	7.4
	2015	863	13.0	64.5	20.3	2.3	13.0	11.6	14.2
Israel	2011	677	46.8	34.2	17.0	2.0	46.8	49.6	44.0
	2015	796	33.7	46.0	16.7	3.7	33.7	36.0	31.2
Italy	2011	561	31.2	44.3	22.5	2.1	31.2	32.3	30.2
	2015	640	33.1	47.6	18.4	0.9	33.1	35.0	31.2
Japan	2011	636	57.8	31.6	10.3	0.3	57.8	56.2	59.4
	2015	683	64.5	29.0	6.3	0.3	64.5	66.0	62.8
Jordan	2011	1080	12.1	68.2	19.3	0.5	12.1	14.2	10.1
	2015	1122	8.8	66.1	24.1	1.0	8.8	11.5	5.9
Kazakhstan	2011	624	40.4	25.6	31.2	2.8	40.4	46.7	33.9
	2015	695	46.3	32.6	19.6	1.4	46.3	55.6	38.0
Korea, Rep. of	2011	741	80.5	15.9	3.4	0.2	80.5	80.7	80.2
	2015	766	70.6	24.2	5.1	0.1	70.6	71.5	69.8
Lebanon	2011	570	18.6	42.9	33.2	5.3	18.6	19.4	17.7
	2015	552	14.4	44.6	33.7	7.3	14.4	16.8	11.8
Lithuania	2011	681	26.8	62.2	10.2	0.9	26.8	25.6	27.8
	2015	611	25.1	63.1	10.7	1.1	25.1	22.2	28.0

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_14 (M052421): Data and Chance / Reasoning Type: CR 1 Point
Label: Explain why Pat is correct

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	808	16.6	55.0	26.6	1.9	16.6	17.7	15.4
	2015	1394	16.0	61.0	21.8	1.3	16.0	15.7	16.3
Morocco	2011	1154	9.0	42.1	40.4	8.4	9.0	11.9	6.4
	2015	1894	5.5	53.1	39.4	2.0	5.5	5.7	5.3
New Zealand	2011	761	41.5	47.9	9.8	0.8	41.5	43.0	40.3
	2015	1144	42.7	47.6	9.1	0.5	42.7	44.6	40.9
Oman	2011	1371	6.4	56.6	33.9	3.1	6.4	8.9	3.8
	2015	1261	8.8	64.5	25.5	1.1	8.8	13.4	4.7
Qatar	2011	632	17.2	55.8	24.5	2.4	17.2	17.8	16.6
	2015	772	22.9	50.2	24.1	2.8	22.9	23.3	22.5
Russian Federation	2011	695	34.8	38.5	24.2	2.5	34.8	33.8	35.7
	2015	675	28.9	47.5	20.7	2.9	28.9	25.0	32.7
Saudi Arabia	2011	617	17.3	58.7	23.3	0.8	17.3	24.1	10.9
	2015	543	17.1	49.6	33.2	0.2	17.1	23.3	10.9
Singapore	2011	835	59.2	36.9	3.8	0.1	59.2	60.9	57.6
	2015	870	68.3	28.5	2.5	0.7	68.3	70.4	66.1
Slovenia	2011	631	37.6	52.1	10.2	0.2	37.6	44.4	31.3
	2015	603	71.4	22.2	5.7	0.7	71.4	75.5	68.0
South Africa	2011	1706	7.1	65.0	25.6	2.2	7.1	6.8	7.4
	2015	1797	9.3	66.5	23.4	0.9	9.3	11.9	6.1
Sweden	2011	797	39.2	45.8	13.7	1.3	39.2	44.7	34.3
	2015	581	53.4	36.1	8.2	2.3	53.4	54.6	52.4
Thailand	2011	886	14.2	48.2	34.9	2.7	14.2	13.6	15.0
	2015	923	23.0	47.7	28.1	1.1	23.0	23.9	21.9
Turkey	2011	982	25.9	55.5	17.8	0.8	25.9	27.8	24.3
	2015	864	23.2	64.4	12.5	0.0	23.2	25.7	20.5
United Arab Emirates	2011	2006	25.5	57.1	16.5	0.9	25.5	30.1	20.9
	2015	2568	29.1	52.8	17.1	1.1	29.1	34.1	23.8
United States	2011	1518	60.4	32.7	4.7	2.2	60.4	59.1	61.8
	2015	1456	46.4	49.0	3.8	0.8	46.4	48.6	44.2
International Avg (n=33)	2011	28366	32.7	46.8	18.7	1.8	32.7	34.4	31.1
	2015	31172	34.4	47.1	17.2	1.3	34.4	36.6	32.2
Ontario, Canada	2011	673	55.3	34.6	6.4	3.7	55.3	51.7	58.5
	2015	647	53.8	36.4	7.5	2.3	53.8	56.1	51.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M11_14 (M052421): Data and Chance / Reasoning Type: CR 1 Point
Label: Explain why Pat is correct

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	856	48.3	42.8	6.1	2.8	48.3	47.8	48.8
	2015	559	47.8	41.5	6.2	4.5	47.8	50.1	45.1
Norway (8)	2011	559	53.6	37.8	7.3	1.3	53.6	63.1	44.1
	2015	672	57.2	29.2	12.4	1.2	57.2	65.8	49.8
Abu Dhabi, UAE	2011	631	25.1	57.2	17.2	0.4	25.1	30.7	20.0
	2015	690	25.5	55.0	18.0	1.5	25.5	30.3	20.5
Dubai, UAE	2011	783	30.9	53.0	15.0	1.1	30.9	33.1	29.0
	2015	884	43.6	45.9	9.5	1.0	43.6	47.8	38.9
Florida, US	2011	229	62.8	29.6	7.4	0.3	62.8	62.2	63.4
	2015	302	44.1	49.3	6.4	0.2	44.1	46.3	41.6

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_01 (M052024): Number / Knowing Type: MC Key: B
Label: Octagon with equivalent shading

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	61.4	30.0	61.4	1.7	5.4	1.4	0.1	60.8	62.0
	2015	1468	61.2	31.8	61.2	1.2	4.1	1.3	0.3	58.6	63.9
Bahrain	2011	653	35.4	52.0	35.4	3.6	5.9	2.8	0.3	35.7	35.1
	2015	705	52.6	37.7	52.6	3.2	5.4	0.6	0.6	55.3	50.0
Botswana	2011	772	21.6	62.0	21.6	6.2	6.8	3.0	0.5	20.2	23.2
	2015	839	23.8	60.1	23.8	6.7	7.2	2.3	0.0	22.4	25.2
Chile	2011	820	27.5	59.8	27.5	2.5	5.9	3.8	0.5	26.3	28.9
	2015	693	39.5	51.6	39.5	1.9	4.6	1.6	0.8	38.6	40.2
Chinese Taipei	2011	719	69.6	22.9	69.6	3.0	3.7	0.8	0.0	69.9	69.4
	2015	819	72.1	22.9	72.1	1.8	2.6	0.7	0.0	69.6	74.4
England	2011	540	60.5	29.2	60.5	3.1	6.0	0.7	0.4	56.9	64.7
	2015	686	59.8	29.6	59.8	4.5	4.8	1.0	0.3	59.2	60.4
Georgia	2011	651	40.1	44.0	40.1	4.1	6.3	4.2	1.3	40.4	39.9
	2015	582	46.2	38.8	46.2	2.3	9.2	3.3	0.2	43.9	48.6
Hong Kong SAR	2011	575	77.0	16.6	77.0	2.1	3.1	0.8	0.3	77.5	76.6
	2015	597	80.1	13.3	80.1	2.5	3.9	0.2	0.0	78.5	81.7
Hungary	2011	746	54.3	36.7	54.3	3.2	4.6	1.3	0.0	56.9	51.9
	2015	689	63.0	30.4	63.0	1.8	3.4	1.1	0.3	60.6	65.1
Iran, Islamic Rep. of	2011	859	38.4	43.0	38.4	3.9	11.0	3.5	0.3	32.6	43.3
	2015	878	41.2	38.1	41.2	4.5	10.8	5.4	0.1	35.6	46.1
Israel	2011	683	62.9	25.1	62.9	3.4	3.0	4.7	0.8	62.6	63.3
	2015	793	58.5	28.4	58.5	4.2	5.3	3.4	0.3	59.2	57.7
Italy	2011	562	42.0	45.4	42.0	4.6	4.1	3.8	0.0	35.1	49.2
	2015	665	41.0	47.9	41.0	2.9	5.2	3.0	0.0	39.7	42.2
Japan	2011	617	60.2	31.0	60.2	4.4	3.1	1.3	0.1	62.0	58.3
	2015	669	67.7	27.2	67.7	2.9	1.9	0.1	0.2	66.9	68.5
Jordan	2011	1101	31.6	55.3	31.6	3.4	5.9	3.9	0.0	30.2	32.9
	2015	1124	27.9	57.3	27.9	2.8	9.4	2.5	0.2	28.2	27.6
Kazakhstan	2011	630	38.5	44.3	38.5	3.5	7.7	5.6	0.4	36.4	40.3
	2015	697	52.5	36.3	52.5	4.9	4.8	1.5	0.0	56.5	48.5
Korea, Rep. of	2011	736	88.1	9.6	88.1	0.8	1.5	0.0	0.0	90.3	85.7
	2015	753	83.8	11.9	83.8	1.7	2.2	0.3	0.0	87.3	80.6
Lebanon	2011	556	27.3	52.4	27.3	3.9	7.3	8.8	0.3	20.9	35.1
	2015	550	29.2	44.8	29.2	5.2	6.4	12.1	2.3	28.3	30.1
Lithuania	2011	684	48.0	41.1	48.0	3.7	5.7	1.6	0.0	46.7	49.3
	2015	620	54.5	39.4	54.5	2.6	2.7	0.9	0.0	54.1	55.0

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_01 (M052024): Number / Knowing Type: MC Key: B
Label: Octagon with equivalent shading

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	46.3	44.3	46.3	2.1	5.5	1.2	0.6	46.6	45.9
	2015	1394	43.4	42.3	43.4	2.4	10.7	1.0	0.1	42.8	43.9
Morocco	2011	1300	23.7	56.4	23.7	4.4	6.7	7.8	1.0	22.8	24.5
	2015	1730	26.7	56.8	26.7	4.0	8.3	4.2	0.0	27.8	25.8
New Zealand	2011	761	58.5	31.4	58.5	3.4	4.3	2.0	0.2	49.8	66.4
	2015	1152	52.2	37.1	52.2	2.6	5.6	2.4	0.1	51.4	53.2
Oman	2011	1378	27.0	56.7	27.0	4.5	8.7	2.5	0.6	29.4	24.5
	2015	1271	30.2	53.5	30.2	3.8	9.2	3.1	0.1	32.7	27.9
Qatar	2011	640	37.6	51.9	37.6	2.4	7.3	0.8	0.0	34.5	40.7
	2015	770	39.1	48.4	39.1	4.0	5.8	2.2	0.5	35.0	42.9
Russian Federation	2011	707	50.2	37.4	50.2	4.3	4.6	3.5	0.0	49.1	51.1
	2015	685	55.6	35.8	55.6	2.1	4.4	2.0	0.1	52.4	58.8
Saudi Arabia	2011	619	35.8	56.7	35.8	2.0	4.9	0.6	0.0	35.0	36.6
	2015	541	32.0	55.8	32.0	4.3	7.1	0.7	0.0	29.6	34.5
Singapore	2011	855	78.4	12.5	78.4	3.9	4.0	0.9	0.3	80.0	76.9
	2015	872	82.4	10.2	82.4	2.4	4.8	0.2	0.0	86.0	78.8
Slovenia	2011	627	59.0	29.9	59.0	3.9	3.0	3.9	0.3	57.0	60.7
	2015	606	55.2	35.0	55.2	3.4	4.3	1.8	0.3	51.7	59.2
South Africa	2011	1692	23.4	53.4	23.4	12.0	6.1	4.9	0.2	21.9	24.9
	2015	1794	21.7	59.8	21.7	6.8	8.2	3.3	0.2	22.2	21.2
Sweden	2011	797	56.0	29.9	56.0	4.2	5.3	3.9	0.7	50.4	61.4
	2015	573	58.1	32.0	58.1	3.8	3.0	2.8	0.3	53.7	62.6
Thailand	2011	864	35.8	47.3	35.8	2.8	7.0	6.9	0.3	33.5	38.5
	2015	925	36.1	50.9	36.1	5.1	6.4	1.5	0.0	33.4	39.2
Turkey	2011	998	48.1	42.0	48.1	3.1	6.0	0.8	0.1	47.4	48.7
	2015	865	44.3	40.1	44.3	3.7	11.4	0.4	0.1	43.3	45.2
United Arab Emirates	2011	2029	37.2	49.3	37.2	3.1	7.7	2.5	0.2	36.0	38.4
	2015	2581	43.8	44.5	43.8	2.0	8.0	1.7	0.0	42.5	45.2
United States	2011	1498	57.9	29.7	57.9	2.5	6.8	2.2	0.9	55.8	60.3
	2015	1463	60.2	30.6	60.2	1.8	5.8	1.1	0.4	58.8	61.3
International Avg (n=33)	2011	28551	47.3	40.3	47.3	3.6	5.6	2.9	0.3	45.8	48.7
	2015	31049	49.6	38.8	49.6	3.3	6.0	2.1	0.2	48.7	50.5
Ontario, Canada	2011	673	58.5	29.5	58.5	3.0	4.9	3.3	0.8	51.9	65.4
	2015	631	61.0	27.3	61.0	3.3	6.1	1.8	0.5	60.5	61.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_01 (M052024): Number / Knowing Type: MC Key: B
Label: Octagon with equivalent shading

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	68.6	20.6	68.6	2.9	4.5	2.6	0.9	67.3	69.9
	2015	562	71.0	19.1	71.0	4.8	4.3	0.7	0.1	63.0	78.9
Norway (8)	2011	560	54.2	34.6	54.2	2.4	4.7	3.4	0.7	53.4	54.9
	2015	668	61.8	27.9	61.8	2.2	4.9	2.7	0.5	60.9	62.7
Abu Dhabi, UAE	2011	636	37.5	50.5	37.5	3.8	6.4	1.7	0.0	33.2	41.4
	2015	693	38.6	49.7	38.6	2.0	7.4	2.2	0.0	37.4	39.9
Dubai, UAE	2011	799	44.5	43.2	44.5	2.7	7.6	1.7	0.4	43.8	45.2
	2015	869	57.4	33.8	57.4	1.5	6.4	0.8	0.0	58.5	56.3
Florida, US	2011	247	56.6	32.4	56.6	1.7	8.3	0.9	0.0	49.8	63.2
	2015	286	47.8	39.6	47.8	3.3	8.2	1.1	0.0	48.2	47.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_02A (M052058A): Number / Applying Type: CR 1 Point
Label: Time when Pat finishes last lap

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	75.2	22.5	2.2	0.1	75.2	76.1	74.2
	2015	1468	73.3	23.9	2.5	0.3	73.3	69.7	77.1
Bahrain	2011	653	27.5	55.7	16.6	0.3	27.5	26.6	28.3
	2015	705	38.8	53.5	7.1	0.6	38.8	37.6	39.9
Botswana	2011	771	24.2	70.3	4.8	0.7	24.2	24.1	24.4
	2015	835	28.6	68.9	2.5	0.0	28.6	27.8	29.5
Chile	2011	820	55.0	35.5	8.8	0.7	55.0	50.4	60.2
	2015	693	50.0	35.6	13.6	0.8	50.0	45.5	53.8
Chinese Taipei	2011	719	87.7	10.0	2.3	0.0	87.7	88.3	87.1
	2015	819	88.6	10.0	1.4	0.0	88.6	89.3	87.9
England	2011	540	75.5	21.6	2.5	0.4	75.5	73.9	77.4
	2015	686	78.9	18.8	2.0	0.3	78.9	77.5	80.4
Georgia	2011	652	47.6	31.1	19.9	1.4	47.6	44.3	51.4
	2015	582	49.3	36.1	14.4	0.2	49.3	45.6	53.1
Hong Kong SAR	2011	575	84.3	11.8	3.5	0.3	84.3	81.9	86.9
	2015	597	88.7	10.3	1.0	0.0	88.7	89.6	87.9
Hungary	2011	746	78.7	17.7	3.4	0.1	78.7	73.5	83.5
	2015	689	77.5	19.0	3.2	0.3	77.5	73.4	81.2
Iran, Islamic Rep. of	2011	859	41.0	44.5	14.0	0.5	41.0	35.3	45.7
	2015	878	44.7	41.2	13.9	0.1	44.7	38.9	49.9
Israel	2011	683	69.6	21.1	8.1	1.2	69.6	65.1	74.3
	2015	793	72.7	20.8	6.2	0.3	72.7	70.4	75.1
Italy	2011	562	69.5	23.6	6.6	0.3	69.5	65.6	73.6
	2015	665	70.1	24.2	5.7	0.0	70.1	67.2	72.8
Japan	2011	617	79.7	17.2	2.8	0.3	79.7	75.4	84.1
	2015	669	79.8	18.2	1.9	0.2	79.8	77.0	82.8
Jordan	2011	1101	31.9	60.2	7.7	0.1	31.9	26.5	37.2
	2015	1124	30.1	61.7	7.9	0.3	30.1	26.9	33.5
Kazakhstan	2011	631	46.3	38.6	14.7	0.4	46.3	41.5	50.4
	2015	698	51.0	43.4	5.6	0.0	51.0	47.3	54.7
Korea, Rep. of	2011	736	88.3	11.0	0.7	0.0	88.3	87.4	89.4
	2015	753	91.2	7.6	1.2	0.0	91.2	91.5	90.9
Lebanon	2011	560	42.8	40.4	16.5	0.3	42.8	32.8	55.0
	2015	553	40.4	35.7	21.6	2.3	40.4	38.3	42.6
Lithuania	2011	684	69.7	25.0	5.0	0.2	69.7	65.8	74.0
	2015	620	74.3	22.1	3.5	0.0	74.3	68.4	80.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

Trend Achievement Data Almanac for Mathematics Items (Weighted)

M13_02A (M052058A): Number / Applying Type: CR 1 Point
Label: Time when Pat finishes last lap

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	48.7	42.6	8.0	0.7	48.7	47.4	50.0
	2015	1394	55.3	39.0	5.5	0.1	55.3	55.4	55.3
Morocco	2011	1308	24.0	48.5	25.9	1.5	24.0	17.7	29.6
	2015	1730	23.1	58.0	18.9	0.0	23.1	18.2	27.3
New Zealand	2011	761	76.5	21.3	2.0	0.2	76.5	71.9	80.6
	2015	1152	73.6	23.4	2.8	0.1	73.6	73.8	73.3
Oman	2011	1377	19.5	67.5	12.2	0.8	19.5	17.1	22.0
	2015	1270	27.4	66.3	6.0	0.3	27.4	24.6	30.0
Qatar	2011	640	38.5	50.1	11.4	0.0	38.5	35.2	41.8
	2015	770	44.8	47.6	7.1	0.5	44.8	43.0	46.5
Russian Federation	2011	707	79.3	13.5	7.1	0.0	79.3	78.8	79.7
	2015	685	78.9	14.9	6.0	0.1	78.9	79.5	78.3
Saudi Arabia	2011	621	24.9	69.0	6.1	0.0	24.9	14.5	34.7
	2015	541	21.0	70.4	8.6	0.0	21.0	17.4	24.8
Singapore	2011	855	89.3	8.6	1.8	0.3	89.3	89.4	89.1
	2015	872	90.2	9.3	0.5	0.0	90.2	91.0	89.4
Slovenia	2011	627	79.7	16.3	3.7	0.3	79.7	75.5	83.3
	2015	606	78.6	18.0	3.1	0.3	78.6	75.6	82.0
South Africa	2011	1692	17.6	76.9	5.2	0.3	17.6	15.6	19.5
	2015	1794	20.5	75.5	3.8	0.2	20.5	15.9	25.4
Sweden	2011	797	79.7	15.8	3.4	1.1	79.7	77.1	82.1
	2015	573	82.4	14.4	2.9	0.3	82.4	81.7	83.1
Thailand	2011	864	45.2	42.7	11.8	0.3	45.2	45.5	44.9
	2015	926	46.8	45.3	7.9	0.0	46.8	46.2	47.5
Turkey	2011	999	53.0	35.8	11.0	0.1	53.0	48.2	57.8
	2015	865	55.9	38.1	5.8	0.1	55.9	53.1	58.6
United Arab Emirates	2011	2029	45.3	48.6	5.8	0.2	45.3	39.2	51.6
	2015	2581	52.3	42.7	5.0	0.0	52.3	46.3	58.6
United States	2011	1498	71.5	23.8	3.2	1.5	71.5	68.7	74.8
	2015	1463	71.7	26.0	1.9	0.4	71.7	69.6	73.7
International Avg (n=33)	2011	28566	57.2	34.5	7.8	0.4	57.2	53.8	60.6
	2015	31049	59.1	34.5	6.1	0.2	59.1	56.8	61.4
Ontario, Canada	2011	673	72.4	21.8	4.4	1.4	72.4	72.7	72.1
	2015	632	73.6	23.3	2.6	0.5	73.6	72.9	74.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_02A (M052058A): Number / Applying Type: CR 1 Point
Label: Time when Pat finishes last lap

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	82.2	13.9	2.8	1.2	82.2	80.9	83.6
	2015	563	84.4	13.9	1.6	0.1	84.4	83.6	85.2
Norway (8)	2011	560	76.5	19.0	3.7	0.8	76.5	72.7	79.7
	2015	668	78.9	17.9	2.7	0.5	78.9	77.4	80.4
Abu Dhabi, UAE	2011	636	43.7	50.4	5.9	0.0	43.7	35.4	51.4
	2015	693	47.8	47.0	5.2	0.0	47.8	47.4	48.2
Dubai, UAE	2011	799	55.2	39.3	4.9	0.6	55.2	50.4	59.7
	2015	869	65.4	31.2	3.4	0.0	65.4	55.9	75.4
Florida, US	2011	247	69.0	25.8	5.2	0.0	69.0	66.0	71.9
	2015	286	63.3	33.3	3.4	0.0	63.3	60.8	65.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_02B (M052058B): Number / Applying Type: CR 1 Point
Label: Percentage of laps finished

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	32.1	55.9	11.9	0.1	32.1	29.4	34.8
	2015	1468	30.5	60.0	9.1	0.3	30.5	28.7	32.4
Bahrain	2011	653	6.2	68.9	24.6	0.3	6.2	6.8	5.6
	2015	705	9.1	76.8	13.4	0.6	9.1	9.3	8.8
Botswana	2011	771	3.5	84.3	11.0	1.2	3.5	2.8	4.3
	2015	835	6.6	87.5	5.9	0.0	6.6	6.3	6.9
Chile	2011	820	6.4	66.2	26.4	1.0	6.4	5.1	7.8
	2015	693	11.8	64.6	22.8	0.8	11.8	7.6	15.4
Chinese Taipei	2011	719	47.8	44.4	7.9	0.0	47.8	46.5	49.0
	2015	819	48.1	45.2	6.7	0.0	48.1	43.8	52.1
England	2011	540	31.0	59.1	9.5	0.4	31.0	30.4	31.6
	2015	686	30.1	62.3	6.7	1.0	30.1	25.9	34.5
Georgia	2011	652	7.5	47.4	43.3	1.8	7.5	5.1	10.3
	2015	582	13.3	56.8	29.7	0.2	13.3	13.2	13.4
Hong Kong SAR	2011	575	50.2	44.3	5.1	0.3	50.2	48.9	51.6
	2015	597	59.6	37.3	3.1	0.0	59.6	56.4	62.7
Hungary	2011	746	22.4	59.5	18.0	0.1	22.4	16.3	27.9
	2015	689	25.2	60.9	13.6	0.3	25.2	20.2	29.9
Iran, Islamic Rep. of	2011	859	5.8	68.4	25.1	0.8	5.8	2.0	9.0
	2015	878	8.3	68.5	23.0	0.1	8.3	7.5	9.1
Israel	2011	683	25.3	53.9	19.6	1.2	25.3	19.9	30.9
	2015	793	27.1	53.7	18.8	0.4	27.1	22.6	31.9
Italy	2011	562	15.3	52.7	31.5	0.4	15.3	11.8	19.0
	2015	665	16.2	63.5	20.3	0.0	16.2	12.6	19.5
Japan	2011	617	36.7	57.2	5.8	0.3	36.7	31.0	42.3
	2015	669	47.4	49.0	3.5	0.2	47.4	43.6	51.5
Jordan	2011	1101	4.7	79.2	16.0	0.1	4.7	4.6	4.7
	2015	1124	3.0	82.8	13.9	0.3	3.0	1.6	4.5
Kazakhstan	2011	630	13.5	60.4	25.7	0.4	13.5	13.8	13.2
	2015	698	25.1	59.2	15.7	0.0	25.1	24.8	25.5
Korea, Rep. of	2011	736	53.3	44.0	2.6	0.0	53.3	46.5	60.6
	2015	753	55.0	41.6	3.5	0.0	55.0	50.3	59.2
Lebanon	2011	560	6.5	56.2	37.0	0.3	6.5	3.4	10.1
	2015	553	6.8	48.9	41.7	2.6	6.8	4.3	9.3
Lithuania	2011	684	19.5	59.3	21.0	0.2	19.5	14.8	24.5
	2015	620	21.2	62.9	15.9	0.0	21.2	19.0	23.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_02B (M052058B): Number / Applying Type: CR 1 Point
Label: Percentage of laps finished

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	10.0	75.8	13.0	1.2	10.0	9.9	10.2
	2015	1394	16.1	74.0	9.6	0.3	16.1	13.9	18.3
Morocco	2011	1309	2.1	50.7	45.1	2.1	2.1	1.6	2.4
	2015	1730	2.3	63.6	34.1	0.1	2.3	1.8	2.7
New Zealand	2011	761	26.5	64.6	8.7	0.2	26.5	20.2	32.0
	2015	1152	25.6	65.2	9.1	0.1	25.6	23.5	27.8
Oman	2011	1378	2.6	76.1	20.6	0.8	2.6	2.4	2.7
	2015	1270	3.9	84.3	11.5	0.3	3.9	4.1	3.6
Qatar	2011	639	9.3	68.1	22.3	0.3	9.3	7.8	10.8
	2015	770	12.1	72.3	15.2	0.5	12.1	10.4	13.7
Russian Federation	2011	707	27.7	50.1	21.7	0.5	27.7	26.1	29.2
	2015	685	27.6	52.1	20.2	0.1	27.6	26.6	28.6
Saudi Arabia	2011	621	3.3	85.4	11.3	0.0	3.3	2.8	3.8
	2015	541	4.6	82.5	12.8	0.0	4.6	3.9	5.4
Singapore	2011	855	53.8	42.2	3.6	0.4	53.8	52.7	54.9
	2015	872	63.1	35.3	1.7	0.0	63.1	62.1	64.0
Slovenia	2011	627	19.2	60.0	20.6	0.3	19.2	15.2	22.7
	2015	606	20.5	63.9	15.4	0.3	20.5	19.4	21.6
South Africa	2011	1692	3.1	88.4	7.9	0.6	3.1	2.8	3.4
	2015	1794	4.2	88.3	7.3	0.2	4.2	4.1	4.4
Sweden	2011	797	26.8	59.0	13.0	1.3	26.8	25.1	28.3
	2015	573	30.2	59.5	10.0	0.3	30.2	20.8	40.0
Thailand	2011	864	4.7	71.8	23.1	0.4	4.7	4.5	4.9
	2015	926	8.4	76.5	15.1	0.0	8.4	8.5	8.4
Turkey	2011	999	15.7	65.9	18.3	0.1	15.7	15.9	15.6
	2015	865	19.2	73.0	7.5	0.4	19.2	18.3	19.9
United Arab Emirates	2011	2029	11.4	74.1	14.1	0.4	11.4	9.7	13.1
	2015	2580	17.1	73.4	9.5	0.0	17.1	15.4	18.9
United States	2011	1498	30.4	62.5	5.2	1.8	30.4	29.0	32.1
	2015	1463	32.9	64.8	1.8	0.5	32.9	29.2	36.7
International Avg (n=33)	2011	28566	19.2	62.3	17.9	0.6	19.2	17.1	21.3
	2015	31048	22.2	63.9	13.6	0.3	22.2	20.0	24.4
Ontario, Canada	2011	673	31.2	59.0	7.5	2.2	31.2	24.9	37.7
	2015	632	30.5	63.7	5.3	0.5	30.5	26.5	34.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_02B (M052058B): Number / Applying Type: CR 1 Point
Label: Percentage of laps finished

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	34.4	52.5	11.6	1.5	34.4	29.8	39.5
	2015	563	37.3	56.4	6.2	0.1	37.3	32.5	42.0
Norway (8)	2011	560	22.2	61.6	14.9	1.2	22.2	21.1	23.3
	2015	668	24.7	63.8	11.0	0.5	24.7	20.4	29.0
Abu Dhabi, UAE	2011	636	8.3	79.9	11.2	0.6	8.3	6.6	10.0
	2015	692	13.5	77.7	8.7	0.0	13.5	11.6	15.5
Dubai, UAE	2011	799	19.1	64.2	16.1	0.7	19.1	15.2	22.7
	2015	869	27.0	64.1	8.9	0.0	27.0	25.9	28.2
Florida, US	2011	247	27.1	66.2	6.8	0.0	27.1	24.3	29.8
	2015	286	27.2	69.4	3.4	0.0	27.2	26.6	27.8

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_03 (M052125): Number / Reasoning Type: MC Key: D
Label: Multiples of 3

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	46.0	21.1	19.7	11.6	46.0	1.5	0.1	48.0	44.1
	2015	1468	45.0	21.4	22.7	7.2	45.0	3.3	0.3	47.8	42.2
Bahrain	2011	653	27.4	27.4	33.5	9.9	27.4	1.5	0.3	35.6	19.3
	2015	705	43.8	21.9	24.9	7.3	43.8	1.5	0.6	47.8	39.8
Botswana	2011	771	32.2	32.3	24.0	7.5	32.2	2.7	1.3	33.9	30.3
	2015	835	33.1	30.7	27.0	7.7	33.1	1.5	0.0	35.8	30.1
Chile	2011	820	28.3	26.2	32.8	8.8	28.3	2.7	1.2	31.4	24.8
	2015	693	38.6	18.6	29.9	10.6	38.6	1.4	0.8	38.6	38.7
Chinese Taipei	2011	719	68.4	14.7	11.6	4.7	68.4	0.5	0.0	72.7	64.3
	2015	819	64.6	18.3	12.0	4.3	64.6	0.8	0.0	66.7	62.7
England	2011	540	61.4	9.2	20.0	7.3	61.4	1.6	0.5	63.5	58.9
	2015	686	60.4	9.6	21.1	6.4	60.4	1.5	1.0	62.7	58.0
Georgia	2011	652	25.3	37.2	27.9	5.4	25.3	2.4	1.9	24.4	26.2
	2015	582	29.4	29.4	29.7	8.4	29.4	2.9	0.3	27.3	31.5
Hong Kong SAR	2011	575	64.6	12.5	14.0	8.2	64.6	0.3	0.3	66.4	62.8
	2015	597	67.6	12.3	12.9	7.0	67.6	0.2	0.0	70.9	64.5
Hungary	2011	746	37.5	26.9	24.7	9.0	37.5	1.6	0.2	37.3	37.7
	2015	689	41.9	23.7	23.5	8.7	41.9	2.0	0.3	42.8	41.0
Iran, Islamic Rep. of	2011	859	21.1	34.1	35.5	6.0	21.1	2.2	1.0	21.3	21.0
	2015	878	26.4	30.9	35.0	5.2	26.4	2.1	0.4	27.2	25.7
Israel	2011	683	51.6	20.3	15.4	8.9	51.6	2.5	1.3	53.2	50.0
	2015	793	47.0	24.7	17.0	8.4	47.0	2.5	0.4	50.2	43.6
Italy	2011	562	53.7	18.6	13.7	11.5	53.7	2.0	0.6	52.9	54.5
	2015	665	59.4	15.4	14.4	8.7	59.4	2.0	0.0	64.3	55.0
Japan	2011	617	64.6	10.8	19.6	4.1	64.6	0.6	0.3	61.3	67.9
	2015	669	71.3	8.9	17.3	2.0	71.3	0.3	0.2	75.2	66.9
Jordan	2011	1101	16.5	31.1	39.6	9.6	16.5	3.1	0.1	20.2	12.8
	2015	1124	15.2	32.7	42.8	7.8	15.2	1.2	0.3	19.2	11.2
Kazakhstan	2011	631	25.6	25.2	39.2	5.4	25.6	4.2	0.5	25.3	25.9
	2015	698	45.4	17.0	29.6	4.7	45.4	3.0	0.2	49.2	41.6
Korea, Rep. of	2011	736	78.7	6.7	11.2	3.3	78.7	0.1	0.0	78.3	79.1
	2015	753	70.4	10.2	12.3	6.7	70.4	0.4	0.0	73.1	67.9
Lebanon	2011	554	35.9	32.7	21.1	7.4	35.9	2.2	0.6	34.8	37.3
	2015	549	32.2	30.6	19.2	8.1	32.2	7.3	2.6	35.1	29.2
Lithuania	2011	684	16.0	20.2	53.8	6.3	16.0	3.6	0.2	15.1	16.9
	2015	501	13.5	16.4	61.2	7.7	13.5	1.2	0.0	16.3	10.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_03 (M052125): Number / Reasoning Type: MC Key: D
Label: Multiples of 3

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	14.4	45.0	30.0	6.9	14.4	2.2	1.3	13.4	15.6
	2015	1394	20.2	39.3	32.2	6.5	20.2	1.3	0.4	23.1	17.4
Morocco	2011	1294	12.0	38.7	36.5	7.7	12.0	2.9	2.1	14.9	9.4
	2015	1730	13.1	35.9	39.5	8.5	13.1	3.0	0.1	16.0	10.7
New Zealand	2011	761	40.5	21.9	26.4	8.7	40.5	2.3	0.2	40.1	40.9
	2015	1152	41.1	24.3	23.0	9.3	41.1	2.1	0.1	44.9	37.1
Oman	2011	1378	19.6	27.0	39.9	10.3	19.6	2.5	0.8	23.0	16.1
	2015	1271	23.3	29.6	35.3	9.9	23.3	1.6	0.3	29.3	17.7
Qatar	2011	640	29.3	29.2	31.2	9.0	29.3	1.0	0.3	34.2	24.5
	2015	770	30.3	31.4	28.7	7.3	30.3	1.7	0.5	33.1	27.7
Russian Federation	2011	707	71.0	6.9	13.7	6.4	71.0	1.5	0.5	72.1	69.9
	2015	685	71.1	5.5	16.4	5.7	71.1	1.3	0.1	72.3	69.9
Saudi Arabia	2011	621	17.1	37.6	35.9	8.5	17.1	0.9	0.0	15.8	18.3
	2015	541	13.5	34.2	40.5	10.3	13.5	1.5	0.0	14.3	12.8
Singapore	2011	855	71.8	11.9	10.2	4.5	71.8	1.1	0.4	74.6	69.2
	2015	872	74.6	11.4	9.3	4.1	74.6	0.6	0.0	78.4	70.8
Slovenia	2011	627	46.6	11.9	28.7	9.4	46.6	3.2	0.3	51.4	42.5
	2015	606	50.8	9.9	28.9	7.3	50.8	2.8	0.3	49.6	52.2
South Africa	2011	1692	19.8	39.7	29.9	8.4	19.8	1.6	0.6	21.6	18.0
	2015	1794	22.3	37.5	30.3	7.8	22.3	1.9	0.2	23.8	20.6
Sweden	2011	797	8.8	46.6	31.6	7.3	8.8	4.3	1.4	8.3	9.2
	2015	573	13.2	38.9	34.8	6.5	13.2	6.0	0.6	12.9	13.5
Thailand	2011	864	17.4	46.2	24.6	7.0	17.4	4.4	0.4	18.8	15.8
	2015	926	23.5	42.9	23.9	8.1	23.5	1.6	0.0	27.0	19.6
Turkey	2011	999	43.0	18.9	26.5	10.0	43.0	1.5	0.1	47.9	38.1
	2015	864	49.0	18.9	23.5	7.5	49.0	0.6	0.4	52.4	46.0
United Arab Emirates	2011	2029	30.5	31.2	28.8	7.5	30.5	1.7	0.4	32.5	28.4
	2015	2581	37.0	29.3	24.2	7.6	37.0	1.9	0.0	39.0	34.9
United States	2011	1498	47.2	20.9	19.6	8.4	47.2	2.0	1.9	50.4	43.6
	2015	1463	48.5	22.2	19.9	7.5	48.5	1.4	0.5	50.0	47.2
International Avg (n=33)	2011	28547	37.7	25.5	26.4	7.7	37.7	2.1	0.6	39.2	36.2
	2015	30926	40.5	23.8	26.2	7.3	40.5	2.0	0.3	42.9	38.1
Ontario, Canada	2011	673	47.4	16.7	22.4	8.6	47.4	2.6	2.3	47.6	47.2
	2015	630	52.5	17.5	21.9	6.9	52.5	0.7	0.5	52.8	52.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_03 (M052125): Number / Reasoning Type: MC Key: D
Label: Multiples of 3

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	45.7	21.8	21.4	7.4	45.7	2.1	1.6	49.8	41.2
	2015	561	53.8	18.5	19.1	6.2	53.8	2.2	0.1	54.3	53.4
Norway (8)	2011	560	8.3	49.1	28.7	8.2	8.3	3.9	1.7	9.0	7.6
	2015	668	11.1	45.2	32.3	6.5	11.1	4.4	0.5	12.5	9.8
Abu Dhabi, UAE	2011	636	26.4	34.3	30.3	6.9	26.4	1.5	0.6	25.0	27.7
	2015	693	25.5	36.0	28.1	7.7	25.5	2.7	0.0	28.3	22.6
Dubai, UAE	2011	799	44.7	21.5	23.6	8.0	44.7	1.5	0.7	47.8	41.7
	2015	869	55.0	19.9	17.4	6.2	55.0	1.5	0.0	56.2	53.8
Florida, US	2011	247	46.6	21.3	21.6	8.5	46.6	2.0	0.0	51.6	41.8
	2015	286	45.3	25.5	21.3	5.4	45.3	2.5	0.0	46.9	43.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_04 (M052229): Number / Knowing Type: CR 1 Point
Label: Convert decimal to a fraction.

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	42.6	14.5	34.8	8.0	0.1	42.6	46.3	39.0
	2015	1468	42.0	15.1	33.2	9.4	0.3	42.0	45.1	38.7
Bahrain	2011	653	37.5	20.1	30.2	11.7	0.5	37.5	50.1	25.2
	2015	705	37.3	32.6	23.0	6.5	0.6	37.3	43.7	31.0
Botswana	2011	771	13.6	13.9	65.0	5.9	1.6	13.6	15.3	11.9
	2015	835	17.4	17.5	60.5	4.6	0.0	17.4	18.6	16.1
Chile	2011	820	16.5	12.1	42.6	27.5	1.3	16.5	16.5	16.6
	2015	693	13.8	14.4	35.3	35.7	0.8	13.8	13.9	13.8
Chinese Taipei	2011	719	82.0	7.4	4.9	5.6	0.0	82.0	83.6	80.5
	2015	819	78.2	11.7	6.9	3.2	0.0	78.2	77.9	78.5
England	2011	540	30.8	15.3	40.4	12.9	0.5	30.8	26.5	35.7
	2015	686	35.1	12.3	39.1	12.6	1.0	35.1	36.5	33.7
Georgia	2011	650	47.8	8.3	20.6	21.2	2.1	47.8	52.1	42.9
	2015	582	57.9	10.4	21.1	10.3	0.3	57.9	61.7	53.9
Hong Kong SAR	2011	575	74.1	4.8	13.6	7.2	0.3	74.1	79.9	68.0
	2015	597	80.0	5.6	11.2	3.1	0.0	80.0	79.7	80.3
Hungary	2011	746	52.5	6.3	23.3	17.6	0.4	52.5	53.6	51.5
	2015	689	50.3	5.0	28.3	16.1	0.3	50.3	53.7	47.2
Iran, Islamic Rep. of	2011	859	55.3	22.2	11.9	9.6	1.0	55.3	57.3	53.7
	2015	878	60.8	18.1	11.9	8.8	0.4	60.8	63.2	58.6
Israel	2011	683	57.0	11.7	16.3	13.3	1.7	57.0	59.9	54.0
	2015	793	50.3	12.9	21.2	15.3	0.4	50.3	51.0	49.5
Italy	2011	562	44.7	21.9	18.4	14.4	0.6	44.7	43.5	46.0
	2015	664	43.3	24.5	20.9	11.3	0.0	43.3	43.9	42.8
Japan	2011	617	65.6	14.3	15.6	4.2	0.3	65.6	64.9	66.3
	2015	669	73.1	13.4	10.0	3.4	0.2	73.1	74.3	71.8
Jordan	2011	1101	54.2	18.2	22.6	4.8	0.1	54.2	64.1	44.5
	2015	1124	51.4	17.4	23.5	7.3	0.3	51.4	58.1	44.6
Kazakhstan	2011	631	64.2	1.4	20.7	13.2	0.5	64.2	61.7	66.4
	2015	698	64.9	4.3	23.7	6.8	0.2	64.9	68.5	61.3
Korea, Rep. of	2011	736	94.6	3.3	1.5	0.7	0.0	94.6	94.6	94.5
	2015	753	93.2	3.3	2.6	0.9	0.0	93.2	94.0	92.4
Lebanon	2011	560	52.8	9.4	25.9	11.3	0.6	52.8	52.8	52.8
	2015	553	56.4	7.4	20.6	13.1	2.6	56.4	58.2	54.5
Lithuania	2011	684	53.3	17.3	20.5	8.8	0.2	53.3	50.3	56.4
	2015	620	52.3	17.9	23.6	6.3	0.0	52.3	54.2	50.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_04 (M052229): Number / Knowing Type: CR 1 Point
Label: Convert decimal to a fraction.

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	45.9	10.3	31.4	11.1	1.3	45.9	48.5	43.3
	2015	1394	50.2	8.1	34.0	7.2	0.4	50.2	59.7	41.0
Morocco	2011	1307	23.7	12.9	38.2	22.9	2.3	23.7	29.2	18.8
	2015	1730	30.7	14.1	38.6	16.6	0.1	30.7	36.3	25.9
New Zealand	2011	761	35.2	17.9	37.2	9.5	0.2	35.2	32.4	37.7
	2015	1152	32.3	16.2	41.6	9.8	0.1	32.3	30.9	33.8
Oman	2011	1377	20.2	9.8	53.1	15.9	0.9	20.2	29.6	10.5
	2015	1270	34.6	12.7	45.1	7.2	0.3	34.6	45.9	23.9
Qatar	2011	640	33.8	15.4	37.4	13.2	0.3	33.8	39.1	28.5
	2015	770	38.6	19.1	32.0	9.7	0.7	38.6	47.7	30.1
Russian Federation	2011	707	73.4	8.4	9.7	8.1	0.5	73.4	74.4	72.4
	2015	685	72.3	8.0	11.2	8.5	0.1	72.3	74.7	69.8
Saudi Arabia	2011	621	41.0	18.4	32.7	7.9	0.0	41.0	49.4	33.1
	2015	541	25.2	22.9	41.6	10.3	0.0	25.2	27.7	22.5
Singapore	2011	855	85.9	4.2	8.4	1.1	0.5	85.9	89.0	82.9
	2015	872	93.0	1.5	4.7	0.8	0.1	93.0	91.8	94.1
Slovenia	2011	627	65.1	13.9	14.1	6.6	0.3	65.1	66.9	63.5
	2015	606	64.1	11.7	18.1	5.9	0.3	64.1	66.3	61.7
South Africa	2011	1692	16.7	9.1	63.4	10.1	0.8	16.7	18.7	14.8
	2015	1794	28.5	11.6	53.3	6.4	0.2	28.5	33.3	23.4
Sweden	2011	797	23.6	10.5	40.8	23.8	1.4	23.6	21.4	25.6
	2015	573	22.6	8.5	46.2	22.1	0.6	22.6	21.8	23.4
Thailand	2011	864	33.9	17.9	32.5	15.1	0.5	33.9	34.5	33.1
	2015	926	37.0	16.9	36.8	9.3	0.0	37.0	42.0	31.5
Turkey	2011	999	38.2	15.8	31.0	14.8	0.1	38.2	40.6	35.8
	2015	865	45.7	13.7	29.0	11.2	0.4	45.7	50.4	41.4
United Arab Emirates	2011	2029	43.5	21.4	28.3	6.4	0.4	43.5	46.5	40.6
	2015	2581	51.4	12.0	30.0	6.6	0.0	51.4	53.7	49.0
United States	2011	1498	43.4	20.2	29.2	5.0	2.2	43.4	44.4	42.3
	2015	1463	53.2	14.5	28.6	3.1	0.5	53.2	52.9	53.5
International Avg (n=33)	2011	28563	47.4	13.0	27.8	11.2	0.7	47.4	49.6	45.1
	2015	31048	49.6	13.2	27.5	9.4	0.3	49.6	52.5	46.8
Ontario, Canada	2011	673	35.8	15.0	36.0	10.1	3.1	35.8	36.5	35.2
	2015	632	34.8	10.6	46.2	7.7	0.7	34.8	34.0	35.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_04 (M052229): Number / Knowing Type: CR 1 Point
Label: Convert decimal to a fraction.

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	877	39.7	7.3	38.8	12.2	1.9	39.7	38.9	40.5
	2015	563	49.2	9.8	35.2	5.7	0.1	49.2	48.0	50.5
Norway (8)	2011	560	26.5	17.1	38.9	15.9	1.7	26.5	27.5	25.6
	2015	668	32.2	17.3	33.6	16.4	0.5	32.2	26.9	37.5
Abu Dhabi, UAE	2011	636	41.1	23.2	29.4	5.7	0.6	41.1	40.8	41.4
	2015	693	47.5	10.6	35.2	6.7	0.0	47.5	51.2	43.6
Dubai, UAE	2011	799	46.6	18.6	26.4	7.7	0.7	46.6	52.7	41.0
	2015	869	56.2	12.7	24.9	6.1	0.0	56.2	57.7	54.7
Florida, US	2011	247	39.3	21.8	33.5	4.8	0.6	39.3	37.2	41.2
	2015	286	36.4	25.6	31.3	6.8	0.0	36.4	35.3	37.5

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_05 (M052063): Algebra / Applying Type: MC Key: C
Label: Expression for area of rectangle

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	32.2	18.8	39.1	32.2	8.0	1.7	0.1	31.3	33.1
	2015	1468	30.7	17.3	40.5	30.7	7.9	3.2	0.4	30.8	30.5
Bahrain	2011	653	27.6	20.1	43.3	27.6	5.5	2.5	0.9	31.9	23.3
	2015	705	54.9	15.6	21.8	54.9	6.0	1.0	0.6	55.4	54.4
Botswana	2011	771	25.1	22.9	37.3	25.1	9.8	3.2	1.7	26.0	24.0
	2015	835	22.5	28.0	37.2	22.5	9.8	2.5	0.0	26.8	17.9
Chile	2011	820	19.9	20.4	42.7	19.9	9.8	5.6	1.6	18.5	21.6
	2015	693	19.5	24.8	40.9	19.5	9.7	4.3	0.8	17.8	20.9
Chinese Taipei	2011	719	85.7	2.1	9.7	85.7	1.8	0.6	0.1	89.9	81.6
	2015	819	83.5	3.0	11.5	83.5	1.8	0.2	0.0	86.9	80.2
England	2011	540	34.5	13.6	40.4	34.5	9.0	1.8	0.7	32.8	36.5
	2015	686	41.2	17.1	33.7	41.2	5.8	1.0	1.2	40.8	41.5
Georgia	2011	650	50.8	11.6	25.3	50.8	7.8	2.1	2.3	54.8	46.4
	2015	582	48.3	12.5	28.8	48.3	8.8	1.3	0.3	42.8	54.1
Hong Kong SAR	2011	575	78.7	3.3	11.6	78.7	4.6	1.3	0.5	83.3	73.8
	2015	597	84.2	1.5	10.3	84.2	3.6	0.3	0.0	85.6	82.8
Hungary	2011	746	29.3	16.3	33.7	29.3	17.4	3.0	0.4	26.5	31.8
	2015	689	35.1	14.3	34.9	35.1	13.8	1.6	0.3	36.9	33.4
Iran, Islamic Rep. of	2011	859	40.1	14.6	32.9	40.1	9.0	2.1	1.2	39.6	40.5
	2015	878	46.6	13.8	30.4	46.6	7.0	1.7	0.4	52.8	41.1
Israel	2011	683	67.4	5.0	19.0	67.4	4.0	2.7	2.0	68.7	66.1
	2015	793	60.3	10.3	19.6	60.3	6.9	2.3	0.6	63.5	56.9
Italy	2011	562	36.5	13.2	36.1	36.5	7.1	5.6	1.4	34.8	38.2
	2015	665	28.0	14.3	38.5	28.0	10.6	8.6	0.0	29.9	26.3
Japan	2011	617	64.7	4.4	26.4	64.7	2.9	1.2	0.3	61.1	68.3
	2015	669	71.6	6.9	20.1	71.6	1.0	0.2	0.2	74.7	68.3
Jordan	2011	1101	30.7	18.3	37.4	30.7	11.3	1.8	0.5	33.2	28.4
	2015	1124	27.2	17.2	43.2	27.2	10.3	1.7	0.3	31.7	22.6
Kazakhstan	2011	631	62.8	7.4	22.8	62.8	4.5	1.9	0.6	60.9	64.4
	2015	698	66.4	7.5	19.3	66.4	6.0	0.6	0.3	68.0	64.7
Korea, Rep. of	2011	736	81.8	2.4	13.4	81.8	2.2	0.3	0.0	83.0	80.5
	2015	753	81.9	3.1	12.9	81.9	1.5	0.6	0.0	82.3	81.5
Lebanon	2011	558	49.1	11.8	27.8	49.1	6.7	3.8	0.8	47.6	50.8
	2015	553	51.2	10.3	24.5	51.2	5.9	5.5	2.6	53.7	48.6
Lithuania	2011	684	41.9	12.0	35.5	41.9	9.8	0.6	0.2	43.5	40.2
	2015	620	40.6	13.8	38.5	40.6	6.2	1.0	0.0	43.7	37.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_05 (M052063): Algebra / Applying Type: MC Key: C
Label: Expression for area of rectangle

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	38.5	14.2	34.1	38.5	10.1	1.8	1.3	38.9	38.0
	2015	1394	44.6	12.4	29.4	44.6	11.6	1.5	0.4	48.1	41.2
Morocco	2011	1303	21.6	24.2	41.5	21.6	7.5	2.3	3.0	20.6	22.4
	2015	1729	30.7	21.0	39.6	30.7	6.5	2.0	0.2	33.8	28.1
New Zealand	2011	761	26.1	18.9	44.9	26.1	7.2	2.7	0.2	23.0	28.8
	2015	1152	28.3	17.7	43.5	28.3	7.1	3.0	0.3	33.0	23.3
Oman	2011	1378	29.6	21.1	37.3	29.6	8.8	2.3	0.9	34.7	24.3
	2015	1270	39.3	20.6	30.8	39.3	8.0	1.0	0.3	46.5	32.4
Qatar	2011	640	37.7	17.0	34.6	37.7	7.6	2.6	0.6	37.8	37.6
	2015	770	42.8	18.0	29.8	42.8	6.3	2.4	0.7	43.3	42.4
Russian Federation	2011	707	72.3	4.1	15.9	72.3	5.2	2.0	0.6	77.2	67.8
	2015	685	72.3	6.2	16.7	72.3	3.7	1.1	0.1	74.7	69.8
Saudi Arabia	2011	621	32.3	21.2	39.4	32.3	6.2	0.9	0.0	34.8	29.9
	2015	541	22.8	21.4	48.9	22.8	5.6	1.1	0.2	23.5	22.1
Singapore	2011	855	88.0	3.7	5.9	88.0	1.9	0.0	0.5	88.7	87.4
	2015	872	88.6	2.1	7.1	88.6	1.8	0.3	0.1	91.5	85.8
Slovenia	2011	626	26.7	9.9	47.9	26.7	11.4	3.9	0.3	28.5	25.2
	2015	606	28.5	15.2	42.8	28.5	9.7	3.6	0.3	29.2	27.6
South Africa	2011	1692	16.7	22.5	51.5	16.7	5.3	2.9	1.0	18.2	15.3
	2015	1794	20.5	21.0	53.7	20.5	3.5	1.1	0.2	21.6	19.4
Sweden	2011	797	28.0	18.1	33.0	28.0	16.2	3.1	1.6	30.2	25.8
	2015	573	32.2	16.5	34.2	32.2	12.7	3.9	0.6	29.9	34.6
Thailand	2011	864	29.0	20.1	38.6	29.0	7.1	4.7	0.5	31.0	26.8
	2015	926	34.6	21.4	38.0	34.6	4.8	1.2	0.1	35.5	33.5
Turkey	2011	999	49.8	11.0	24.1	49.8	12.2	2.6	0.2	50.5	49.2
	2015	864	49.3	11.5	25.4	49.3	13.2	0.2	0.4	53.3	45.7
United Arab Emirates	2011	2029	34.0	16.2	40.9	34.0	6.3	2.0	0.7	36.3	31.7
	2015	2581	44.4	17.1	30.9	44.4	5.8	1.8	0.0	44.7	44.0
United States	2011	1498	43.2	9.6	37.4	43.2	5.6	1.4	2.8	45.5	40.6
	2015	1463	46.6	9.7	38.1	46.6	4.0	1.0	0.6	47.8	45.2
International Avg (n=33)	2011	28557	43.4	13.6	32.2	43.4	7.6	2.3	0.9	44.3	42.4
	2015	31047	46.0	14.0	30.8	46.0	6.9	1.9	0.4	47.9	44.2
Ontario, Canada	2011	673	19.8	14.3	51.7	19.8	7.9	2.5	3.8	20.1	19.5
	2015	632	22.9	14.5	51.2	22.9	7.2	3.4	0.8	21.7	24.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_05 (M052063): Algebra / Applying Type: MC Key: C
Label: Expression for area of rectangle

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	37.6	13.2	35.3	37.6	9.2	2.1	2.6	37.5	37.6
	2015	562	47.9	11.2	32.5	47.9	6.6	1.7	0.1	50.3	45.5
Norway (8)	2011	560	16.8	26.1	41.3	16.8	9.0	4.9	1.9	19.0	15.0
	2015	668	22.6	20.8	39.4	22.6	10.3	6.5	0.5	22.8	22.5
Abu Dhabi, UAE	2011	636	31.4	19.2	38.5	31.4	8.2	1.6	1.1	32.0	30.8
	2015	693	41.2	22.8	27.8	41.2	6.2	2.0	0.0	42.4	40.0
Dubai, UAE	2011	799	47.0	9.4	34.5	47.0	5.8	2.4	0.9	47.7	46.4
	2015	869	57.7	10.1	27.6	57.7	3.8	0.7	0.1	57.1	58.4
Florida, US	2011	247	42.0	11.6	35.7	42.0	9.1	1.1	0.6	40.6	43.4
	2015	286	43.1	10.7	41.9	43.1	4.1	0.0	0.2	46.1	40.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_06 (M052072): Algebra / Knowing Type: MC Key: B
Label: Expression with exponents of y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	51.6	23.6	51.6	3.5	19.6	1.5	0.1	47.9	55.2
	2015	1468	60.5	19.4	60.5	3.4	14.2	2.2	0.4	57.5	63.7
Bahrain	2011	653	31.6	24.4	31.6	5.1	36.1	1.6	1.3	34.2	29.1
	2015	705	54.7	18.3	54.7	3.3	22.4	0.7	0.6	58.0	51.4
Botswana	2011	771	28.7	38.3	28.7	1.8	27.0	1.8	2.3	30.4	27.0
	2015	836	31.1	30.9	31.1	2.7	33.9	1.4	0.0	33.9	28.1
Chile	2011	820	30.8	45.5	30.8	3.1	16.3	2.8	1.6	28.2	33.6
	2015	693	40.9	41.9	40.9	5.0	10.2	1.2	0.9	37.6	43.7
Chinese Taipei	2011	719	79.7	8.8	79.7	2.9	8.2	0.2	0.1	79.9	79.6
	2015	819	77.1	10.0	77.1	1.4	11.2	0.3	0.0	75.9	78.2
England	2011	540	54.4	21.5	54.4	3.9	18.1	1.3	0.7	52.4	56.7
	2015	686	56.8	19.9	56.8	6.1	15.5	0.5	1.2	56.3	57.4
Georgia	2011	653	45.1	32.3	45.1	3.2	15.9	1.1	2.3	44.4	46.0
	2015	582	53.6	24.2	53.6	3.9	17.2	0.8	0.3	51.9	55.4
Hong Kong SAR	2011	575	83.1	8.0	83.1	1.8	6.5	0.2	0.5	85.3	80.8
	2015	597	85.5	6.9	85.5	1.7	5.3	0.6	0.0	86.4	84.5
Hungary	2011	746	62.3	16.9	62.3	1.3	18.7	0.4	0.4	62.5	62.2
	2015	689	67.8	14.4	67.8	2.7	14.6	0.2	0.3	65.6	69.8
Iran, Islamic Rep. of	2011	859	67.6	15.7	67.6	3.1	11.3	0.9	1.5	73.8	62.3
	2015	878	55.9	27.1	55.9	1.8	13.9	0.9	0.4	57.9	54.2
Israel	2011	683	53.5	12.2	53.5	4.1	25.6	2.3	2.3	52.6	54.5
	2015	793	58.7	10.5	58.7	4.8	22.8	2.5	0.6	60.1	57.3
Italy	2011	562	74.8	13.0	74.8	1.9	7.2	1.8	1.4	72.3	77.4
	2015	665	72.1	16.1	72.1	2.6	8.3	0.9	0.0	74.6	69.8
Japan	2011	617	79.3	5.9	79.3	2.6	11.6	0.3	0.3	77.4	81.2
	2015	669	79.8	5.2	79.8	1.9	12.7	0.3	0.2	77.4	82.4
Jordan	2011	1101	50.5	25.2	50.5	4.8	18.2	0.9	0.5	54.1	47.0
	2015	1124	47.5	26.9	47.5	4.1	20.5	0.7	0.3	50.7	44.1
Kazakhstan	2011	631	57.5	19.0	57.5	1.3	19.8	1.7	0.7	54.9	59.8
	2015	698	69.5	13.3	69.5	0.9	15.7	0.4	0.3	70.6	68.3
Korea, Rep. of	2011	736	89.6	4.4	89.6	1.5	4.3	0.3	0.0	89.0	90.2
	2015	753	85.0	6.1	85.0	1.0	7.8	0.1	0.0	88.0	82.3
Lebanon	2011	559	76.5	10.6	76.5	1.4	10.1	0.4	1.0	76.3	76.6
	2015	553	76.6	8.2	76.6	1.6	9.0	1.9	2.7	76.7	76.6
Lithuania	2011	684	56.4	23.3	56.4	1.6	18.0	0.6	0.2	55.4	57.5
	2015	620	57.5	25.2	57.5	1.5	15.4	0.5	0.0	53.5	61.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_06 (M052072): Algebra / Knowing Type: MC Key: B
Label: Expression with exponents of y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	42.9	23.1	42.9	5.5	25.7	1.4	1.3	42.9	42.9
	2015	1394	48.1	23.4	48.1	5.1	22.4	0.5	0.4	46.8	49.3
Morocco	2011	1305	30.7	30.3	30.7	3.9	29.4	2.7	3.1	31.5	29.9
	2015	1730	36.1	35.3	36.1	2.5	25.0	0.9	0.2	36.1	36.1
New Zealand	2011	761	54.8	18.4	54.8	6.0	17.8	2.7	0.3	48.2	60.7
	2015	1152	52.1	21.1	52.1	6.3	18.1	2.2	0.3	49.5	54.9
Oman	2011	1378	38.6	25.8	38.6	5.4	27.6	1.6	1.0	45.7	31.2
	2015	1271	42.4	28.4	42.4	3.6	24.5	0.6	0.4	49.7	35.4
Qatar	2011	640	50.9	19.8	50.9	4.4	23.3	1.0	0.6	49.5	52.3
	2015	770	54.7	18.4	54.7	4.3	21.0	1.0	0.7	57.0	52.6
Russian Federation	2011	707	75.9	9.6	75.9	1.8	10.7	1.3	0.6	75.5	76.3
	2015	685	75.8	11.0	75.8	1.4	11.0	0.7	0.1	77.8	73.8
Saudi Arabia	2011	619	39.7	27.2	39.7	3.6	28.9	0.6	0.0	37.7	41.5
	2015	541	24.2	29.1	24.2	7.9	37.8	0.8	0.2	20.6	28.1
Singapore	2011	855	82.1	4.9	82.1	2.5	9.8	0.2	0.5	82.6	81.6
	2015	872	79.3	4.7	79.3	2.6	13.1	0.2	0.1	78.4	80.2
Slovenia	2011	626	82.4	9.9	82.4	1.0	4.6	1.8	0.3	81.2	83.4
	2015	606	83.6	10.9	83.6	1.6	3.1	0.6	0.3	86.8	80.2
South Africa	2011	1692	26.6	39.7	26.6	3.1	27.4	2.1	1.1	27.0	26.2
	2015	1794	33.2	39.8	33.2	1.7	24.2	0.8	0.3	35.7	30.5
Sweden	2011	797	44.5	17.9	44.5	7.6	26.7	1.9	1.6	45.2	43.8
	2015	573	50.8	17.4	50.8	4.1	25.0	2.2	0.6	49.1	52.5
Thailand	2011	864	39.0	32.1	39.0	3.9	22.5	1.9	0.7	43.6	33.6
	2015	926	40.3	35.6	40.3	4.6	18.9	0.5	0.1	43.9	36.4
Turkey	2011	999	41.1	30.5	41.1	2.7	23.8	1.5	0.5	42.3	39.9
	2015	865	45.3	27.5	45.3	3.1	23.6	0.1	0.4	45.4	45.2
United Arab Emirates	2011	2029	47.3	25.9	47.3	3.3	21.4	1.2	0.8	46.0	48.7
	2015	2580	55.3	20.8	55.3	2.4	20.1	1.3	0.0	53.8	56.9
United States	2011	1498	61.4	18.4	61.4	3.6	12.9	0.9	2.9	60.9	62.0
	2015	1463	59.5	21.8	59.5	2.6	15.3	0.3	0.6	57.6	61.2
International Avg (n=33)	2011	28561	55.5	20.7	55.5	3.2	18.3	1.3	1.0	55.5	55.5
	2015	31050	57.9	20.3	57.9	3.1	17.4	0.9	0.4	58.2	57.6
Ontario, Canada	2011	673	40.1	24.6	40.1	5.3	24.0	2.1	3.9	39.8	40.5
	2015	632	42.6	23.2	42.6	4.8	26.1	2.5	0.8	41.0	44.3

DIFF = Percent correct
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M13_06 (M052072): Algebra / Knowing Type: MC Key: B
Label: Expression with exponents of y

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	52.2	19.1	52.2	3.7	19.8	2.7	2.6	52.9	51.3
	2015	562	66.1	15.1	66.1	2.4	16.0	0.3	0.1	66.3	65.9
Norway (8)	2011	560	34.1	24.5	34.1	4.9	30.0	4.5	2.0	36.1	32.4
	2015	668	37.2	23.0	37.2	3.8	32.7	2.8	0.5	33.5	40.8
Abu Dhabi, UAE	2011	636	47.1	25.5	47.1	3.4	21.4	1.3	1.3	45.7	48.4
	2015	693	49.2	25.2	49.2	2.5	21.0	2.2	0.0	46.1	52.4
Dubai, UAE	2011	799	60.3	19.7	60.3	2.0	15.5	1.4	1.1	56.9	63.4
	2015	868	71.1	12.3	71.1	1.6	14.4	0.5	0.1	69.7	72.5
Florida, US	2011	247	66.8	17.0	66.8	3.3	10.7	1.5	0.6	68.1	65.7
	2015	286	52.9	27.4	52.9	2.0	16.8	0.7	0.2	55.2	50.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_07A (M052146A): Algebra / Reasoning Type: CR 1 Point
Label: Number of matches for figure 10

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	48.3	46.9	4.6	0.2	48.3	50.5	46.3
	2015	1468	48.3	47.3	4.1	0.4	48.3	50.3	46.1
Bahrain	2011	653	28.8	58.2	11.4	1.6	28.8	34.5	23.3
	2015	705	42.3	51.8	5.3	0.6	42.3	47.6	37.1
Botswana	2011	771	26.4	66.2	4.8	2.6	26.4	26.8	26.1
	2015	836	38.2	60.0	1.6	0.2	38.2	43.2	32.8
Chile	2011	820	31.6	55.2	11.5	1.7	31.6	32.4	30.7
	2015	693	36.0	48.5	14.5	0.9	36.0	43.7	29.5
Chinese Taipei	2011	719	84.2	14.3	1.3	0.1	84.2	87.5	80.9
	2015	819	83.2	14.9	1.8	0.1	83.2	81.9	84.4
England	2011	540	42.3	54.2	2.8	0.7	42.3	44.8	39.4
	2015	686	45.1	51.4	2.3	1.2	45.1	46.2	43.9
Georgia	2011	653	27.0	49.1	21.2	2.6	27.0	25.8	28.4
	2015	582	36.3	48.4	15.1	0.3	36.3	38.6	33.9
Hong Kong SAR	2011	575	66.9	29.5	3.1	0.5	66.9	68.7	64.9
	2015	597	69.6	28.3	2.0	0.0	69.6	70.1	69.2
Hungary	2011	746	40.6	52.2	6.7	0.5	40.6	39.7	41.5
	2015	689	47.0	49.8	2.9	0.3	47.0	46.7	47.2
Iran, Islamic Rep. of	2011	859	29.6	58.2	10.6	1.7	29.6	27.1	31.7
	2015	878	44.7	46.4	8.5	0.4	44.7	50.2	39.8
Israel	2011	683	51.4	36.7	9.2	2.7	51.4	51.8	51.0
	2015	793	51.1	41.1	7.1	0.7	51.1	53.5	48.7
Italy	2011	562	51.6	39.1	7.9	1.4	51.6	51.4	51.7
	2015	665	51.0	43.3	5.8	0.0	51.0	57.2	45.3
Japan	2011	617	72.3	25.0	2.2	0.5	72.3	72.5	72.1
	2015	669	77.6	21.2	1.0	0.2	77.6	77.6	77.5
Jordan	2011	1101	35.9	58.0	5.7	0.5	35.9	43.1	28.8
	2015	1124	32.4	62.1	5.1	0.3	32.4	37.7	27.0
Kazakhstan	2011	631	37.9	50.3	11.1	0.7	37.9	34.7	40.7
	2015	698	51.0	43.3	5.5	0.3	51.0	54.2	47.7
Korea, Rep. of	2011	736	78.9	20.1	0.9	0.0	78.9	77.3	80.6
	2015	753	72.9	26.0	1.1	0.0	72.9	71.5	74.2
Lebanon	2011	560	26.7	54.2	18.1	1.0	26.7	25.2	28.6
	2015	553	22.5	54.4	20.3	2.8	22.5	23.3	21.7
Lithuania	2011	684	38.5	55.4	5.9	0.2	38.5	40.6	36.3
	2015	620	43.6	52.2	4.2	0.0	43.6	45.0	42.3

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_07A (M052146A): Algebra / Reasoning Type: CR 1 Point
Label: Number of matches for figure 10

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	30.9	60.1	7.5	1.6	30.9	32.9	28.7
	2015	1394	49.4	46.1	4.0	0.4	49.4	54.3	44.8
Morocco	2011	1306	14.6	61.5	20.4	3.4	14.6	16.3	13.2
	2015	1730	18.8	66.8	14.1	0.3	18.8	20.2	17.7
New Zealand	2011	761	44.8	50.1	4.9	0.3	44.8	45.6	44.0
	2015	1152	45.9	49.3	4.6	0.3	45.9	49.2	42.3
Oman	2011	1378	22.3	65.4	11.1	1.2	22.3	30.0	14.2
	2015	1271	30.9	64.0	4.6	0.4	30.9	38.5	23.7
Qatar	2011	640	32.8	56.6	10.0	0.6	32.8	35.5	30.1
	2015	770	37.0	55.5	6.7	0.8	37.0	43.7	30.9
Russian Federation	2011	707	48.7	38.5	11.9	0.9	48.7	53.8	44.2
	2015	685	50.4	41.0	8.5	0.1	50.4	52.4	48.4
Saudi Arabia	2011	621	30.4	61.9	7.8	0.0	30.4	32.5	28.4
	2015	541	23.2	67.2	9.2	0.5	23.2	29.0	17.0
Singapore	2011	855	73.7	24.9	0.8	0.6	73.7	74.4	73.0
	2015	872	80.3	19.0	0.6	0.1	80.3	82.4	78.4
Slovenia	2011	627	46.0	48.9	4.9	0.3	46.0	44.4	47.3
	2015	606	50.5	44.6	4.7	0.3	50.5	53.6	47.0
South Africa	2011	1692	21.4	73.3	4.2	1.1	21.4	25.0	17.8
	2015	1794	35.1	62.2	2.4	0.3	35.1	37.8	32.3
Sweden	2011	797	39.0	50.6	8.7	1.6	39.0	43.0	35.2
	2015	573	53.7	41.7	3.8	0.8	53.7	55.4	51.9
Thailand	2011	864	36.2	53.8	9.0	0.9	36.2	40.4	31.3
	2015	926	47.1	47.1	5.6	0.1	47.1	54.0	39.6
Turkey	2011	999	33.7	52.7	13.1	0.5	33.7	37.8	29.6
	2015	865	44.4	49.9	5.3	0.4	44.4	48.0	41.1
United Arab Emirates	2011	2029	34.3	57.6	7.3	0.8	34.3	38.7	29.8
	2015	2580	46.1	49.0	4.7	0.2	46.1	51.4	40.8
United States	2011	1498	37.9	54.9	4.0	3.2	37.9	38.2	37.5
	2015	1463	44.3	53.1	2.0	0.6	44.3	47.9	40.6
International Avg (n=33)	2011	28566	41.4	49.5	8.0	1.1	41.4	43.1	39.6
	2015	31050	47.0	46.9	5.7	0.4	47.0	50.2	43.8
Ontario, Canada	2011	673	50.2	38.3	7.2	4.3	50.2	54.5	45.7
	2015	632	55.2	41.6	2.5	0.8	55.2	60.7	49.2

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_07A (M052146A): Algebra / Reasoning Type: CR 1 Point
Label: Number of matches for figure 10

COUNTRY	Year	N	10 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	51.8	39.7	5.5	2.9	51.8	55.0	48.4
	2015	563	57.7	39.3	2.8	0.1	57.7	57.6	57.9
Norway (8)	2011	560	35.5	54.8	7.7	2.0	35.5	38.5	32.9
	2015	668	42.6	50.9	6.0	0.5	42.6	46.2	39.0
Abu Dhabi, UAE	2011	636	31.4	59.3	8.0	1.3	31.4	33.7	29.3
	2015	693	42.1	51.9	5.7	0.3	42.1	49.4	34.6
Dubai, UAE	2011	799	39.6	51.0	8.4	1.1	39.6	43.2	36.2
	2015	868	57.8	39.1	3.0	0.1	57.8	60.7	54.6
Florida, US	2011	247	32.0	60.8	5.1	2.1	32.0	33.8	30.4
	2015	286	42.9	53.1	3.8	0.2	42.9	44.6	41.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_07B (M052146B): Algebra / Reasoning Type: CR 1 Point
Label: Rule for number of matches

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	14.6	18.9	42.9	23.1	0.4	14.6	13.1	16.2
	2015	1468	15.9	32.0	32.3	19.3	0.4	15.9	16.1	15.6
Bahrain	2011	653	4.9	10.9	56.0	26.1	2.0	4.9	6.3	3.6
	2015	705	7.0	22.0	52.5	17.9	0.7	7.0	8.3	5.7
Botswana	2011	771	1.2	22.4	61.7	10.5	4.2	1.2	0.9	1.5
	2015	836	1.3	33.4	57.0	7.9	0.3	1.3	1.6	1.1
Chile	2011	820	3.0	8.7	42.0	44.0	2.4	3.0	2.2	3.9
	2015	693	3.6	9.6	39.3	45.8	1.6	3.6	3.7	3.6
Chinese Taipei	2011	719	55.8	4.4	31.7	7.9	0.1	55.8	59.4	52.4
	2015	819	52.7	4.1	36.2	6.8	0.1	52.7	53.6	51.9
England	2011	540	17.4	9.3	53.0	19.4	0.9	17.4	17.7	17.1
	2015	686	21.1	11.6	51.7	14.3	1.2	21.1	22.4	19.7
Georgia	2011	653	3.7	7.6	25.3	60.2	3.2	3.7	3.2	4.3
	2015	582	5.3	14.4	38.0	41.9	0.4	5.3	5.7	4.9
Hong Kong SAR	2011	575	30.4	6.4	52.4	10.2	0.5	30.4	30.9	30.0
	2015	597	37.3	13.1	44.9	4.7	0.0	37.3	34.9	39.6
Hungary	2011	746	9.4	14.3	42.9	32.4	0.9	9.4	9.5	9.3
	2015	689	12.8	12.8	45.9	28.2	0.3	12.8	10.8	14.7
Iran, Islamic Rep. of	2011	859	4.8	15.4	44.7	33.2	2.0	4.8	3.7	5.8
	2015	878	17.4	8.4	53.3	20.1	0.8	17.4	19.3	15.7
Israel	2011	683	26.8	8.4	39.6	21.1	4.1	26.8	27.9	25.7
	2015	793	26.5	14.5	38.6	19.3	1.1	26.5	28.8	23.9
Italy	2011	562	7.1	20.2	34.0	37.1	1.6	7.1	4.8	9.5
	2015	665	5.3	13.3	50.3	31.1	0.1	5.3	5.0	5.5
Japan	2011	617	43.6	2.5	44.9	8.4	0.6	43.6	43.6	43.5
	2015	669	55.1	0.0	38.0	6.8	0.2	55.1	56.2	53.8
Jordan	2011	1101	11.7	12.6	57.9	17.1	0.7	11.7	15.5	7.9
	2015	1124	7.2	16.6	59.7	16.2	0.4	7.2	10.2	4.1
Kazakhstan	2011	631	12.1	7.3	41.3	38.4	0.9	12.1	13.2	11.2
	2015	698	18.6	3.2	57.4	19.2	1.6	18.6	20.3	16.8
Korea, Rep. of	2011	736	41.4	34.0	20.7	3.9	0.0	41.4	39.4	43.5
	2015	753	39.8	39.8	16.7	3.7	0.0	39.8	42.3	37.5
Lebanon	2011	560	2.5	11.9	39.4	44.7	1.5	2.5	1.5	3.7
	2015	553	2.9	10.0	38.0	45.0	4.1	2.9	3.2	2.4
Lithuania	2011	684	8.2	6.3	53.8	31.5	0.2	8.2	6.8	9.7
	2015	620	9.8	6.7	52.9	30.5	0.1	9.8	10.5	9.1

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_07B (M052146B): Algebra / Reasoning Type: CR 1 Point
Label: Rule for number of matches

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	1.9	4.6	67.1	24.7	1.7	1.9	1.6	2.1
	2015	1394	6.2	6.8	70.1	16.0	0.9	6.2	6.5	5.8
Morocco	2011	1308	0.9	1.1	44.1	49.2	4.7	0.9	0.7	1.0
	2015	1730	1.5	2.2	50.9	44.8	0.5	1.5	1.6	1.5
New Zealand	2011	761	20.7	25.6	34.0	19.1	0.7	20.7	18.9	22.3
	2015	1152	19.2	22.1	42.0	16.4	0.3	19.2	22.3	15.9
Oman	2011	1377	5.2	8.9	60.5	23.8	1.5	5.2	7.7	2.5
	2015	1270	6.5	7.1	72.5	13.4	0.5	6.5	8.6	4.4
Qatar	2011	640	9.7	6.5	58.2	25.1	0.6	9.7	11.9	7.5
	2015	770	11.1	11.5	58.8	17.9	0.8	11.1	13.1	9.2
Russian Federation	2011	707	14.4	15.9	32.3	36.1	1.4	14.4	13.3	15.4
	2015	685	16.2	13.9	34.7	34.9	0.3	16.2	20.7	11.6
Saudi Arabia	2011	621	8.0	5.6	68.0	17.7	0.6	8.0	9.3	6.8
	2015	541	3.7	6.5	68.7	20.6	0.5	3.7	4.0	3.3
Singapore	2011	855	46.4	1.5	46.2	5.4	0.6	46.4	44.9	47.8
	2015	872	55.5	3.7	37.2	3.4	0.1	55.5	55.2	55.9
Slovenia	2011	627	7.6	17.8	43.8	30.5	0.3	7.6	8.4	7.0
	2015	606	8.8	27.1	37.5	26.2	0.3	8.8	8.8	8.8
South Africa	2011	1692	2.9	5.9	77.0	12.9	1.3	2.9	3.2	2.5
	2015	1794	7.7	14.7	68.0	8.9	0.7	7.7	9.5	5.8
Sweden	2011	797	8.4	14.8	44.2	30.1	2.5	8.4	9.4	7.5
	2015	573	28.6	10.4	43.8	16.1	1.2	28.6	29.6	27.6
Thailand	2011	864	4.3	18.2	47.5	28.1	1.8	4.3	4.4	4.2
	2015	926	7.2	13.8	56.1	22.5	0.3	7.2	7.2	7.3
Turkey	2011	999	14.6	11.8	39.6	33.2	0.8	14.6	15.0	14.2
	2015	865	20.0	4.7	56.8	18.0	0.6	20.0	21.2	18.8
United Arab Emirates	2011	2029	6.4	15.1	59.7	17.4	1.4	6.4	6.7	6.1
	2015	2580	14.6	11.5	61.1	12.6	0.2	14.6	14.8	14.4
United States	2011	1498	11.5	26.7	49.5	8.9	3.5	11.5	11.0	12.1
	2015	1463	14.7	25.7	57.1	1.7	0.9	14.7	13.6	15.9
International Avg (n=33)	2011	28567	14.0	12.2	47.1	25.2	1.5	14.0	14.1	13.9
	2015	31049	17.0	13.6	49.0	19.8	0.6	17.0	17.9	16.1
Ontario, Canada	2011	673	22.5	15.1	41.3	14.8	6.2	22.5	23.9	21.1
	2015	632	31.4	18.9	40.9	7.5	1.4	31.4	31.1	31.7

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_07B (M052146B): Algebra / Reasoning Type: CR 1 Point
Label: Rule for number of matches

COUNTRY	Year	N	10 %	70 %	79 %	OMITTED %	NOT REACHED %	V1 %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	20.9	11.6	47.1	17.1	3.3	20.9	21.1	20.7
	2015	563	21.9	1.6	68.2	7.6	0.6	21.9	23.3	20.6
Norway (8)	2011	560	3.9	21.7	42.4	28.9	3.0	3.9	3.2	4.6
	2015	668	5.7	26.0	42.8	25.0	0.5	5.7	6.0	5.4
Abu Dhabi, UAE	2011	636	4.7	17.2	62.2	14.2	1.7	4.7	4.9	4.5
	2015	693	11.9	12.3	62.4	13.0	0.3	11.9	13.9	9.8
Dubai, UAE	2011	799	8.6	15.4	51.7	23.0	1.3	8.6	8.8	8.5
	2015	868	24.5	11.8	53.1	10.5	0.1	24.5	22.5	26.5
Florida, US	2011	247	9.1	28.3	49.7	10.5	2.3	9.1	4.4	13.6
	2015	286	9.8	26.9	59.2	3.8	0.2	9.8	7.3	12.4

V1 = Percent scoring 1 pt or better; V2 = Percent scoring 2 pts; Percent right for boys and girls corresponds to percent obtaining full credit.
Because of missing gender information, some totals may appear inconsistent.

M13_08 (M052092): Algebra / Applying Type: MC Key: A
Label: Graph of y = 2x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	18.1	18.1	15.9	31.2	31.5	2.9	0.4	19.7	16.5
	2015	1468	20.4	20.4	17.7	28.4	30.5	2.6	0.4	21.1	19.6
Bahrain	2011	653	12.0	12.0	10.0	35.5	36.2	3.8	2.5	14.0	10.1
	2015	705	45.0	45.0	8.6	22.8	21.9	0.9	0.7	44.4	45.6
Botswana	2011	771	18.9	18.9	16.2	27.2	30.5	2.3	4.9	18.0	19.9
	2015	836	15.7	15.7	18.0	39.5	24.4	1.8	0.6	14.2	17.3
Chile	2011	820	9.1	9.1	19.0	33.2	29.7	6.4	2.7	8.8	9.4
	2015	693	14.0	14.0	21.0	28.7	31.0	3.5	1.8	13.3	14.6
Chinese Taipei	2011	719	38.2	38.2	12.9	24.0	24.0	0.7	0.1	41.1	35.4
	2015	819	35.5	35.5	11.5	29.1	23.1	0.7	0.1	35.0	36.0
England	2011	540	23.6	23.6	11.4	29.6	32.0	2.4	1.0	22.3	25.2
	2015	686	18.2	18.2	12.7	35.1	30.4	2.4	1.2	15.5	21.0
Georgia	2011	653	18.7	18.7	14.6	32.3	27.8	3.4	3.2	18.8	18.6
	2015	582	19.5	19.5	17.3	33.8	26.5	2.6	0.4	18.2	20.8
Hong Kong SAR	2011	575	24.6	24.6	16.4	30.4	26.4	1.7	0.5	23.2	26.1
	2015	597	26.9	26.9	16.2	29.3	26.3	1.3	0.0	25.7	28.1
Hungary	2011	746	24.4	24.4	7.6	38.6	26.8	1.5	1.1	24.6	24.2
	2015	689	26.1	26.1	6.6	39.4	26.6	0.9	0.3	21.9	30.0
Iran, Islamic Rep. of	2011	859	20.0	20.0	10.9	38.5	26.5	2.1	2.0	20.1	20.0
	2015	878	21.2	21.2	21.5	29.1	21.0	6.2	1.0	21.1	21.3
Israel	2011	683	34.6	34.6	7.6	22.4	27.4	3.5	4.6	35.0	34.2
	2015	793	35.9	35.9	9.2	23.9	28.2	1.4	1.4	34.6	37.4
Italy	2011	562	26.0	26.0	10.2	21.1	34.9	5.8	1.9	26.9	25.0
	2015	665	20.8	20.8	14.2	24.4	35.6	4.6	0.5	21.0	20.5
Japan	2011	617	66.5	66.5	1.5	18.7	11.5	1.1	0.6	62.3	70.8
	2015	669	69.9	69.9	3.3	18.1	8.0	0.5	0.2	69.8	70.0
Jordan	2011	1101	22.1	22.1	8.7	29.2	36.1	3.1	0.7	22.5	21.8
	2015	1124	22.9	22.9	10.1	31.0	33.7	1.9	0.5	24.8	20.9
Kazakhstan	2011	631	40.2	40.2	10.9	21.2	24.2	2.3	1.2	33.2	46.2
	2015	698	60.6	60.6	9.7	12.4	14.2	1.3	1.8	63.9	57.2
Korea, Rep. of	2011	736	49.2	49.2	11.3	19.1	19.9	0.4	0.1	49.5	49.0
	2015	753	47.9	47.9	9.5	20.2	22.3	0.1	0.0	50.0	46.1
Lebanon	2011	556	11.0	11.0	6.7	38.2	37.5	5.1	1.5	9.3	13.1
	2015	553	14.7	14.7	9.2	35.5	29.5	7.0	4.1	12.2	17.3
Lithuania	2011	684	18.5	18.5	15.2	37.4	26.3	2.4	0.2	14.2	23.2
	2015	620	19.1	19.1	16.3	39.6	24.1	0.8	0.1	16.8	21.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_08 (M052092): Algebra / Applying Type: MC Key: A
Label: Graph of y = 2x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	11.4	11.4	23.3	28.9	32.9	1.9	1.7	12.9	9.8
	2015	1394	18.9	18.9	21.9	16.4	40.0	2.0	0.9	16.6	21.0
Morocco	2011	1305	13.3	13.3	16.8	47.8	11.5	5.7	4.9	13.3	13.4
	2015	1729	19.8	19.8	18.3	38.1	19.8	3.4	0.6	21.3	18.5
New Zealand	2011	761	17.8	17.8	17.3	29.8	30.3	4.2	0.7	15.8	19.6
	2015	1152	20.4	20.4	15.6	27.6	31.6	4.4	0.5	20.0	20.7
Oman	2011	1377	19.8	19.8	18.8	30.0	27.2	2.6	1.6	18.4	21.3
	2015	1271	20.1	20.1	20.0	30.0	27.0	2.4	0.5	18.0	22.2
Qatar	2011	640	17.4	17.4	14.7	30.4	34.5	2.4	0.6	15.1	19.7
	2015	770	17.3	17.3	13.3	32.4	34.0	2.1	0.8	16.0	18.6
Russian Federation	2011	707	50.7	50.7	8.8	15.0	21.4	2.6	1.5	48.0	53.1
	2015	685	47.6	47.6	9.3	16.0	24.4	2.4	0.3	52.5	42.6
Saudi Arabia	2011	620	22.8	22.8	15.0	26.7	32.9	1.8	0.8	20.8	24.6
	2015	540	18.4	18.4	21.5	29.5	28.8	1.4	0.5	17.5	19.3
Singapore	2011	855	36.0	36.0	8.3	23.5	31.0	0.6	0.6	33.7	38.2
	2015	872	32.1	32.1	8.1	23.5	35.9	0.2	0.1	31.7	32.5
Slovenia	2011	627	12.9	12.9	8.3	41.8	29.9	6.6	0.6	10.4	15.0
	2015	606	11.1	11.1	8.6	44.7	32.5	2.8	0.3	8.0	14.4
South Africa	2011	1692	13.8	13.8	17.8	31.1	33.1	2.7	1.5	14.7	12.9
	2015	1794	13.5	13.5	20.8	34.9	28.5	1.5	0.7	14.0	13.0
Sweden	2011	797	12.1	12.1	15.5	22.8	36.9	9.6	3.1	12.5	11.7
	2015	573	12.4	12.4	17.6	25.1	35.8	7.8	1.2	11.0	14.0
Thailand	2011	864	11.2	11.2	22.1	28.0	31.0	5.8	1.8	11.3	11.1
	2015	926	14.3	14.3	22.3	30.4	30.0	2.8	0.3	14.9	13.5
Turkey	2011	999	19.7	19.7	14.2	28.7	33.8	2.8	0.8	21.0	18.5
	2015	864	17.5	17.5	20.8	31.6	28.7	0.8	0.6	16.9	18.0
United Arab Emirates	2011	2029	16.9	16.9	17.7	33.2	27.8	2.8	1.5	16.7	17.2
	2015	2580	25.3	25.3	13.6	30.7	28.1	2.0	0.3	26.1	24.4
United States	2011	1498	36.0	36.0	9.9	23.5	24.9	1.9	3.7	36.1	35.8
	2015	1463	43.8	43.8	7.0	27.2	20.3	0.9	0.9	43.2	44.4
International Avg (n=33)	2011	28559	23.9	23.9	13.2	29.4	28.7	3.2	1.7	23.2	24.6
	2015	31047	26.3	26.3	14.3	29.0	27.4	2.4	0.7	25.8	26.7
Ontario, Canada	2011	673	14.5	14.5	19.0	31.4	24.4	3.3	7.4	12.6	16.4
	2015	632	15.9	15.9	18.2	37.1	23.0	4.4	1.5	13.9	18.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_08 (M052092): Algebra / Applying Type: MC Key: A
Label: Graph of y = 2x

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	15.0	15.0	15.9	34.6	24.9	6.0	3.6	12.8	17.5
	2015	561	16.2	16.2	12.4	35.0	33.6	1.9	0.9	14.4	18.0
Norway (8)	2011	560	10.6	10.6	20.3	25.1	32.0	8.4	3.7	8.2	12.7
	2015	668	10.3	10.3	16.8	29.1	36.3	7.1	0.5	9.4	11.1
Abu Dhabi, UAE	2011	636	17.0	17.0	15.7	35.8	28.0	1.8	1.7	15.1	18.7
	2015	693	25.2	25.2	14.4	29.3	28.2	2.6	0.3	24.7	25.7
Dubai, UAE	2011	799	18.5	18.5	15.8	32.1	28.2	3.8	1.5	19.3	17.8
	2015	868	25.6	25.6	10.5	32.1	31.0	0.5	0.4	26.6	24.5
Florida, US	2011	247	21.7	21.7	9.2	28.1	37.3	1.4	2.3	23.4	20.1
	2015	286	38.0	38.0	12.4	18.9	28.9	1.6	0.2	37.7	38.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_09 (M052046): Geometry / Reasoning Type: MC Key: D
Label: Rotation and reflection

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	32.0	18.6	17.5	28.4	32.0	2.9	0.6	32.7	31.4
	2015	1468	36.2	13.8	17.2	31.0	36.2	1.4	0.4	35.8	36.6
Bahrain	2011	653	24.9	15.8	25.6	29.4	24.9	1.8	2.5	24.7	25.0
	2015	705	47.8	10.1	16.2	24.6	47.8	0.6	0.7	52.0	43.7
Botswana	2011	772	23.5	20.5	16.7	30.8	23.5	2.9	5.5	24.4	22.6
	2015	842	28.2	16.8	19.6	33.6	28.2	1.0	0.7	26.4	30.2
Chile	2011	820	20.2	22.6	21.8	27.6	20.2	4.7	3.2	21.0	19.4
	2015	693	22.3	22.8	18.5	31.8	22.3	2.8	1.8	24.3	20.6
Chinese Taipei	2011	719	47.1	16.4	8.3	27.7	47.1	0.3	0.2	49.4	44.9
	2015	819	47.4	15.4	7.3	29.8	47.4	0.0	0.1	47.0	47.8
England	2011	540	35.3	17.1	13.5	31.7	35.3	1.3	1.0	39.8	30.2
	2015	686	37.2	15.1	12.0	32.5	37.2	1.6	1.5	38.9	35.5
Georgia	2011	653	16.7	19.7	21.9	33.6	16.7	4.9	3.2	16.6	16.8
	2015	582	17.8	24.0	18.9	35.4	17.8	3.4	0.5	18.9	16.7
Hong Kong SAR	2011	575	48.5	13.2	12.0	25.6	48.5	0.2	0.5	51.6	45.2
	2015	597	52.0	14.9	8.8	23.9	52.0	0.4	0.0	53.5	50.6
Hungary	2011	746	34.0	17.2	13.5	31.8	34.0	2.3	1.2	33.7	34.2
	2015	689	36.8	17.7	12.4	31.2	36.8	1.6	0.3	38.1	35.6
Iran, Islamic Rep. of	2011	859	18.3	20.6	23.1	32.4	18.3	3.3	2.3	17.0	19.4
	2015	878	22.3	12.5	24.9	34.5	22.3	4.6	1.2	20.8	23.6
Israel	2011	683	19.7	18.1	20.8	32.8	19.7	3.9	4.7	21.3	18.0
	2015	793	21.1	18.3	19.0	35.6	21.1	4.7	1.4	22.1	20.0
Italy	2011	560	17.6	18.5	20.8	35.1	17.6	5.9	2.2	17.7	17.5
	2015	665	21.7	19.9	16.9	36.1	21.7	4.7	0.7	25.6	18.1
Japan	2011	617	44.1	14.5	13.2	26.3	44.1	1.2	0.6	44.2	44.1
	2015	669	57.3	13.1	7.2	22.1	57.3	0.0	0.3	60.4	54.1
Jordan	2011	1101	21.6	17.8	25.2	32.8	21.6	1.8	0.7	23.6	19.7
	2015	1124	19.8	13.0	24.4	41.0	19.8	1.2	0.7	21.8	17.7
Kazakhstan	2011	631	20.4	18.9	22.2	32.0	20.4	5.2	1.2	20.1	20.8
	2015	697	28.8	21.8	15.4	30.7	28.8	1.5	1.8	31.3	26.3
Korea, Rep. of	2011	736	40.7	19.6	10.7	28.6	40.7	0.3	0.1	41.8	39.6
	2015	753	41.0	17.8	7.5	33.5	41.0	0.2	0.0	45.0	37.4
Lebanon	2011	555	21.3	18.0	21.0	29.2	21.3	8.9	1.7	20.1	22.8
	2015	552	18.1	14.3	23.0	26.7	18.1	13.6	4.3	21.8	14.3
Lithuania	2011	684	22.4	23.9	16.0	32.8	22.4	4.6	0.2	25.4	19.2
	2015	620	28.5	23.4	17.4	28.0	28.5	2.6	0.1	29.4	27.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_09 (M052046): Geometry / Reasoning Type: MC Key: D
Label: Rotation and reflection

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	26.1	15.0	17.2	38.4	26.1	1.5	1.7	26.5	25.8
	2015	1394	27.9	15.0	18.7	35.0	27.9	2.4	0.9	28.0	27.9
Morocco	2011	1288	15.9	15.0	29.3	31.0	15.9	3.9	5.0	15.3	16.4
	2015	1730	19.4	18.6	23.7	33.5	19.4	4.3	0.6	20.8	18.2
New Zealand	2011	761	33.6	15.8	15.1	30.9	33.6	3.7	0.9	26.7	39.8
	2015	1152	32.5	14.9	16.4	33.2	32.5	2.2	0.9	32.8	32.2
Oman	2011	1378	22.1	16.1	26.4	31.2	22.1	2.3	1.9	21.6	22.5
	2015	1271	24.4	16.7	22.5	34.0	24.4	1.7	0.6	26.0	22.8
Qatar	2011	640	21.9	17.7	23.7	34.0	21.9	1.8	0.9	24.9	18.8
	2015	770	27.0	18.0	21.0	31.2	27.0	1.6	1.2	30.7	23.5
Russian Federation	2011	707	22.9	21.3	15.0	33.1	22.9	6.2	1.5	22.5	23.2
	2015	685	21.0	26.9	15.2	32.3	21.0	4.3	0.3	20.5	21.6
Saudi Arabia	2011	620	17.8	17.0	24.2	38.3	17.8	1.8	0.8	20.1	15.7
	2015	539	24.1	18.0	20.6	36.1	24.1	0.4	0.8	26.8	21.2
Singapore	2011	855	41.2	21.0	7.5	29.0	41.2	0.6	0.7	40.1	42.3
	2015	872	43.0	19.9	8.5	28.0	43.0	0.5	0.1	44.6	41.5
Slovenia	2011	627	37.2	11.9	13.2	31.2	37.2	5.4	1.1	38.7	35.9
	2015	606	41.0	10.5	13.4	32.7	41.0	2.2	0.3	42.7	39.2
South Africa	2011	1692	20.3	22.3	23.3	29.6	20.3	2.9	1.6	21.8	18.8
	2015	1794	24.2	21.7	19.8	30.9	24.2	2.3	1.2	23.1	25.3
Sweden	2011	797	19.3	17.3	18.8	35.0	19.3	6.2	3.3	18.9	19.7
	2015	573	29.3	18.8	12.9	30.8	29.3	6.8	1.4	34.1	24.2
Thailand	2011	864	23.9	17.6	17.2	34.0	23.9	5.3	2.1	25.4	22.2
	2015	927	23.6	17.3	18.7	37.9	23.6	2.2	0.3	26.0	21.0
Turkey	2011	999	28.7	19.7	18.6	29.6	28.7	2.3	1.0	30.0	27.5
	2015	864	28.6	21.8	20.8	27.8	28.6	0.4	0.6	30.5	26.8
United Arab Emirates	2011	2029	22.0	19.0	21.7	32.5	22.0	3.1	1.6	22.2	21.8
	2015	2581	30.0	16.3	19.8	31.7	30.0	1.9	0.3	31.4	28.6
United States	2011	1498	33.5	12.2	12.1	36.1	33.5	1.9	4.2	32.7	34.3
	2015	1463	38.3	13.1	14.2	32.3	38.3	1.1	0.9	35.8	40.8
International Avg (n=33)	2011	28541	27.1	17.9	18.4	31.6	27.1	3.2	1.8	27.6	26.5
	2015	31053	30.9	17.3	16.7	31.8	30.9	2.4	0.8	32.3	29.4
Ontario, Canada	2011	673	37.1	12.3	11.4	28.8	37.1	2.8	7.7	36.1	38.1
	2015	632	42.6	11.5	12.6	30.1	42.6	1.1	2.1	43.4	41.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_09 (M052046): Geometry / Reasoning Type: MC Key: D
Label: Rotation and reflection

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	34.4	13.7	15.1	28.3	34.4	4.6	3.9	34.2	34.6
	2015	558	39.8	14.1	15.0	28.7	39.8	0.7	1.7	38.9	40.8
Norway (8)	2011	560	22.8	13.6	16.6	38.2	22.8	4.4	4.4	22.5	23.1
	2015	668	23.5	18.1	22.8	30.8	23.5	4.1	0.7	24.2	22.7
Abu Dhabi, UAE	2011	636	21.8	17.6	23.6	31.9	21.8	3.2	1.9	21.5	22.1
	2015	693	26.1	18.7	22.4	29.8	26.1	2.7	0.3	25.1	27.0
Dubai, UAE	2011	799	24.9	18.4	18.4	33.5	24.9	3.2	1.6	24.7	25.0
	2015	869	35.4	14.5	14.6	34.0	35.4	1.0	0.4	37.7	33.0
Florida, US	2011	247	36.3	18.0	13.9	26.9	36.3	2.5	2.3	37.6	35.0
	2015	286	35.0	17.8	13.7	32.5	35.0	0.8	0.2	41.3	28.8

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_10 (M052083): Geometry / Applying Type: MC Key: C
Label: Surface area of the prism

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	41.4	21.6	25.4	41.4	7.1	3.6	0.9	37.5	45.1
	2015	1468	39.3	25.4	25.4	39.3	6.9	2.6	0.4	38.7	40.0
Bahrain	2011	653	21.4	24.5	31.9	21.4	15.2	4.5	2.5	19.8	22.9
	2015	705	44.9	13.7	29.1	44.9	8.8	2.7	0.8	46.2	43.7
Botswana	2011	772	12.6	34.2	21.8	12.6	19.7	5.6	6.0	13.2	11.9
	2015	842	12.9	41.1	22.4	12.9	20.2	2.7	0.7	12.5	13.4
Chile	2011	820	21.3	27.7	31.8	21.3	6.2	9.6	3.4	21.6	20.9
	2015	693	20.9	26.4	34.8	20.9	9.9	6.1	1.9	19.3	22.2
Chinese Taipei	2011	719	80.4	3.6	10.7	80.4	4.9	0.3	0.2	81.3	79.4
	2015	819	69.3	5.1	17.1	69.3	8.3	0.1	0.1	69.1	69.4
England	2011	540	39.1	21.7	26.8	39.1	8.1	3.2	1.0	36.3	42.4
	2015	686	40.6	17.5	28.9	40.6	7.2	3.7	2.1	38.4	42.9
Georgia	2011	653	19.8	21.0	36.5	19.8	8.7	10.6	3.4	20.1	19.6
	2015	582	20.9	24.8	33.4	20.9	13.0	7.4	0.5	19.2	22.8
Hong Kong SAR	2011	575	72.4	5.4	11.2	72.4	9.1	1.3	0.5	75.5	69.1
	2015	597	76.3	3.4	12.2	76.3	7.2	0.8	0.0	75.6	77.1
Hungary	2011	746	31.0	21.6	34.0	31.0	6.3	5.7	1.3	32.7	29.6
	2015	689	33.4	21.9	32.9	33.4	7.9	3.4	0.4	30.0	36.6
Iran, Islamic Rep. of	2011	859	19.9	24.5	38.6	19.9	8.9	5.5	2.5	19.0	20.7
	2015	877	19.2	18.8	41.4	19.2	10.4	8.7	1.4	17.1	21.1
Israel	2011	683	33.8	17.3	28.2	33.8	6.8	9.0	4.9	31.9	35.9
	2015	793	35.4	17.6	30.0	35.4	8.3	6.8	1.8	33.3	37.5
Italy	2011	562	41.3	8.8	22.0	41.3	13.5	11.8	2.6	40.1	42.6
	2015	665	39.4	11.2	29.6	39.4	13.3	5.8	0.9	35.3	43.0
Japan	2011	617	61.4	7.9	22.2	61.4	6.1	1.7	0.6	59.5	63.3
	2015	669	65.0	5.7	22.9	65.0	5.6	0.4	0.3	67.1	62.7
Jordan	2011	1101	18.9	28.3	35.1	18.9	12.2	4.6	0.8	20.1	17.8
	2015	1124	15.9	30.9	36.1	15.9	13.6	2.8	0.7	14.9	16.9
Kazakhstan	2011	631	31.4	20.5	27.0	31.4	11.3	7.9	1.9	25.8	36.3
	2015	698	42.5	17.2	22.5	42.5	13.8	2.2	1.8	44.3	40.6
Korea, Rep. of	2011	736	73.6	3.2	14.7	73.6	7.5	0.8	0.1	73.6	73.6
	2015	753	71.3	4.6	14.1	71.3	9.3	0.7	0.0	74.2	68.7
Lebanon	2011	556	15.6	29.9	30.5	15.6	8.3	13.4	2.3	12.6	19.2
	2015	553	15.9	28.7	26.5	15.9	8.1	15.5	5.2	17.1	14.7
Lithuania	2011	684	37.1	22.3	25.8	37.1	8.1	6.3	0.3	36.6	37.7
	2015	620	40.3	24.9	22.9	40.3	8.6	3.2	0.1	41.4	39.3

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_10 (M052083): Geometry / Applying Type: MC Key: C
Label: Surface area of the prism

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	36.6	25.4	24.3	36.6	9.6	2.3	1.8	36.6	36.5
	2015	1394	34.4	27.6	26.1	34.4	8.0	2.3	1.6	35.0	33.8
Morocco	2011	1307	14.5	33.2	36.3	14.5	5.3	5.3	5.5	14.5	14.5
	2015	1730	13.7	39.2	32.4	13.7	9.3	4.7	0.7	13.8	13.7
New Zealand	2011	761	36.3	24.5	27.1	36.3	5.9	5.0	1.1	31.0	41.0
	2015	1152	29.6	28.9	31.4	29.6	5.5	3.5	1.1	31.7	27.3
Oman	2011	1378	17.2	23.8	42.6	17.2	10.2	4.2	2.1	17.4	17.0
	2015	1271	20.0	28.8	34.3	20.0	13.6	2.6	0.6	19.8	20.3
Qatar	2011	640	22.7	25.7	32.9	22.7	12.4	5.2	1.0	22.1	23.4
	2015	770	25.7	22.8	33.4	25.7	11.8	5.0	1.3	26.0	25.4
Russian Federation	2011	707	38.3	13.7	26.5	38.3	9.1	9.8	2.6	37.8	38.7
	2015	685	38.0	15.9	27.0	38.0	11.0	7.5	0.6	39.1	37.0
Saudi Arabia	2011	621	20.2	25.2	37.5	20.2	14.1	2.0	1.0	17.2	22.9
	2015	541	19.0	26.2	40.7	19.0	11.4	1.8	0.8	18.0	20.0
Singapore	2011	855	74.5	5.9	12.2	74.5	5.1	1.5	0.7	76.7	72.4
	2015	872	76.4	5.3	13.5	76.4	3.6	1.0	0.1	75.3	77.5
Slovenia	2011	627	38.6	17.0	24.4	38.6	10.2	8.7	1.1	38.8	38.5
	2015	606	36.6	21.2	26.2	36.6	10.0	5.7	0.3	35.6	37.7
South Africa	2011	1692	12.8	38.9	28.8	12.8	14.0	3.8	1.7	13.2	12.3
	2015	1794	12.7	39.6	29.4	12.7	14.3	2.2	1.7	11.0	14.6
Sweden	2011	797	36.8	14.9	30.0	36.8	7.8	7.0	3.4	35.3	38.3
	2015	573	42.8	14.1	27.2	42.8	6.1	8.0	1.9	41.6	44.1
Thailand	2011	864	23.4	28.0	27.9	23.4	8.2	9.8	2.7	24.7	21.9
	2015	927	25.3	26.1	34.3	25.3	8.7	5.2	0.4	21.8	29.1
Turkey	2011	999	28.3	21.1	30.4	28.3	10.7	8.3	1.2	30.8	25.9
	2015	864	24.5	33.4	29.5	24.5	11.2	0.7	0.6	22.7	26.2
United Arab Emirates	2011	2029	27.1	25.1	28.6	27.1	12.3	4.9	1.9	27.1	27.2
	2015	2580	31.7	24.2	28.8	31.7	11.5	3.3	0.4	29.0	34.5
United States	2011	1498	38.6	16.0	26.8	38.6	11.3	2.4	4.9	40.0	37.2
	2015	1463	39.5	20.5	27.3	39.5	8.8	2.7	1.1	39.8	39.2
International Avg (n=33)	2011	28564	34.5	20.7	27.6	34.5	9.5	5.6	2.1	34.0	35.0
	2015	31055	35.6	21.6	28.0	35.6	9.9	4.0	1.0	35.0	36.2
Ontario, Canada	2011	673	44.2	12.9	19.6	44.2	11.8	3.9	7.7	45.5	42.8
	2015	632	50.9	14.7	19.5	50.9	9.6	2.9	2.4	49.5	52.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_10 (M052083): Geometry / Applying Type: MC Key: C
Label: Surface area of the prism

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	50.3	10.6	18.3	50.3	10.3	6.3	4.1	50.3	50.4
	2015	562	59.3	8.6	16.2	59.3	9.5	4.7	1.7	56.5	62.1
Norway (8)	2011	560	31.1	18.4	30.8	31.1	7.2	7.7	4.9	25.5	35.9
	2015	668	33.9	23.5	29.4	33.9	5.4	7.2	0.7	30.1	37.6
Abu Dhabi, UAE	2011	636	25.6	27.7	24.9	25.6	14.4	5.3	2.1	23.9	27.3
	2015	693	28.0	30.2	27.9	28.0	9.8	3.5	0.5	26.3	29.8
Dubai, UAE	2011	799	31.3	20.4	29.4	31.3	12.4	4.6	1.8	31.6	31.1
	2015	868	38.1	20.7	26.8	38.1	12.2	1.8	0.4	34.8	41.4
Florida, US	2011	247	39.3	13.5	31.4	39.3	9.4	3.6	2.7	37.5	41.0
	2015	286	38.9	21.1	23.9	38.9	12.9	3.0	0.2	33.9	43.7

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_11 (M052082): Geometry / Applying Type: MC Key: C
Label: Value of angle x outside triangle

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	51.5	14.5	13.7	51.5	16.9	2.1	1.2	46.1	56.7
	2015	1468	54.2	14.2	14.5	54.2	15.4	1.2	0.4	50.8	57.7
Bahrain	2011	653	33.7	20.4	16.5	33.7	24.2	2.3	2.9	31.8	35.6
	2015	705	52.9	16.8	11.3	52.9	17.0	0.7	1.3	52.3	53.5
Botswana	2011	772	41.4	18.9	10.8	41.4	19.2	2.4	7.2	41.2	41.6
	2015	840	54.0	17.9	8.2	54.0	18.3	0.8	0.9	57.7	49.9
Chile	2011	820	39.1	22.3	13.1	39.1	18.0	3.5	4.0	37.8	40.5
	2015	693	45.2	21.4	12.1	45.2	17.5	1.9	2.0	42.3	47.6
Chinese Taipei	2011	719	85.8	4.9	3.9	85.8	5.1	0.0	0.2	88.7	83.0
	2015	819	85.6	4.8	3.7	85.6	5.7	0.1	0.1	86.9	84.5
England	2011	540	62.2	15.4	12.5	62.2	7.9	0.6	1.4	61.9	62.7
	2015	686	62.7	16.9	10.7	62.7	5.8	1.6	2.3	60.9	64.6
Georgia	2011	653	37.4	11.2	10.9	37.4	35.7	0.9	3.9	33.1	42.2
	2015	582	46.9	11.4	10.9	46.9	28.9	1.4	0.5	47.2	46.5
Hong Kong SAR	2011	575	76.8	8.0	7.2	76.8	7.3	0.2	0.5	78.9	74.5
	2015	597	78.9	5.2	6.0	78.9	9.4	0.5	0.0	78.4	79.5
Hungary	2011	746	69.3	9.7	6.6	69.3	11.8	1.0	1.7	67.1	71.2
	2015	689	69.3	11.5	6.8	69.3	11.0	0.4	0.9	68.2	70.4
Iran, Islamic Rep. of	2011	858	36.9	24.8	16.3	36.9	18.0	0.8	3.2	37.6	36.3
	2015	877	41.6	29.5	12.9	41.6	13.3	1.0	1.7	38.8	44.2
Israel	2011	683	50.9	13.4	16.1	50.9	11.0	3.6	5.1	48.7	53.2
	2015	793	54.9	13.5	12.9	54.9	13.9	2.4	2.4	54.4	55.5
Italy	2011	562	56.2	13.3	9.7	56.2	14.1	3.0	3.7	53.5	58.9
	2015	665	56.7	14.0	10.2	56.7	15.5	2.5	1.1	57.9	55.5
Japan	2011	617	84.1	2.6	6.0	84.1	6.4	0.3	0.6	85.2	83.0
	2015	669	87.4	3.4	4.6	87.4	4.3	0.1	0.3	86.4	88.5
Jordan	2011	1101	40.6	22.5	15.0	40.6	19.6	1.4	0.9	39.8	41.3
	2015	1124	37.7	22.3	15.6	37.7	21.8	1.6	1.0	34.5	41.0
Kazakhstan	2011	631	44.1	15.9	11.5	44.1	25.8	0.8	2.1	38.3	49.1
	2015	698	59.9	9.7	10.5	59.9	17.3	0.6	2.1	62.6	57.2
Korea, Rep. of	2011	736	88.5	4.0	5.8	88.5	1.4	0.1	0.1	90.1	86.9
	2015	753	89.1	2.4	6.0	89.1	2.5	0.0	0.0	89.2	89.0
Lebanon	2011	559	50.6	13.9	9.6	50.6	20.9	1.1	3.9	42.3	60.9
	2015	553	58.2	11.2	7.8	58.2	14.7	2.4	5.6	55.1	61.5
Lithuania	2011	684	52.0	15.8	14.4	52.0	16.8	0.6	0.4	52.3	51.7
	2015	620	53.8	18.6	13.9	53.8	12.9	0.5	0.4	51.3	56.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_11 (M052082): Geometry / Applying Type: MC Key: C
Label: Value of angle x outside triangle

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	47.9	21.4	10.2	47.9	17.1	1.3	2.2	46.6	49.2
	2015	1394	47.1	18.1	11.8	47.1	19.8	1.3	1.9	49.9	44.4
Morocco	2011	1307	29.1	16.4	17.4	29.1	28.2	2.3	6.5	28.5	29.7
	2015	1730	30.0	22.9	22.2	30.0	22.3	1.6	1.0	29.7	30.2
New Zealand	2011	761	49.6	17.2	17.3	49.6	11.6	3.2	1.2	42.4	56.0
	2015	1152	52.4	17.3	12.9	52.4	13.9	2.4	1.1	51.6	53.4
Oman	2011	1378	34.2	21.7	12.0	34.2	28.0	1.8	2.3	36.3	31.9
	2015	1271	42.2	20.2	9.2	42.2	26.5	1.2	0.7	41.9	42.5
Qatar	2011	640	39.2	22.1	12.9	39.2	22.4	2.2	1.2	36.2	42.2
	2015	770	41.3	21.3	11.7	41.3	23.0	1.3	1.4	40.1	42.4
Russian Federation	2011	707	62.7	11.1	9.0	62.7	11.6	2.3	3.2	60.4	64.8
	2015	685	66.3	9.8	11.7	66.3	10.4	1.1	0.7	65.1	67.5
Saudi Arabia	2011	620	29.2	24.7	14.0	29.2	27.7	3.1	1.3	23.4	34.7
	2015	541	27.6	20.2	13.9	27.6	37.5	0.0	0.8	26.5	28.8
Singapore	2011	855	84.9	5.1	4.1	84.9	4.0	1.0	0.9	84.5	85.3
	2015	872	87.5	4.6	4.4	87.5	3.3	0.2	0.1	88.6	86.3
Slovenia	2011	627	63.3	10.5	12.7	63.3	10.4	2.0	1.2	61.3	64.9
	2015	606	61.9	14.6	12.5	61.9	9.5	1.3	0.3	64.3	59.2
South Africa	2011	1692	24.8	19.4	14.6	24.8	37.1	2.0	2.1	22.4	27.3
	2015	1794	26.6	21.8	14.6	26.6	34.4	0.7	1.9	26.3	26.9
Sweden	2011	797	50.2	19.2	9.4	50.2	14.1	3.3	3.8	48.0	52.3
	2015	573	49.4	20.6	11.0	49.4	13.1	3.7	2.1	46.8	52.1
Thailand	2011	864	33.5	14.0	18.2	33.5	29.4	2.0	2.8	31.0	36.5
	2015	927	34.3	19.6	15.4	34.3	28.4	1.9	0.5	31.1	37.9
Turkey	2011	999	51.8	15.0	10.8	51.8	19.6	1.0	1.8	52.4	51.2
	2015	864	50.5	14.5	10.8	50.5	23.2	0.5	0.6	46.6	54.1
United Arab Emirates	2011	2029	37.8	21.0	11.8	37.8	25.1	2.0	2.4	37.1	38.6
	2015	2581	45.3	17.6	12.6	45.3	22.6	1.4	0.5	42.6	48.1
United States	2011	1498	48.1	16.0	13.0	48.1	16.4	1.0	5.6	46.8	49.7
	2015	1463	48.5	20.4	10.8	48.5	17.6	1.1	1.5	45.3	51.8
International Avg (n=33)	2011	28565	51.1	15.3	11.7	51.1	17.7	1.7	2.5	49.4	52.8
	2015	31054	54.5	15.4	11.0	54.5	16.7	1.2	1.2	53.7	55.4
Ontario, Canada	2011	673	51.2	16.3	8.8	51.2	11.5	3.6	8.5	52.9	49.5
	2015	632	55.5	16.2	13.4	55.5	11.5	1.0	2.5	52.1	59.2

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_11 (M052082): Geometry / Applying Type: MC Key: C
Label: Value of angle x outside triangle

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	65.4	9.6	10.5	65.4	7.6	2.6	4.4	66.7	63.9
	2015	562	72.5	7.3	6.8	72.5	9.2	1.3	2.9	68.7	76.3
Norway (8)	2011	560	50.0	15.8	15.3	50.0	9.1	3.5	6.2	52.7	47.7
	2015	668	58.1	18.5	13.0	58.1	8.1	1.6	0.7	57.0	59.1
Abu Dhabi, UAE	2011	636	39.3	21.3	10.3	39.3	24.0	2.6	2.6	35.9	42.4
	2015	693	41.3	18.4	13.8	41.3	24.4	1.5	0.6	40.2	42.5
Dubai, UAE	2011	799	45.6	17.9	11.6	45.6	21.3	1.2	2.5	46.6	44.5
	2015	869	56.4	11.4	12.0	56.4	19.0	0.7	0.5	53.3	59.7
Florida, US	2011	247	50.7	19.8	12.5	50.7	10.8	1.9	4.2	52.9	48.6
	2015	286	40.6	22.4	10.0	40.6	24.7	2.1	0.2	37.4	43.9

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_12 (M052161): Data and Chance / Applying Type: MC Key: B
Label: Number of balls in a bag

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	75.3	5.6	75.3	11.1	4.9	1.7	1.4	75.3	75.3
	2015	1468	76.8	5.6	76.8	11.7	4.5	1.0	0.5	73.7	80.0
Bahrain	2011	653	42.0	8.5	42.0	21.9	21.7	2.7	3.2	41.9	42.0
	2015	705	58.8	7.6	58.8	18.4	13.4	0.5	1.3	59.8	57.8
Botswana	2011	772	34.8	11.9	34.8	22.3	18.3	4.3	8.5	31.0	38.8
	2015	840	39.7	10.8	39.7	26.6	19.9	2.0	1.0	40.5	38.8
Chile	2011	820	48.4	14.2	48.4	15.2	11.9	6.1	4.2	46.5	50.5
	2015	693	50.8	13.5	50.8	20.7	10.8	2.3	2.0	44.5	56.2
Chinese Taipei	2011	719	87.6	4.0	87.6	6.4	1.7	0.2	0.2	88.4	86.7
	2015	819	85.5	4.6	85.5	7.9	1.7	0.1	0.1	85.6	85.4
England	2011	540	69.5	9.3	69.5	12.9	5.5	1.4	1.4	65.9	73.7
	2015	686	74.0	7.0	74.0	11.6	2.7	2.2	2.3	70.0	78.2
Georgia	2011	653	49.8	8.6	49.8	23.3	9.6	4.8	3.9	50.0	49.5
	2015	582	50.4	9.1	50.4	27.6	7.6	4.9	0.5	49.1	51.8
Hong Kong SAR	2011	575	82.4	5.7	82.4	7.0	4.0	0.3	0.5	85.4	79.3
	2015	597	85.1	4.9	85.1	6.8	3.1	0.2	0.0	82.7	87.4
Hungary	2011	746	66.0	7.6	66.0	15.2	7.2	2.2	1.9	61.5	70.2
	2015	689	70.3	7.6	70.3	13.1	7.0	1.0	0.9	65.8	74.4
Iran, Islamic Rep. of	2011	858	51.3	7.2	51.3	18.4	16.5	3.4	3.3	50.1	52.3
	2015	877	60.4	7.8	60.4	15.9	10.3	3.9	1.7	57.7	62.8
Israel	2011	683	68.6	6.2	68.6	10.3	5.4	4.1	5.3	64.7	72.7
	2015	793	73.7	7.7	73.7	7.7	6.4	2.0	2.5	74.5	72.9
Italy	2011	562	73.8	4.8	73.8	8.3	5.2	4.1	3.7	71.4	76.2
	2015	665	74.8	5.6	74.8	10.5	4.0	4.0	1.1	72.3	77.0
Japan	2011	617	83.9	3.0	83.9	8.2	2.4	1.9	0.6	84.1	83.7
	2015	669	90.2	2.5	90.2	5.1	1.7	0.3	0.3	89.8	90.6
Jordan	2011	1101	42.6	9.0	42.6	22.8	22.4	2.4	0.9	43.6	41.6
	2015	1124	39.0	10.2	39.0	26.3	21.2	1.8	1.5	38.6	39.4
Kazakhstan	2011	631	58.1	9.2	58.1	14.4	12.7	3.5	2.1	55.1	60.8
	2015	698	66.0	8.4	66.0	13.0	9.5	1.0	2.1	66.8	65.2
Korea, Rep. of	2011	736	88.8	2.8	88.8	5.8	2.0	0.4	0.1	87.7	90.0
	2015	753	90.9	2.5	90.9	5.5	1.0	0.2	0.0	92.1	89.8
Lebanon	2011	559	42.6	5.3	42.6	22.7	19.6	6.0	3.9	37.4	48.9
	2015	553	37.9	5.7	37.9	21.9	20.2	8.3	6.1	36.1	39.7
Lithuania	2011	684	70.3	7.5	70.3	12.6	7.0	2.0	0.5	68.7	72.1
	2015	620	73.2	7.1	73.2	13.5	5.0	0.7	0.4	68.8	77.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_12 (M052161): Data and Chance / Applying Type: MC Key: B
Label: Number of balls in a bag

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	49.0	9.1	49.0	25.3	11.2	2.6	2.8	47.2	50.9
	2015	1394	55.4	6.7	55.4	24.2	9.5	1.8	2.3	54.8	56.0
Morocco	2011	1306	30.4	6.4	30.4	25.3	27.2	3.9	6.9	29.5	31.3
	2015	1730	32.8	7.8	32.8	26.3	28.0	3.6	1.5	33.9	31.9
New Zealand	2011	761	72.4	6.2	72.4	10.2	5.6	4.1	1.4	68.3	76.1
	2015	1152	72.2	8.1	72.2	11.3	5.3	1.9	1.2	74.2	70.0
Oman	2011	1378	31.1	10.0	31.1	25.4	28.2	2.8	2.6	34.7	27.4
	2015	1271	40.6	8.2	40.6	22.3	26.0	2.1	0.8	42.7	38.5
Qatar	2011	640	44.0	10.5	44.0	24.0	17.4	2.2	1.9	43.1	44.9
	2015	770	55.7	11.7	55.7	17.1	11.8	2.1	1.7	56.7	54.8
Russian Federation	2011	707	71.8	5.3	71.8	11.5	5.1	3.0	3.3	72.6	71.0
	2015	685	76.5	4.1	76.5	10.2	5.2	3.2	0.7	75.9	77.1
Saudi Arabia	2011	621	36.6	11.6	36.6	23.8	23.5	1.8	2.7	35.5	37.7
	2015	541	33.9	10.1	33.9	22.3	32.5	0.3	0.8	33.1	34.9
Singapore	2011	855	83.2	4.3	83.2	7.4	3.0	0.8	1.3	81.7	84.7
	2015	872	87.9	3.6	87.9	4.6	2.8	0.8	0.3	88.1	87.6
Slovenia	2011	627	73.2	4.9	73.2	12.8	5.9	2.0	1.2	68.2	77.6
	2015	606	76.4	4.0	76.4	13.2	5.4	0.8	0.3	80.5	71.8
South Africa	2011	1692	22.1	7.1	22.1	22.8	42.3	3.3	2.3	23.1	21.1
	2015	1794	34.0	6.3	34.0	24.6	31.4	1.7	1.9	34.6	33.3
Sweden	2011	797	73.5	6.3	73.5	9.6	3.0	3.6	3.9	71.3	75.6
	2015	573	81.0	5.8	81.0	7.4	2.4	1.3	2.1	82.9	79.0
Thailand	2011	864	57.3	10.0	57.3	16.0	10.3	3.6	2.8	59.2	55.2
	2015	927	58.0	12.3	58.0	15.5	11.2	2.5	0.6	57.9	58.0
Turkey	2011	999	63.6	7.6	63.6	14.4	9.0	3.5	2.0	64.2	63.0
	2015	864	65.9	6.9	65.9	13.9	12.5	0.1	0.6	67.9	64.0
United Arab Emirates	2011	2029	47.9	8.3	47.9	18.7	18.9	3.5	2.7	48.1	47.8
	2015	2581	57.2	7.3	57.2	16.7	15.8	2.3	0.8	55.5	59.0
United States	2011	1498	71.5	7.0	71.5	8.8	5.9	1.0	5.8	72.0	71.0
	2015	1463	75.5	6.7	75.5	9.4	5.0	1.7	1.7	74.7	76.2
International Avg (n=33)	2011	28565	59.5	7.4	59.5	15.6	12.0	2.8	2.7	58.4	60.6
	2015	31054	63.6	7.2	63.6	15.2	10.8	1.9	1.3	63.1	64.2
Ontario, Canada	2011	673	35.4	13.6	35.4	11.0	26.9	3.4	9.7	33.8	37.2
	2015	631	80.3	5.1	80.3	7.0	4.0	1.0	2.6	77.3	83.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_12 (M052161): Data and Chance / Applying Type: MC Key: B
Label: Number of balls in a bag

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	70.7	5.8	70.7	8.9	7.3	2.7	4.7	74.2	66.7
	2015	562	81.3	4.3	81.3	4.7	3.1	3.0	3.5	77.0	85.6
Norway (8)	2011	560	72.2	4.1	72.2	8.8	4.1	4.3	6.5	71.1	73.1
	2015	668	79.0	6.7	79.0	8.9	2.6	2.1	0.7	79.4	78.5
Abu Dhabi, UAE	2011	636	43.8	7.9	43.8	18.0	22.0	5.4	2.9	41.8	45.8
	2015	693	53.2	8.9	53.2	16.0	18.8	2.3	0.8	53.6	52.8
Dubai, UAE	2011	799	55.1	8.1	55.1	18.5	13.8	2.0	2.5	54.5	55.7
	2015	869	71.8	5.1	71.8	12.1	9.0	1.5	0.6	69.5	74.2
Florida, US	2011	247	69.6	7.5	69.6	11.0	6.4	0.4	5.1	70.7	68.6
	2015	286	69.5	8.4	69.5	16.3	5.1	0.6	0.2	69.3	69.6

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_13A (M052418A): Data and Chance / Applying Type: MC Key: D
Label: Liv's smartphone use

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	31.8	12.1	14.1	37.6	31.8	2.5	1.9	30.4	33.1
	2015	1468	38.3	13.7	13.7	31.0	38.3	2.8	0.5	38.1	38.4
Bahrain	2011	653	19.0	19.6	11.2	44.3	19.0	1.5	4.4	18.2	19.8
	2015	705	23.6	14.2	12.5	46.8	23.6	1.7	1.3	22.4	24.8
Botswana	2011	772	26.2	9.3	7.7	43.8	26.2	2.7	10.3	26.6	25.7
	2015	840	29.3	11.8	7.6	47.9	29.3	2.1	1.3	29.2	29.5
Chile	2011	820	22.3	11.2	10.9	46.8	22.3	3.7	5.1	23.0	21.5
	2015	693	21.6	16.5	13.9	44.1	21.6	1.7	2.2	18.7	24.0
Chinese Taipei	2011	719	66.9	7.2	5.7	19.9	66.9	0.2	0.2	65.4	68.3
	2015	819	70.8	6.3	4.7	17.6	70.8	0.5	0.1	70.5	71.2
England	2011	540	42.2	13.7	11.8	29.6	42.2	0.9	1.9	39.4	45.3
	2015	686	43.7	14.3	11.3	27.3	43.7	0.9	2.5	42.4	45.0
Georgia	2011	653	31.7	16.5	9.4	31.0	31.7	6.6	4.7	27.1	36.9
	2015	582	32.2	15.2	14.4	34.5	32.2	2.4	1.3	26.8	37.7
Hong Kong SAR	2011	575	69.9	8.6	7.7	11.6	69.9	1.7	0.5	70.5	69.2
	2015	597	77.9	4.6	6.0	10.6	77.9	0.9	0.0	76.5	79.2
Hungary	2011	746	43.6	14.7	10.4	28.5	43.6	0.9	2.0	42.0	45.1
	2015	689	49.1	13.2	13.4	23.0	49.1	0.3	0.9	47.7	50.4
Iran, Islamic Rep. of	2011	859	21.4	15.6	13.6	42.9	21.4	2.1	4.4	17.9	24.3
	2015	878	24.8	16.3	13.0	40.0	24.8	3.0	2.9	23.2	26.1
Israel	2011	683	44.3	14.0	12.7	20.0	44.3	2.8	6.2	44.1	44.5
	2015	793	44.4	14.6	11.7	24.2	44.4	2.2	3.0	42.2	46.8
Italy	2011	562	33.0	13.2	15.2	29.9	33.0	4.5	4.3	27.7	38.4
	2015	665	33.4	14.8	13.9	33.3	33.4	3.2	1.4	31.3	35.3
Japan	2011	617	50.2	10.0	13.6	23.4	50.2	1.2	1.6	45.0	55.4
	2015	669	58.2	8.7	13.5	19.1	58.2	0.3	0.3	58.2	58.2
Jordan	2011	1101	22.0	12.4	11.1	51.1	22.0	2.0	1.4	19.1	25.0
	2015	1124	17.0	13.1	10.2	56.1	17.0	1.9	1.7	15.0	19.1
Kazakhstan	2011	631	29.6	13.5	13.7	35.1	29.6	4.8	3.3	32.9	26.8
	2015	698	48.2	13.2	10.6	23.4	48.2	2.2	2.3	46.8	49.6
Korea, Rep. of	2011	736	67.8	5.4	7.3	18.9	67.8	0.3	0.3	66.0	69.7
	2015	753	66.2	6.3	7.2	20.1	66.2	0.2	0.0	68.1	64.5
Lebanon	2011	557	24.5	17.6	14.2	32.3	24.5	5.7	5.7	21.0	28.9
	2015	553	27.4	10.7	15.0	32.8	27.4	6.6	7.6	25.9	28.9
Lithuania	2011	684	41.3	18.2	11.7	25.4	41.3	2.3	1.0	38.5	44.3
	2015	620	42.2	15.4	12.3	28.5	42.2	0.8	0.8	37.9	46.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_13A (M052418A): Data and Chance / Applying Type: MC Key: D
Label: Liv's smartphone use

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	39.3	8.7	10.6	36.7	39.3	1.2	3.4	40.7	37.9
	2015	1394	42.3	11.2	11.3	30.5	42.3	2.0	2.7	46.0	38.7
Morocco	2011	1307	21.7	13.1	16.3	39.5	21.7	2.1	7.3	20.5	22.7
	2015	1730	23.1	16.5	15.8	39.4	23.1	3.0	2.3	22.0	24.0
New Zealand	2011	761	34.3	10.2	15.6	36.1	34.3	2.2	1.5	28.5	39.5
	2015	1152	34.1	13.3	13.8	35.7	34.1	1.6	1.4	34.1	34.2
Oman	2011	1378	20.6	15.5	18.0	40.9	20.6	1.9	3.1	21.1	20.2
	2015	1271	23.1	14.5	15.7	43.8	23.1	1.9	1.0	22.9	23.3
Qatar	2011	639	25.3	14.1	20.5	36.9	25.3	0.9	2.3	28.0	22.5
	2015	770	26.8	16.0	12.8	39.9	26.8	1.7	2.9	22.7	30.5
Russian Federation	2011	707	45.0	13.2	10.3	22.7	45.0	4.4	4.3	43.9	45.9
	2015	685	48.6	14.9	8.5	23.5	48.6	3.5	1.1	49.5	47.7
Saudi Arabia	2011	620	23.5	12.0	15.4	45.0	23.5	0.9	3.2	16.9	29.6
	2015	541	18.2	16.1	17.9	46.5	18.2	0.3	1.0	12.9	23.8
Singapore	2011	855	76.6	6.5	5.1	9.8	76.6	0.5	1.4	78.7	74.6
	2015	872	82.6	5.4	3.9	7.2	82.6	0.4	0.6	85.7	79.4
Slovenia	2011	627	39.7	14.6	13.1	28.5	39.7	2.0	2.0	37.9	41.3
	2015	606	40.6	14.6	12.3	30.3	40.6	1.8	0.4	42.4	38.6
South Africa	2011	1692	33.1	10.3	8.4	43.7	33.1	1.9	2.5	33.8	32.4
	2015	1794	25.5	9.6	7.3	54.0	25.5	1.4	2.2	26.9	24.0
Sweden	2011	797	41.7	13.2	15.6	21.6	41.7	2.7	5.3	41.5	41.9
	2015	573	46.6	14.2	11.2	23.0	46.6	2.8	2.2	43.4	49.9
Thailand	2011	864	22.6	11.9	13.0	46.1	22.6	2.9	3.5	22.1	23.2
	2015	927	29.1	12.0	13.3	42.8	29.1	1.9	0.9	25.9	32.6
Turkey	2011	999	31.3	10.9	10.4	41.7	31.3	3.0	2.7	30.5	32.1
	2015	864	29.5	10.9	12.4	46.1	29.5	0.5	0.6	27.5	31.3
United Arab Emirates	2011	2029	25.1	12.3	11.0	46.2	25.1	2.0	3.5	23.8	26.4
	2015	2581	31.9	13.7	11.0	40.6	31.9	1.9	0.9	29.3	34.6
United States	2011	1498	33.7	11.7	10.5	36.3	33.7	1.9	5.9	32.7	34.9
	2015	1463	39.1	11.5	10.5	36.1	39.1	0.9	2.0	35.6	42.5
International Avg (n=33)	2011	28563	36.4	12.5	12.0	33.5	36.4	2.3	3.4	35.0	37.8
	2015	31055	39.1	12.6	11.6	33.3	39.1	1.8	1.6	37.8	40.3
Ontario, Canada	2011	673	28.1	14.1	13.2	31.6	28.1	2.5	10.5	24.9	31.4
	2015	632	39.3	12.4	11.1	32.2	39.3	2.1	3.0	38.2	40.4

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_13A (M052418A): Data and Chance / Applying Type: MC Key: D
Label: Liv's smartphone use

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	47.9	12.1	13.2	17.1	47.9	4.1	5.5	50.3	45.2
	2015	562	57.3	11.1	8.8	16.8	57.3	1.5	4.5	55.3	59.2
Norway (8)	2011	560	34.4	11.5	12.7	31.3	34.4	2.5	7.7	32.6	35.9
	2015	668	39.2	10.5	17.6	27.9	39.2	3.6	1.2	36.7	41.7
Abu Dhabi, UAE	2011	636	23.2	14.9	10.7	44.6	23.2	2.7	3.9	20.5	25.7
	2015	693	26.9	16.4	13.3	40.7	26.9	1.9	0.8	26.2	27.5
Dubai, UAE	2011	799	32.4	11.6	12.2	39.5	32.4	1.6	2.7	32.5	32.2
	2015	869	43.3	12.3	8.9	33.6	43.3	1.2	0.6	42.3	44.4
Florida, US	2011	247	32.1	12.1	14.2	36.2	32.1	0.4	5.1	23.9	39.8
	2015	286	29.1	14.7	13.8	41.0	29.1	1.2	0.2	25.7	32.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_13B (M052418B): Data and Chance / Applying Type: MC Key: A
Label: Smartphone use listening to music

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Australia	2011	1065	51.9	51.9	17.9	20.2	4.7	2.2	3.2	52.2	51.6
	2015	1468	51.9	51.9	18.3	21.6	5.6	1.3	1.3	55.0	48.7
Bahrain	2011	653	28.5	28.5	15.8	39.9	8.7	1.8	5.3	26.4	30.6
	2015	705	30.1	30.1	14.4	42.9	8.9	1.5	2.3	29.6	30.5
Botswana	2011	772	20.2	20.2	11.2	44.7	9.7	2.2	12.0	22.1	18.2
	2015	840	27.0	27.0	14.3	46.1	7.7	2.2	2.6	30.3	23.5
Chile	2011	820	34.2	34.2	17.7	29.6	7.7	3.2	7.6	35.5	32.7
	2015	693	43.3	43.3	19.6	24.8	6.8	2.8	2.8	46.8	40.4
Chinese Taipei	2011	719	70.7	70.7	8.1	18.4	2.0	0.5	0.4	72.5	68.9
	2015	819	74.1	74.1	7.4	15.9	2.0	0.0	0.6	75.1	73.2
England	2011	540	55.2	55.2	16.5	19.3	5.6	0.8	2.7	53.4	57.2
	2015	686	58.1	58.1	16.2	18.4	3.2	1.4	2.6	55.5	60.8
Georgia	2011	653	44.7	44.7	14.1	21.6	5.8	6.0	7.8	44.4	45.1
	2015	582	40.7	40.7	19.4	26.2	7.6	3.7	2.4	39.5	42.1
Hong Kong SAR	2011	575	77.0	77.0	8.8	9.2	2.8	0.9	1.3	78.1	75.9
	2015	597	81.2	81.2	8.4	6.8	2.6	0.2	0.7	77.9	84.4
Hungary	2011	746	57.9	57.9	17.2	16.5	4.9	1.2	2.3	58.3	57.4
	2015	689	62.3	62.3	16.3	18.0	1.5	0.6	1.3	61.5	62.9
Iran, Islamic Rep. of	2011	859	33.2	33.2	13.1	35.2	10.0	2.4	6.1	29.1	36.7
	2015	878	38.8	38.8	15.7	28.9	9.2	3.3	4.1	32.8	44.0
Israel	2011	683	55.1	55.1	11.3	18.4	4.2	3.1	7.9	52.6	57.6
	2015	793	52.5	52.5	13.1	21.9	5.1	3.1	4.3	50.6	54.4
Italy	2011	562	44.9	44.9	12.2	27.4	4.9	3.6	7.0	42.9	47.1
	2015	665	43.8	43.8	19.2	26.4	5.0	3.5	2.1	41.9	45.5
Japan	2011	617	60.0	60.0	15.4	17.3	3.4	1.1	2.8	60.3	59.8
	2015	669	68.6	68.6	13.5	13.6	3.2	0.8	0.3	69.2	68.0
Jordan	2011	1101	25.5	25.5	16.0	45.2	8.9	2.5	1.9	23.8	27.1
	2015	1124	25.1	25.1	16.8	43.2	9.9	2.3	2.6	26.0	24.2
Kazakhstan	2011	631	40.3	40.3	13.7	28.4	9.0	3.2	5.5	42.4	38.4
	2015	698	51.2	51.2	12.7	25.5	5.5	1.7	3.4	51.6	50.8
Korea, Rep. of	2011	736	76.5	76.5	9.3	12.1	1.6	0.0	0.6	74.8	78.2
	2015	753	71.4	71.4	12.2	14.6	1.5	0.2	0.1	72.2	70.7
Lebanon	2011	559	27.7	27.7	18.2	32.0	9.4	3.8	9.0	28.0	27.3
	2015	553	24.5	24.5	14.4	34.1	10.0	6.8	10.2	22.0	27.1
Lithuania	2011	684	50.8	50.8	19.1	22.3	4.2	1.4	2.3	49.5	52.1
	2015	620	53.6	53.6	18.4	22.5	2.7	1.4	1.4	54.8	52.5

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.

M13_13B (M052418B): Data and Chance / Applying Type: MC Key: A
Label: Smartphone use listening to music

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Malaysia	2011	817	41.6	41.6	14.3	32.2	7.1	0.5	4.4	41.7	41.4
	2015	1394	49.4	49.4	12.2	28.2	4.7	2.0	3.4	52.4	46.5
Morocco	2011	1309	21.5	21.5	20.5	38.2	8.9	2.0	8.8	21.8	21.3
	2015	1730	25.0	25.0	19.5	35.5	12.3	4.1	3.6	26.2	23.9
New Zealand	2011	761	48.6	48.6	18.6	22.8	5.7	1.3	2.9	45.0	51.7
	2015	1152	49.2	49.2	19.1	22.9	4.8	2.2	1.8	51.8	46.3
Oman	2011	1378	25.4	25.4	18.9	37.1	11.8	2.5	4.3	24.0	27.0
	2015	1271	34.4	34.4	13.2	38.7	10.2	1.7	1.8	34.4	34.4
Qatar	2011	639	31.9	31.9	16.5	35.1	11.4	2.5	2.6	27.9	35.9
	2015	770	39.9	39.9	17.2	30.0	7.4	1.7	3.9	42.4	37.5
Russian Federation	2011	707	56.5	56.5	11.9	18.7	2.1	3.3	7.5	55.6	57.3
	2015	685	62.9	62.9	14.4	14.3	2.4	3.0	3.0	64.7	61.0
Saudi Arabia	2011	619	25.9	25.9	15.8	41.8	11.5	0.8	4.2	23.7	28.0
	2015	541	26.7	26.7	20.6	40.2	10.8	0.5	1.2	25.5	28.0
Singapore	2011	855	81.0	81.0	7.2	7.1	1.9	1.0	1.7	82.4	79.7
	2015	872	87.8	87.8	3.5	6.2	1.3	0.5	0.7	89.7	85.9
Slovenia	2011	627	51.7	51.7	16.9	20.1	4.2	3.7	3.3	50.4	52.8
	2015	606	56.3	56.3	18.1	18.8	3.0	2.8	1.0	58.0	54.4
South Africa	2011	1692	19.8	19.8	16.4	42.6	15.4	2.0	3.7	20.6	19.1
	2015	1794	20.2	20.2	18.1	45.8	11.8	1.2	2.8	20.1	20.4
Sweden	2011	797	49.2	49.2	16.6	18.6	6.1	2.5	7.0	49.9	48.6
	2015	573	47.6	47.6	17.7	19.4	5.6	5.9	3.8	46.3	49.0
Thailand	2011	864	34.2	34.2	14.7	36.4	6.8	2.8	5.2	35.7	32.4
	2015	927	42.8	42.8	15.5	33.4	4.9	1.0	2.3	45.3	40.0
Turkey	2011	999	42.0	42.0	13.5	31.0	5.9	2.8	4.7	42.0	42.0
	2015	864	39.7	39.7	16.1	36.4	5.8	1.3	0.7	38.4	40.9
United Arab Emirates	2011	2029	36.2	36.2	14.0	37.0	6.7	1.5	4.6	37.7	34.7
	2015	2581	42.7	42.7	13.7	33.6	5.9	2.4	1.7	42.1	43.3
United States	2011	1498	49.1	49.1	15.5	24.2	3.1	0.8	7.3	51.0	47.0
	2015	1463	56.9	56.9	14.1	22.1	3.7	0.9	2.3	55.4	58.3
International Avg (n=33)	2011	28566	44.5	44.5	14.8	27.3	6.5	2.1	4.8	44.1	44.9
	2015	31055	47.9	47.9	15.2	26.6	5.8	2.1	2.4	48.0	47.7
Ontario, Canada	2011	673	43.8	43.8	17.9	20.9	2.9	2.7	11.9	44.3	43.3
	2015	632	53.3	53.3	17.7	17.8	3.8	3.8	3.7	53.5	53.0

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Label: Smartphone use listening to music

COUNTRY	Year	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Quebec, Canada	2011	878	53.4	53.4	12.2	18.4	3.8	3.7	8.5	56.8	49.7
	2015	561	58.8	58.8	12.8	18.8	1.9	2.1	5.6	55.9	61.8
Norway (8)	2011	560	43.4	43.4	16.3	23.9	4.2	3.0	9.1	44.3	42.6
	2015	668	50.6	50.6	19.3	19.2	4.4	3.4	3.1	51.1	50.1
Abu Dhabi, UAE	2011	636	35.5	35.5	14.3	36.0	7.2	1.8	5.1	36.7	34.4
	2015	693	39.5	39.5	16.9	31.5	8.0	2.5	1.6	40.5	38.4
Dubai, UAE	2011	799	43.5	43.5	14.1	30.8	6.2	1.7	3.6	45.3	41.9
	2015	869	54.1	54.1	12.0	27.6	3.8	1.2	1.4	54.9	53.2
Florida, US	2011	247	45.5	45.5	19.1	26.1	3.8	0.0	5.5	46.5	44.5
	2015	286	50.4	50.4	12.5	30.0	5.0	1.3	0.8	51.7	49.1

DIFF = Percent correct
Because of missing gender information, some totals may appear inconsistent.