

Mathematics: Number / Knowing

MP04_01 MP72178: Shelves labeled with perfect square - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	21.4	64.0	17.4	18.3	0.3	22.7	20.1
	2023	1556	14.6	69.6	11.9	17.7	0.7	16.1	13.3
Kuwait	2019	660	16.9	73.4	14.9	11.7	0.0	17.2	16.5
	2023	1073	14.9	72.6	12.7	14.4	0.3	12.2	17.9
South Africa (9)	2019	2975	13.9	65.3	10.6	24.1	0.0	15.8	11.7
	2023	2990	12.5	69.7	10.0	20.1	0.3	14.2	10.9

International Avg. (3)	2019	4492	17.4	67.5	14.3	18.1	0.1	18.6	16.1
	2023	5619	14.0	70.6	11.6	17.4	0.4	14.2	14.0

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

Mathematics: Number / Reasoning

MP04_02 MP72234: Statement about whole number x - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	44.6	18.3	19.4	12.3	40.2	9.5	0.4	49.5	40.4
	2023	1555	37.5	18.0	22.6	15.7	33.8	9.0	0.9	37.8	37.3
Kuwait	2019	660	39.8	21.3	19.6	16.7	38.1	4.1	0.3	42.8	36.4
	2023	1074	37.2	21.4	19.7	18.8	35.5	4.3	0.3	39.7	34.7
South Africa (9)	2019	2975	29.9	25.6	27.9	13.1	28.4	4.8	0.2	34.3	25.3
	2023	2993	27.0	25.4	28.3	15.5	25.6	4.9	0.3	30.6	23.6
International Avg. (3)	2019	4492	38.1	21.7	22.3	14.1	35.5	6.1	0.3	42.2	34.1
	2023	5622	33.9	21.6	23.6	16.7	31.6	6.0	0.5	36.0	31.8

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

Mathematics: Number / Knowing

MP04_03 MP72020: Compare values of decimals and fractions - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	36.4	51.1	18.6	25.3	4.5	0.5	35.8	37.0
	2023	1555	26.4	59.7	16.3	16.1	6.9	1.0	20.5	32.0
Kuwait	2019	660	24.8	65.9	15.6	16.5	1.7	0.3	21.3	28.8
	2023	1073	26.8	61.5	16.9	17.2	4.1	0.3	23.0	30.7
South Africa (9)	2019	2975	26.6	60.0	25.6	13.5	0.6	0.3	27.1	26.0
	2023	2989	29.4	55.5	28.2	14.9	1.0	0.4	29.1	29.2
International Avg. (3)	2019	4492	29.3	59.0	19.9	18.4	2.3	0.3	28.0	30.6
	2023	5617	27.5	58.9	20.5	16.1	4.0	0.5	24.2	30.7

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

Mathematics: Number / Applying

MP04_04 MP72027: Fraction of water in full container - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	60.1	58.1	21.2	9.0	8.4	2.9	0.5	55.6	64.1
	2023	1551	54.5	52.8	26.3	9.7	8.0	2.1	1.0	47.9	60.8
Kuwait	2019	660	37.7	36.9	31.6	13.1	16.2	1.9	0.3	30.0	46.2
	2023	1074	37.0	35.7	33.0	13.2	14.7	3.2	0.3	32.7	41.4
South Africa (9)	2019	2975	26.9	26.3	28.7	14.0	28.9	1.7	0.3	24.3	29.6
	2023	2991	25.3	25.0	22.6	15.6	35.3	1.1	0.4	23.3	26.8
International Avg. (3)	2019	4492	41.6	40.4	27.2	12.0	17.8	2.2	0.4	36.6	46.6
	2023	5616	39.0	37.9	27.3	12.8	19.4	2.1	0.5	34.6	43.0

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

Mathematics: Number / Applying

MP04_05 MP72052: Table of proportional x and y (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	12.6	79.4	11.4	8.2	1.0	12.3	12.8
	2023	1551	8.5	74.7	7.0	17.3	1.0	9.5	7.7
Kuwait	2019	660	12.0	83.2	11.4	5.1	0.3	11.3	12.8
	2023	1073	11.0	81.4	10.1	8.0	0.5	7.3	15.0
South Africa (9)	2019	2975	2.8	92.3	2.7	4.3	0.7	3.4	2.3
	2023	2986	4.8	91.2	4.6	3.7	0.5	4.4	5.3
International Avg. (3)	2019	4492	9.1	85.0	8.5	5.9	0.6	9.0	9.3
	2023	5610	8.1	82.4	7.2	9.7	0.7	7.1	9.3

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

Mathematics: Number / Applying

MP04_05A MP72052A: Table of proportional x and y - x value - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	17.2	74.2	15.4	9.4	1.0	17.3	17.1
	2023	1551	14.3	69.6	11.6	17.8	1.0	14.9	13.8
Kuwait	2019	660	21.1	74.6	19.9	5.3	0.3	21.7	20.3
	2023	1073	17.2	75.7	15.8	8.0	0.5	14.7	19.8
South Africa (9)	2019	2975	8.1	87.2	7.7	4.4	0.7	9.1	7.1
	2023	2989	6.3	89.4	6.0	4.0	0.5	6.7	6.1
International Avg. (3)	2019	4492	15.5	78.6	14.3	6.4	0.6	16.0	14.8
	2023	5613	12.6	78.2	11.1	9.9	0.7	12.1	13.2

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

Mathematics: Number / Applying

MP04_05B MP72052B: Table of proportional x and y - y value - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	20.7	70.2	18.4	10.4	1.0	20.3	21.1
	2023	1551	20.9	63.3	16.8	18.9	1.0	22.6	19.5
Kuwait	2019	660	21.2	74.0	20.0	5.8	0.3	20.4	22.2
	2023	1073	16.5	75.8	14.9	8.8	0.5	13.5	19.5
South Africa (9)	2019	2975	9.0	85.7	8.5	5.1	0.7	10.3	7.6
	2023	2986	7.0	88.3	6.6	4.5	0.5	6.4	7.5

International Avg. (3)	2019	4492	17.0	76.6	15.6	7.1	0.6	17.0	17.0
	2023	5610	14.8	75.8	12.8	10.7	0.7	14.2	15.5

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

Mathematics: Algebra / Knowing

MP04_06 MP72067: Value of y when a = 10, b = 4, and f = -2 - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	55.1	7.2	53.0	9.0	27.0	2.8	1.0	60.8	50.0
	2023	1551	49.7	10.6	47.2	13.6	23.6	3.8	1.2	50.9	48.6
Kuwait	2019	659	41.9	11.2	40.9	14.8	30.8	1.7	0.6	41.0	42.8
	2023	1074	42.4	12.4	40.9	15.7	27.5	2.7	0.8	38.9	45.9
South Africa (9)	2019	2975	31.5	12.0	30.7	10.3	44.4	1.9	0.8	33.4	29.5
	2023	2992	34.7	8.6	34.1	11.0	44.5	1.2	0.6	35.9	34.0
International Avg. (3)	2019	4491	42.8	10.1	41.5	11.4	34.1	2.1	0.8	45.1	40.7
	2023	5617	42.3	10.5	40.7	13.4	31.9	2.6	0.9	41.9	42.8

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

Mathematics: Algebra / Reasoning

MP04_07A MP72083A: Model planes - Explain amount of time - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	57.9	29.7	40.9	28.1	1.3	56.5	59.3
	2023	1551	57.8	24.0	32.9	41.8	1.3	53.2	62.2
Kuwait	2019	660	36.8	42.2	24.6	32.1	1.1	32.0	43.1
	2023	1074	46.2	32.3	27.7	39.2	0.9	42.7	50.5
South Africa (9)	2019	2975	20.7	73.1	19.1	6.9	0.9	20.6	20.9
	2023	2986	25.2	70.9	23.9	4.5	0.7	23.5	26.7
International Avg. (3)	2019	4492	38.5	48.3	28.2	22.4	1.1	36.4	41.1
	2023	5611	43.1	42.4	28.2	28.5	1.0	39.8	46.5

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

Mathematics: Algebra / Applying
MP04_07B MP72083B: Model planes - inequality - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	41.6	15.7	16.0	21.0	37.5	8.5	1.3	45.9	37.8
	2023	1552	36.5	16.5	16.9	23.5	32.7	9.0	1.4	40.3	32.8
Kuwait	2019	658	27.2	25.0	21.8	19.9	25.0	7.1	1.2	30.1	23.9
	2023	1074	28.5	26.9	18.5	19.4	25.8	8.5	0.9	33.3	23.4
South Africa (9)	2019	2975	35.9	21.2	17.5	21.7	33.8	4.5	1.4	37.8	33.7
	2023	2993	39.5	20.8	16.9	20.2	37.9	3.4	0.8	42.8	35.7
International Avg. (3)	2019	4490	34.9	20.6	18.4	20.9	32.1	6.7	1.3	37.9	31.8
	2023	5619	34.8	21.4	17.4	21.0	32.1	7.0	1.1	38.8	30.7

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

Mathematics: Algebra / Applying

MP04_08A MP72108A: Small triangles in figure - figure 10 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	65.2	32.2	60.4	5.9	1.5	66.9	63.7
	2023	1555	55.6	38.2	47.8	12.6	1.4	55.9	55.2
Kuwait	2019	660	46.0	48.3	41.2	9.1	1.4	47.0	44.8
	2023	1074	45.1	46.5	38.2	14.3	0.9	45.6	44.6
South Africa (9)	2019	2975	29.7	63.7	26.9	7.5	1.9	29.9	29.4
	2023	2989	30.6	61.1	26.9	11.1	1.0	31.8	29.2
International Avg. (3)	2019	4492	47.0	48.1	42.8	7.5	1.6	47.9	46.0
	2023	5618	43.7	48.6	37.6	12.6	1.1	44.4	43.0

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

Mathematics: Algebra / Reasoning

MP04_08B MP72108B: Small triangles in figure - rule - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	57.8	32.9	45.0	20.6	1.5	59.2	56.3
	2023	1555	57.2	26.7	35.7	35.6	2.1	58.9	55.5
Kuwait	2019	660	25.5	62.1	21.2	15.0	1.7	24.7	26.3
	2023	1074	27.5	54.5	20.7	23.1	1.7	27.0	28.1
South Africa (9)	2019	2975	15.2	74.9	13.4	9.2	2.5	16.1	14.1
	2023	2989	12.6	79.1	11.4	8.1	1.4	12.4	12.5

International Avg. (3)	2019	4492	32.8	56.6	26.5	14.9	1.9	33.4	32.2
	2023	5618	32.4	53.4	22.6	22.3	1.7	32.8	32.0

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

Mathematics: Geometry / Applying

MP04_09 MP72181: Translation of triangle on grid - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	28.6	63.2	25.3	9.7	1.8	31.6	25.7
	2023	1554	20.0	67.9	17.0	12.6	2.5	16.9	23.1
Kuwait	2019	660	27.6	64.4	24.5	9.2	1.9	24.8	30.8
	2023	1070	29.6	59.5	25.0	13.8	1.7	28.0	31.4
South Africa (9)	2019	2975	4.8	82.0	4.2	10.9	2.9	4.3	5.5
	2023	2988	7.0	81.9	6.1	10.4	1.6	5.4	8.6
International Avg. (3)	2019	4492	20.3	69.9	18.0	9.9	2.2	20.2	20.7
	2023	5612	18.9	69.7	16.0	12.3	1.9	16.8	21.0

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

Mathematics: Geometry / Reasoning

MP04_10 MP72126: Area of shaded part of square ABCD - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	21.8	51.1	4.5	12.6	29.8	2.0	19.6	24.0
	2023	1550	12.8	48.5	3.6	5.6	39.6	2.7	14.0	11.7
Kuwait	2019	658	11.1	73.8	13.2	3.5	7.6	1.9	10.1	12.5
	2023	1071	11.4	73.2	9.1	5.4	10.3	2.0	9.2	13.8
South Africa (9)	2019	2975	8.3	77.7	10.7	2.2	5.7	3.7	7.7	9.0
	2023	2989	6.8	81.9	8.8	1.9	5.4	2.0	6.4	7.4
International Avg. (3)	2019	4490	13.8	67.5	9.5	6.1	14.3	2.5	12.5	15.1
	2023	5610	10.3	67.9	7.2	4.3	18.4	2.2	9.9	11.0

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

Mathematics: Data and Probability / Applying
MP04_11 MP72164: Important for counting planes (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	15.4	79.5	14.5	3.0	3.0	17.1	13.9
	2023	1551	11.5	80.5	10.4	4.7	4.3	10.5	12.3
Kuwait	2019	654	9.7	84.4	9.1	3.8	2.7	7.6	12.1
	2023	1067	9.0	84.8	8.4	3.9	2.8	7.0	11.2
South Africa (9)	2019	2975	9.8	82.6	9.0	3.8	4.7	9.3	10.4
	2023	2976	10.1	86.0	9.7	1.8	2.5	10.1	10.5
International Avg. (3)	2019	4486	11.6	82.2	10.8	3.5	3.5	11.3	12.1
	2023	5594	10.2	83.8	9.5	3.5	3.2	9.2	11.4

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

Mathematics: Data and Probability / Applying
MP04_11A MP72164A: Important for counting planes - times to start/finish - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	75.2	69.2	22.8	5.0	3.0	73.9	76.4
	2023	1551	71.8	63.4	24.9	7.4	4.3	69.1	74.4
Kuwait	2019	657	78.4	72.1	19.8	5.4	2.7	78.0	78.9
	2023	1068	78.1	70.7	19.9	6.6	2.8	75.5	80.8
South Africa (9)	2019	2975	73.9	65.3	23.0	7.0	4.7	72.7	75.4
	2023	2985	75.3	69.2	22.7	5.7	2.5	73.7	77.0
International Avg. (3)	2019	4489	75.9	68.9	21.9	5.8	3.5	74.9	76.9
	2023	5604	75.1	67.8	22.5	6.6	3.2	72.8	77.4

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

Mathematics: Data and Probability / Applying

MP04_11B MP72164B: Important for counting planes - direction - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	61.3	35.6	56.5	4.9	3.0	60.3	62.2
	2023	1551	52.4	41.8	46.1	7.8	4.3	53.7	51.3
Kuwait	2019	656	51.8	43.8	47.2	6.2	2.7	49.1	54.9
	2023	1067	50.5	44.4	45.3	7.5	2.8	50.3	50.7
South Africa (9)	2019	2975	53.7	40.4	46.8	8.2	4.7	51.9	55.7
	2023	2984	52.0	43.8	47.4	6.3	2.5	51.3	53.2
International Avg. (3)	2019	4488	55.6	40.0	50.1	6.4	3.5	53.8	57.6
	2023	5602	51.7	43.3	46.3	7.2	3.2	51.8	51.7

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

Mathematics: Data and Probability / Applying
MP04_11C MP72164C: Important for counting planes - type of plane - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	71.2	25.9	64.1	7.0	3.0	70.9	71.6
	2023	1551	66.6	29.3	58.4	8.0	4.3	68.6	64.7
Kuwait	2019	657	58.7	37.1	52.7	7.5	2.7	60.7	56.4
	2023	1067	64.7	31.2	57.3	8.7	2.8	65.0	64.5
South Africa (9)	2019	2975	49.4	44.4	43.4	7.5	4.7	47.6	51.6
	2023	2979	53.8	42.0	48.9	6.6	2.5	51.7	56.7
International Avg. (3)	2019	4489	59.8	35.8	53.4	7.3	3.5	59.7	59.9
	2023	5597	61.7	34.2	54.9	7.7	3.2	61.8	62.0

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

Mathematics: Data and Probability / Applying

MP04_11D MP72164D: Important for counting planes - days to count - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	64.4	58.5	32.4	6.1	3.0	65.4	63.4
	2023	1551	60.3	52.7	34.7	8.3	4.3	61.3	59.3
Kuwait	2019	657	54.6	49.2	40.9	7.2	2.7	49.7	60.2
	2023	1068	53.3	47.2	41.4	8.6	2.8	50.7	56.0
South Africa (9)	2019	2975	63.1	54.7	32.0	8.6	4.7	61.8	64.6
	2023	2979	63.4	57.7	33.3	6.5	2.5	65.1	61.8
International Avg. (3)	2019	4489	60.7	54.1	35.1	7.3	3.5	59.0	62.7
	2023	5598	59.0	52.5	36.5	7.8	3.2	59.0	59.0

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

Mathematics: Data and Probability / Applying

MP04_11E MP72164E: Important for counting planes - time to pass over - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	44.4	50.4	40.2	6.4	3.0	45.1	43.8
	2023	1551	38.9	54.0	34.4	7.3	4.3	36.2	41.4
Kuwait	2019	655	38.6	55.5	34.8	6.9	2.7	35.3	42.3
	2023	1068	40.0	53.5	35.7	8.0	2.8	35.7	44.7
South Africa (9)	2019	2975	40.0	52.5	35.0	7.8	4.7	37.8	42.5
	2023	2985	38.5	56.6	35.4	5.5	2.5	35.6	41.6
International Avg. (3)	2019	4487	41.0	52.8	36.7	7.0	3.5	39.4	42.9
	2023	5604	39.1	54.7	35.2	6.9	3.2	35.8	42.6

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

Mathematics: Data and Probability / Knowing

MP04_12A MP72185A: Probability of picking marble - not green - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	28.8	62.9	25.5	7.7	3.9	29.8	28.0
	2023	1551	26.1	64.3	22.7	8.1	4.8	24.0	28.0
Kuwait	2019	657	17.5	75.9	16.1	4.7	3.4	14.4	21.1
	2023	1071	14.8	75.0	13.0	8.2	3.7	13.2	16.4
South Africa (9)	2019	2975	4.5	85.3	4.0	4.3	6.4	4.5	4.5
	2023	2989	5.0	87.1	4.6	5.4	2.9	4.1	5.7
International Avg. (3)	2019	4489	16.9	74.7	15.2	5.5	4.6	16.2	17.8
	2023	5611	15.3	75.5	13.4	7.3	3.8	13.8	16.7

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

Mathematics: Data and Probability / Knowing

MP04_12B MP72185B: Probability of picking marble - yellow or blue - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	31.2	60.1	27.2	5.2	7.6	31.4	30.9
	2023	1551	26.3	61.6	22.0	6.7	9.7	24.9	27.6
Kuwait	2019	657	16.9	75.9	15.4	2.9	5.7	14.0	20.2
	2023	1071	14.9	73.8	12.9	5.7	7.6	11.5	18.6
South Africa (9)	2019	2975	5.3	83.5	4.7	3.3	8.5	5.6	4.9
	2023	2989	5.3	86.4	4.8	3.3	5.4	5.0	5.7
International Avg. (3)	2019	4489	17.8	73.2	15.8	3.8	7.3	17.0	18.7
	2023	5611	15.5	73.9	13.2	5.2	7.6	13.8	17.3

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

Mathematics: Number / Applying

MP08_01 MP72002: Show 28 is a perfect number - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	31.2	53.2	24.2	22.6	0.0	36.0	26.8
	2023	1549	20.6	49.9	12.9	37.1	0.1	22.2	18.9
Kuwait	2019	652	19.0	64.7	15.2	19.9	0.2	18.3	20.1
	2023	1076	23.4	53.1	16.3	29.8	0.8	19.7	27.7
South Africa (9)	2019	2981	18.1	74.6	16.4	9.0	0.0	18.5	17.6
	2023	2975	16.2	78.0	15.1	6.8	0.1	15.9	16.5

International Avg. (3)	2019	4481	22.8	64.2	18.6	17.2	0.1	24.2	21.5
	2023	5600	20.1	60.3	14.7	24.6	0.4	19.3	21.0

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

Mathematics: Number / Knowing

MP08_02 MP72188: 3 tenths + 107 thousandths = - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	47.5	15.7	33.1	46.3	2.4	2.4	0.2	52.9	42.9
	2023	1549	41.7	15.8	36.8	39.7	2.9	4.3	0.4	42.1	41.3
Kuwait	2019	652	28.2	22.4	45.8	27.4	1.6	2.5	0.2	30.7	25.3
	2023	1075	31.6	23.5	40.8	30.6	2.2	2.0	0.9	30.7	32.4
South Africa (9)	2019	2981	13.1	17.3	65.4	12.8	1.9	2.6	0.0	12.0	14.3
	2023	2974	13.0	16.9	66.8	12.7	1.4	1.9	0.3	11.5	14.8
International Avg. (3)	2019	4481	29.6	18.5	48.1	28.8	2.0	2.5	0.1	31.9	27.5
	2023	5598	28.7	18.7	48.2	27.7	2.2	2.7	0.5	28.1	29.5

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

Mathematics: Number / Applying

MP08_03 MP72035: Value of M in $3/4 \times M = 1/2$ - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	40.0	49.8	33.2	16.8	0.2	44.4	35.9
	2023	1549	28.4	50.3	20.0	29.2	0.5	28.6	28.2
Kuwait	2019	652	20.1	71.6	18.1	9.7	0.6	19.2	21.3
	2023	1076	25.0	59.8	19.9	19.4	0.9	24.7	25.3
South Africa (9)	2019	2981	14.3	77.0	12.8	10.1	0.0	15.0	13.6
	2023	2973	18.8	73.1	16.9	9.5	0.5	20.5	17.4

International Avg. (3)	2019	4481	24.8	66.2	21.4	12.2	0.3	26.2	23.6
	2023	5598	24.1	61.0	18.9	19.4	0.6	24.6	23.6

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

Mathematics: Number / Knowing

MP08_04 MP72055: Numbers equivalent to 60% - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	14.1	81.6	13.4	4.6	0.4	13.5	14.7
	2023	1549	12.1	83.3	11.5	4.6	0.6	11.2	13.0
Kuwait	2019	652	6.5	89.1	6.2	4.1	0.6	4.3	9.2
	2023	1075	11.9	84.3	11.4	3.4	0.9	8.9	14.8
South Africa (9)	2019	2981	7.5	86.4	7.0	6.6	0.1	7.3	7.7
	2023	2975	12.0	83.0	11.3	5.0	0.6	11.6	12.2
International Avg. (3)	2019	4481	9.4	85.7	8.9	5.1	0.4	8.4	10.5
	2023	5599	12.0	83.6	11.4	4.3	0.7	10.6	13.4

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

Mathematics: Algebra / Knowing

MP08_05 MP72222: Value of sqrt expression for x = 10 and y = 8 - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	32.2	31.1	31.0	13.8	20.3	3.3	0.5	35.3	29.5
	2023	1549	28.1	34.7	27.2	14.9	19.9	2.7	0.6	27.4	28.7
Kuwait	2019	651	29.8	34.1	28.7	16.7	16.8	3.1	0.6	26.2	34.0
	2023	1075	32.6	32.5	31.9	16.6	16.8	1.2	1.1	30.6	34.6
South Africa (9)	2019	2981	29.3	32.8	28.9	16.0	20.9	1.2	0.2	30.3	28.4
	2023	2975	44.5	24.7	43.5	10.5	19.1	1.4	0.8	45.5	43.8
International Avg. (3)	2019	4480	30.4	32.7	29.5	15.5	19.3	2.5	0.4	30.6	30.6
	2023	5599	35.1	30.6	34.2	14.0	18.6	1.8	0.8	34.5	35.7

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

Mathematics: Algebra / Applying

MP08_06 MP72090: Inequality for relationship between areas of rectangles - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	33.6	32.2	18.4	24.2	20.8	3.8	0.5	40.5	27.7
	2023	1549	30.2	28.6	19.7	26.3	20.0	4.8	0.6	33.2	27.5
Kuwait	2019	651	32.3	30.9	21.0	24.2	19.6	3.4	1.0	30.3	34.8
	2023	1075	29.0	27.7	20.2	25.2	22.5	3.4	1.1	27.1	30.7
South Africa (9)	2019	2981	22.5	22.2	20.4	30.2	25.8	1.2	0.2	23.4	21.4
	2023	2974	20.0	19.5	20.1	31.5	26.3	1.7	1.0	22.0	18.3
International Avg. (3)	2019	4480	29.5	28.4	20.0	26.2	22.1	2.8	0.6	31.4	28.0
	2023	5598	26.4	25.3	20.0	27.7	22.9	3.3	0.9	27.4	25.5

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

Mathematics: Algebra / Reasoning

MP08_07 MP72233: Weight of one block on a balance - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	50.5	27.0	48.3	13.7	6.7	3.8	0.5	45.8	54.4
	2023	1549	50.8	27.0	48.1	13.1	6.5	4.6	0.7	50.9	50.7
Kuwait	2019	651	48.1	29.3	46.0	14.3	6.1	2.9	1.3	44.9	51.7
	2023	1074	47.8	29.2	45.5	12.6	7.9	3.3	1.6	42.1	53.3
South Africa (9)	2019	2981	47.0	27.5	46.0	15.6	8.7	1.9	0.3	42.9	51.7
	2023	2975	44.5	29.7	43.3	15.2	9.0	1.3	1.6	38.1	51.2
International Avg. (3)	2019	4480	48.5	28.0	46.8	14.5	7.2	2.8	0.7	44.5	52.6
	2023	5598	47.7	28.6	45.6	13.7	7.8	3.0	1.3	43.7	51.8

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

Mathematics: Algebra / Applying
MP08_08A MP72106A: Figures made of straws - Figure 7 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	75.2	23.3	70.8	4.8	1.1	78.8	71.9
	2023	1549	64.9	31.8	58.9	8.2	1.1	63.9	65.8
Kuwait	2019	652	35.8	59.7	33.3	5.7	1.3	35.5	36.1
	2023	1076	37.4	55.9	33.4	9.1	1.6	34.8	40.1
South Africa (9)	2019	2981	54.1	44.9	53.0	1.4	0.7	53.6	54.7
	2023	2975	52.0	46.0	49.8	2.2	2.0	52.2	51.5
International Avg. (3)	2019	4481	55.0	42.6	52.4	4.0	1.0	56.0	54.2
	2023	5600	51.4	44.6	47.3	6.5	1.6	50.3	52.5

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

Mathematics: Algebra / Reasoning

MP08_08B MP72106B: Figures made of straws - Figure 50 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	48.5	44.2	41.7	12.7	1.4	58.9	39.4
	2023	1549	42.1	45.8	33.3	19.4	1.5	46.2	38.2
Kuwait	2019	652	14.9	75.1	13.2	10.2	1.5	16.1	13.5
	2023	1076	13.1	72.5	10.9	14.9	1.8	11.0	15.3
South Africa (9)	2019	2981	18.1	76.6	16.9	5.5	0.9	19.0	17.1
	2023	2975	18.1	75.5	16.7	5.1	2.8	17.6	18.7
International Avg. (3)	2019	4481	27.2	65.3	23.9	9.5	1.3	31.3	23.3
	2023	5600	24.4	64.6	20.3	13.1	2.0	24.9	24.1

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

Mathematics: Algebra / Reasoning

MP08_08C MP72106C: Figures made of straws - rule - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	45.9	41.3	35.1	22.0	1.7	54.3	38.1
	2023	1549	42.9	36.9	27.7	33.8	1.6	44.9	40.7
Kuwait	2019	652	13.0	68.5	10.2	19.6	1.6	12.1	14.1
	2023	1077	10.6	61.7	7.3	29.3	1.8	9.5	11.7
South Africa (9)	2019	2981	10.1	82.6	9.3	7.2	1.0	11.0	9.0
	2023	2975	10.1	81.0	9.1	6.8	3.1	10.7	9.6
International Avg. (3)	2019	4481	23.0	64.1	18.2	16.3	1.4	25.8	20.4
	2023	5601	21.2	59.8	14.7	23.3	2.2	21.7	20.7

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

Mathematics: Geometry / Knowing
MP08_09A MP72128A: Parallelogram - area - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	23.0	55.6	16.6	26.2	1.7	28.2	18.0
	2023	1549	20.4	48.7	12.5	37.2	1.6	20.1	20.7
Kuwait	2019	652	20.1	72.5	18.2	7.6	1.6	19.6	20.7
	2023	1076	15.4	71.1	13.0	14.0	2.0	13.0	18.1
South Africa (9)	2019	2981	8.4	86.7	8.0	4.1	1.1	9.3	7.5
	2023	2975	8.0	85.6	7.4	3.5	3.5	8.2	7.8
International Avg. (3)	2019	4481	17.2	71.6	14.3	12.6	1.5	19.1	15.4
	2023	5600	14.6	68.5	11.0	18.2	2.4	13.7	15.5

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

Mathematics: Geometry / Reasoning
MP08_09B MP72128B: Parallelogram - perimeter - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	19.1	49.4	8.7	8.4	31.4	2.2	19.7	18.6
	2023	1549	16.9	42.9	7.2	5.9	42.1	1.8	16.9	16.9
Kuwait	2019	652	8.7	78.4	3.7	5.8	9.9	2.2	5.9	12.3
	2023	1077	10.3	70.5	6.1	5.4	15.8	2.3	8.8	11.9
South Africa (9)	2019	2981	5.4	86.1	5.2	2.5	4.9	1.3	5.7	5.1
	2023	2974	5.8	85.3	3.5	3.6	3.7	3.9	4.8	6.9

International Avg. (3)	2019	4481	11.1	71.3	5.9	5.5	15.4	1.9	10.4	12.0
	2023	5600	11.0	66.2	5.6	5.0	20.5	2.7	10.2	11.9

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

Mathematics: Geometry / Applying

MP08_10 MP72119: Point to complete a parallelogram - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	29.4	63.7	26.5	7.6	2.2	31.6	27.4
	2023	1549	26.5	62.2	22.4	13.5	1.9	29.6	23.4
Kuwait	2019	652	16.1	75.0	14.4	8.4	2.2	16.3	15.8
	2023	1077	18.4	71.6	16.1	10.0	2.3	17.9	18.8
South Africa (9)	2019	2981	12.9	75.8	11.2	11.6	1.4	12.6	13.3
	2023	2975	10.3	80.4	9.2	6.3	4.1	8.2	12.4

International Avg. (3)	2019	4481	19.5	71.5	17.4	9.2	1.9	20.2	18.8
	2023	5601	18.4	71.4	15.9	9.9	2.8	18.6	18.2

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

Mathematics: Data and Probability / Applying
MP08_11A MP72153A: Bar graph of cars sold - per quarter - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	18.6	69.5	15.9	12.3	2.3	14.9	22.0
	2023	1549	15.4	67.4	12.3	18.2	2.1	14.0	16.7
Kuwait	2019	652	13.2	79.5	12.1	6.1	2.4	12.0	14.7
	2023	1079	22.8	67.9	20.1	9.4	2.6	21.0	24.7
South Africa (9)	2019	2981	9.1	85.8	8.6	4.1	1.5	9.3	8.9
	2023	2974	9.6	83.3	8.8	3.2	4.7	8.5	10.7
International Avg. (3)	2019	4481	13.6	78.3	12.2	7.5	2.1	12.0	15.2
	2023	5602	15.9	72.9	13.7	10.3	3.1	14.5	17.4

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

Mathematics: Data and Probability / Applying
MP08_11B MP72153B: Bar graph of cars sold - percent in 3rd quarter - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	5.2	74.6	4.1	18.8	2.6	6.1	4.4
	2023	1549	2.9	69.5	2.1	25.1	3.3	2.1	3.6
Kuwait	2019	652	2.4	88.9	2.2	6.4	2.6	1.2	3.9
	2023	1079	5.5	82.5	4.8	9.6	3.0	5.3	5.8
South Africa (9)	2019	2981	3.2	91.7	3.0	3.5	1.9	3.4	2.9
	2023	2974	5.0	87.4	4.6	2.2	5.7	4.4	5.8
International Avg. (3)	2019	4481	3.6	85.0	3.1	9.6	2.3	3.6	3.7
	2023	5602	4.5	79.8	3.8	12.3	4.0	3.9	5.1

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

Mathematics: Data and Probability / Applying
MP08_12 MP72172: Probability of object landing upright - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	43.1	14.2	28.6	11.1	40.7	2.6	2.9	48.5	38.6
	2023	1549	40.4	15.4	28.2	12.5	37.9	2.1	3.9	40.4	40.3
Kuwait	2019	652	33.4	13.4	39.9	10.0	31.7	2.5	2.6	35.5	31.0
	2023	1080	36.5	10.5	40.9	9.1	34.8	1.4	3.2	33.2	39.7
South Africa (9)	2019	2981	24.6	9.4	56.7	6.4	23.7	1.8	2.1	26.4	22.7
	2023	2973	23.5	9.3	54.1	7.1	21.7	1.9	5.9	26.3	21.5
International Avg. (3)	2019	4481	33.7	12.3	41.7	9.1	32.0	2.3	2.5	36.8	30.7
	2023	5602	33.5	11.7	41.1	9.6	31.5	1.8	4.3	33.3	33.8

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

Mathematics: Number / Knowing

MP09_01 MP62329: Two million, fifty thousand, three hundred seven - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	74.6	10.7	74.1	3.2	11.3	0.6	0.1	77.2	72.3
	2023	1560	71.8	7.9	70.8	7.2	12.6	1.2	0.2	70.2	73.3
Kuwait	2019	650	56.1	16.2	55.6	7.1	20.3	0.7	0.2	57.3	54.7
	2023	1088	62.2	16.9	60.9	4.8	15.2	1.8	0.2	54.0	70.6
South Africa (9)	2019	2969	57.0	20.0	56.6	7.3	15.3	0.7	0.1	55.0	59.3
	2023	2938	56.5	19.9	56.1	7.1	16.3	0.5	0.1	52.7	60.9
International Avg. (3)	2019	4465	62.6	15.6	62.1	5.8	15.6	0.7	0.1	63.2	62.1
	2023	5586	63.5	14.9	62.6	6.4	14.7	1.2	0.2	58.9	68.3

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

Mathematics: Number / Reasoning

MP09_02 MP62151: Number of cups of water to fill 3 pitchers - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	24.3	68.7	22.0	9.2	0.1	18.9	29.3
	2023	1560	20.9	68.2	18.0	13.5	0.4	16.8	24.5
Kuwait	2019	652	5.5	86.3	5.0	8.5	0.2	4.1	7.0
	2023	1087	10.0	79.7	8.8	11.2	0.2	6.8	13.4
South Africa (9)	2019	2969	3.1	92.5	2.9	4.5	0.1	2.6	3.7
	2023	2931	5.5	91.9	5.4	2.7	0.1	3.4	7.8
International Avg. (3)	2019	4467	11.0	82.5	10.0	7.4	0.1	8.6	13.3
	2023	5578	12.1	79.9	10.7	9.1	0.2	9.0	15.2

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

Mathematics: Number / Applying

MP09_03 MP62346: Explain which brand has cheaper price per battery - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	16.5	82.0	16.3	1.6	0.1	18.5	14.8
	2023	1560	19.1	78.7	18.6	2.3	0.5	17.9	20.2
Kuwait	2019	651	5.5	93.1	5.4	1.3	0.2	6.7	4.1
	2023	1087	6.9	90.6	6.7	2.4	0.2	5.8	8.1
South Africa (9)	2019	2969	6.3	92.5	6.3	1.1	0.1	6.9	5.7
	2023	2932	7.1	91.5	7.0	1.5	0.1	7.0	7.4

International Avg. (3)	2019	4466	9.5	89.2	9.3	1.3	0.1	10.7	8.2
	2023	5579	11.0	86.9	10.8	2.0	0.3	10.2	11.9

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

Mathematics: Number / Applying

MP09_04 MP62212: Four containers partially filled with water - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	20.5	52.0	20.0	5.4	20.2	2.3	0.1	18.8	22.0
	2023	1560	18.6	53.2	17.9	6.4	18.6	3.4	0.5	18.3	18.9
Kuwait	2019	650	21.6	50.9	21.2	11.1	14.9	1.7	0.2	21.6	21.7
	2023	1088	21.7	48.5	21.0	8.5	18.5	3.1	0.4	21.6	21.9
South Africa (9)	2019	2969	11.1	60.8	10.9	7.1	19.9	1.2	0.1	11.6	10.5
	2023	2937	13.7	59.9	13.6	6.3	19.3	0.9	0.1	13.4	14.2
International Avg. (3)	2019	4465	17.7	54.6	17.4	7.9	18.3	1.7	0.1	17.3	18.1
	2023	5585	18.0	53.8	17.5	7.1	18.8	2.5	0.3	17.8	18.3

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

Mathematics: Algebra / Knowing

MP09_05 MP62056: Write the expression with x and y in simplest form - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	845	15.1	70.4	12.6	16.5	0.6	17.2	13.1
	2023	1560	14.1	60.8	9.9	28.7	0.6	14.7	13.4
Kuwait	2019	651	6.2	82.0	5.5	12.3	0.3	5.0	7.8
	2023	1087	6.8	75.1	5.5	18.7	0.6	5.9	7.8
South Africa (9)	2019	2969	3.7	91.4	3.5	4.9	0.2	4.0	3.4
	2023	2932	4.7	91.3	4.5	3.9	0.2	4.5	5.0

International Avg. (3)	2019	4465	8.4	81.2	7.2	11.2	0.4	8.7	8.1
	2023	5579	8.5	75.8	6.6	17.1	0.5	8.3	8.7

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

Mathematics: Algebra / Knowing

MP09_06 MP62317: Points on a parabola graph - fill in table - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	5.4	77.1	4.4	17.8	0.6	5.0	5.8
	2023	1560	5.8	69.5	4.3	25.4	0.8	6.0	5.6
Kuwait	2019	652	7.7	82.8	6.9	9.7	0.6	6.7	8.8
	2023	1088	7.1	81.5	6.3	11.4	0.8	6.0	8.3
South Africa (9)	2019	2969	7.7	87.5	7.3	4.9	0.2	7.6	7.9
	2023	2932	9.8	85.9	9.3	4.5	0.3	10.3	9.4

International Avg. (3)	2019	4467	6.9	82.5	6.2	10.8	0.5	6.4	7.5
	2023	5580	7.6	79.0	6.6	13.8	0.7	7.5	7.7

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

Mathematics: Algebra / Applying

MP09_07 MP62350: Given point and slope, select collinear point - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	19.8	13.2	27.5	30.1	17.5	11.0	0.7	19.7	19.9
	2023	1560	18.8	12.0	26.6	33.4	16.7	10.3	1.0	19.4	18.3
Kuwait	2019	652	15.8	15.6	31.7	32.4	14.9	4.4	1.0	16.9	14.4
	2023	1088	14.0	14.9	34.8	31.4	13.2	4.8	0.9	13.0	15.1
South Africa (9)	2019	2969	17.6	21.3	29.4	29.1	17.0	2.8	0.3	18.0	17.1
	2023	2934	12.9	18.3	36.6	29.6	12.5	2.5	0.4	10.9	15.1
International Avg. (3)	2019	4467	17.7	16.7	29.6	30.5	16.5	6.1	0.6	18.2	17.1
	2023	5582	15.3	15.1	32.7	31.4	14.2	5.9	0.8	14.4	16.2

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

Mathematics: Algebra / Reasoning
MP09_08 MP62078: Given perimeter of triangle ABC find length of AB - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	26.2	59.2	21.0	18.8	1.0	30.0	22.4
	2023	1560	18.6	56.5	13.0	29.4	1.1	21.7	15.8
Kuwait	2019	652	12.6	79.3	11.5	8.3	1.0	12.3	13.0
	2023	1088	14.5	75.0	12.7	11.2	1.1	13.2	15.9
South Africa (9)	2019	2969	9.2	85.0	8.6	5.9	0.5	9.7	8.5
	2023	2931	10.9	84.1	10.3	5.0	0.7	12.0	9.9

International Avg. (3)	2019	4467	16.0	74.5	13.7	11.0	0.9	17.4	14.7
	2023	5579	14.7	71.9	12.0	15.2	1.0	15.6	13.9

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

Mathematics: Geometry / Knowing

MP09_09 MP62284: Choose the pair of congruent quadrilaterals - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	57.2	21.3	55.2	5.3	14.7	2.5	1.0	60.9	53.8
	2023	1560	51.5	24.2	49.2	8.3	13.9	3.2	1.2	54.2	49.1
Kuwait	2019	652	52.0	30.8	50.2	4.9	10.6	2.5	1.0	55.3	48.1
	2023	1087	49.9	31.5	48.2	5.1	11.7	2.3	1.2	53.9	45.8
South Africa (9)	2019	2969	48.7	31.6	47.5	8.4	10.1	1.7	0.7	46.9	50.7
	2023	2930	43.6	33.8	42.8	9.8	11.8	1.1	0.7	44.9	42.6
International Avg. (3)	2019	4467	52.6	27.9	50.9	6.2	11.8	2.2	0.9	54.4	50.9
	2023	5577	48.3	29.9	46.7	7.7	12.5	2.2	1.1	51.0	45.8

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

Mathematics: Geometry / Applying

MP09_10 MP62245: Coordinates of 4th vertex for Pia's rectangle - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	36.7	33.9	27.3	18.6	12.6	6.0	1.6	43.6	30.6
	2023	1560	29.7	27.5	32.2	20.0	12.8	6.2	1.4	29.7	29.8
Kuwait	2019	652	37.9	36.2	20.7	23.1	15.7	2.9	1.4	39.1	36.4
	2023	1087	37.8	36.2	21.2	20.2	18.1	3.0	1.3	37.0	38.5
South Africa (9)	2019	2969	29.2	28.4	24.3	24.9	19.5	2.1	0.8	30.3	28.1
	2023	2936	28.3	27.8	26.2	25.4	18.7	1.2	0.8	29.1	28.1
International Avg. (3)	2019	4467	34.6	32.8	24.1	22.2	15.9	3.7	1.3	37.7	31.7
	2023	5583	31.9	30.5	26.5	21.9	16.5	3.4	1.1	31.9	32.1

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

Mathematics: Geometry / Reasoning

MP09_11 MP62287: Shaded areas with overlapping congruent triangles - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	844	10.4	58.9	6.8	32.0	2.3	13.6	7.0
	2023	1560	6.1	51.5	3.3	43.4	1.7	8.3	3.8
Kuwait	2019	652	3.3	76.1	2.6	19.7	1.6	4.9	1.1
	2023	1088	12.7	57.8	8.4	32.5	1.3	12.2	13.3
South Africa (9)	2019	2969	3.6	86.8	3.3	9.0	1.0	4.4	2.6
	2023	2933	3.7	89.1	3.4	6.7	0.9	3.9	3.5
International Avg. (3)	2019	4465	5.8	73.9	4.2	20.2	1.6	7.6	3.6
	2023	5581	7.5	66.1	5.0	27.5	1.3	8.2	6.9

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

Mathematics: Data and Probability / Applying
MP09_12A MP62345A: Fishing spots - calculate mean and median - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	845	27.5	44.3	32.1	6.9	13.7	2.9	30.6	24.6
	2023	1560	19.0	48.4	20.1	3.6	25.2	2.6	20.3	17.8
Kuwait	2019	652	44.5	29.2	43.6	19.0	6.2	2.0	48.3	39.7
	2023	1083	34.3	42.6	32.1	14.6	9.0	1.8	38.1	30.2
South Africa (9)	2019	2969	20.1	61.6	31.0	3.9	2.0	1.4	21.9	18.1
	2023	2933	7.9	81.7	11.5	1.8	3.9	1.1	8.7	7.1
International Avg. (3)	2019	4466	30.7	45.0	35.6	9.9	7.3	2.1	33.6	27.5
	2023	5576	20.4	57.6	21.2	6.7	12.7	1.8	22.4	18.4

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

Mathematics: Data and Probability / Applying
MP09_13 MP62115: Marble maze with intersections - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	25.4	29.0	35.0	23.5	4.9	3.3	4.3	19.9	30.1
	2023	1560	23.2	24.2	38.2	21.4	8.4	3.5	4.3	24.0	22.5
Kuwait	2019	651	22.3	24.5	40.2	20.7	7.8	3.3	3.6	20.5	24.2
	2023	1088	25.4	24.7	38.1	24.0	7.6	2.8	2.8	21.5	29.4
South Africa (9)	2019	2969	21.6	25.3	36.5	20.6	13.2	1.8	2.6	22.2	20.9
	2023	2938	22.8	25.0	36.9	22.0	12.4	1.9	1.7	23.6	21.8
International Avg. (3)	2019	4466	23.1	26.3	37.2	21.6	8.6	2.8	3.5	20.9	25.1
	2023	5586	23.8	24.7	37.8	22.5	9.5	2.7	2.9	23.1	24.6

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

Mathematics: Number / Knowing

MP10_01 MP72187: Sum of two numbers with exponents - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	45.0	50.8	41.6	7.5	0.1	48.8	41.4
	2023	1554	38.3	54.0	33.6	12.2	0.2	39.0	37.7
Kuwait	2019	640	36.6	60.8	35.1	3.3	0.7	35.6	37.8
	2023	1071	36.3	60.1	34.3	5.1	0.5	32.4	40.5
South Africa (9)	2019	2965	41.3	57.2	40.3	2.4	0.1	43.4	39.0
	2023	2936	58.2	40.7	56.8	2.4	0.1	62.6	54.0
International Avg. (3)	2019	4453	41.0	56.3	39.0	4.4	0.3	42.6	39.4
	2023	5561	44.3	51.6	41.5	6.6	0.3	44.7	44.0

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

Mathematics: Number / Reasoning

MP10_02 MP72022: Value of P x Q on number line - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	37.0	16.6	29.1	34.9	13.8	5.5	0.1	35.5	38.2
	2023	1554	33.7	16.5	28.3	31.2	16.7	7.1	0.3	35.5	32.0
Kuwait	2019	638	37.3	19.6	28.9	35.8	11.8	3.1	0.8	40.6	33.7
	2023	1070	37.7	17.9	28.5	36.3	13.6	3.2	0.5	37.3	38.1
South Africa (9)	2019	2965	28.2	18.0	36.6	27.5	15.6	2.1	0.2	29.6	26.6
	2023	2936	27.9	17.5	38.9	27.4	14.3	1.9	0.1	27.7	27.7
International Avg. (3)	2019	4451	34.1	18.1	31.5	32.8	13.8	3.6	0.3	35.2	32.8
	2023	5560	33.1	17.3	31.9	31.6	14.8	4.1	0.3	33.5	32.6

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

Mathematics: Number / Applying

MP10_04 MP72045: Ratio of blue and green paint for room - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	35.7	56.1	31.2	12.3	0.4	35.8	35.7
	2023	1554	30.0	57.0	24.4	18.2	0.4	30.4	29.6
Kuwait	2019	640	16.1	76.9	14.8	7.5	0.9	17.2	14.9
	2023	1071	18.7	71.9	16.6	10.8	0.8	17.9	19.6
South Africa (9)	2019	2965	15.7	80.1	14.9	4.6	0.3	15.8	15.6
	2023	2939	15.7	81.1	15.1	3.6	0.2	16.7	15.2

International Avg. (3)	2019	4451	22.5	71.0	20.3	8.1	0.5	22.9	22.1
	2023	5564	21.5	70.0	18.7	10.9	0.5	21.7	21.5

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

Mathematics: Number / Applying

MP10_05 MP72049: Ratio of Y and B in row of quilt - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	846	42.6	40.0	29.6	29.8	0.6	40.1	44.9
	2023	1554	37.7	34.8	21.0	43.3	0.9	36.0	39.4
Kuwait	2019	640	38.3	53.1	32.9	13.0	0.9	36.9	39.9
	2023	1071	39.0	46.9	30.0	22.1	1.0	36.1	42.0
South Africa (9)	2019	2965	33.7	56.3	28.6	14.6	0.4	31.9	35.9
	2023	2940	34.2	57.0	29.6	13.0	0.4	33.8	34.7

International Avg. (3)	2019	4451	38.2	49.8	30.4	19.2	0.6	36.3	40.2
	2023	5565	36.9	46.2	26.8	26.1	0.8	35.3	38.7

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

Mathematics: Algebra / Knowing

MP10_06 MP72069: Value of $3a + 5b$ given values for a and b - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	42.4	47.4	34.9	17.0	0.7	48.7	36.0
	2023	1554	36.2	47.3	26.9	24.8	1.1	36.3	36.2
Kuwait	2019	640	26.3	67.3	24.0	7.8	0.9	27.3	25.1
	2023	1071	24.7	63.9	20.9	14.2	1.0	22.1	27.5
South Africa (9)	2019	2965	24.9	72.6	24.1	2.9	0.5	30.1	18.7
	2023	2939	32.2	65.2	30.9	3.3	0.6	38.4	26.0

International Avg. (3)	2019	4453	31.2	62.4	27.7	9.2	0.7	35.4	26.6
	2023	5564	31.0	58.8	26.2	14.1	0.9	32.3	29.9

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

Mathematics: Algebra / Knowing

MP10_07 MP72074: Write $A + B$ in terms of x and y - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	847	27.7	47.8	18.3	33.0	0.9	31.2	24.1
	2023	1554	27.8	38.2	14.7	45.9	1.2	28.3	27.3
Kuwait	2019	640	11.2	71.5	9.0	18.2	1.3	10.2	12.5
	2023	1071	12.8	64.8	9.5	24.7	1.0	12.4	13.2
South Africa (9)	2019	2965	5.5	84.6	4.9	9.9	0.6	6.9	3.9
	2023	2940	10.8	81.2	9.9	8.2	0.7	13.3	8.4

International Avg. (3)	2019	4452	14.8	68.0	10.7	20.3	0.9	16.1	13.5
	2023	5565	17.1	61.4	11.4	26.3	1.0	18.0	16.3

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

Mathematics: Algebra / Applying

MP10_08 MP72013: Formula for height of cliff - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	25.1	30.5	24.2	23.6	15.7	4.6	1.4	26.0	24.3
	2023	1554	22.5	31.7	27.5	21.1	13.3	4.7	1.6	23.1	22.0
Kuwait	2019	639	21.2	48.8	21.9	20.5	5.1	2.3	1.4	22.0	20.4
	2023	1071	22.4	48.0	20.6	21.3	5.3	3.8	1.0	22.1	22.6
South Africa (9)	2019	2965	25.7	46.8	19.1	25.1	6.6	1.4	0.9	27.5	23.5
	2023	2942	27.8	44.3	20.9	27.1	5.2	1.6	0.8	31.4	24.1
International Avg. (3)	2019	4452	24.0	42.1	21.8	23.0	9.2	2.8	1.2	25.1	22.7
	2023	5567	24.2	41.3	23.0	23.2	7.9	3.4	1.2	25.5	22.9

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

Mathematics: Algebra / Applying

MP10_09 MP72095: Values of x and y for system of equations (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	15.1	57.1	10.2	31.0	1.8	14.3	16.0
	2023	1554	13.5	51.8	8.1	38.4	1.7	14.0	13.0
Kuwait	2019	640	13.2	71.4	10.8	16.3	1.4	12.5	14.1
	2023	1070	14.1	66.5	10.9	21.5	1.1	11.4	17.1
South Africa (9)	2019	2965	11.6	80.3	10.5	8.1	1.2	12.6	10.4
	2023	2925	21.0	72.7	19.3	6.9	1.1	24.1	18.1
International Avg. (3)	2019	4453	13.3	69.6	10.5	18.5	1.5	13.1	13.5
	2023	5549	16.2	63.7	12.8	22.3	1.3	16.5	16.1

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

Mathematics: Algebra / Applying

MP10_09A MP72095A: Values of x and y for system of equations - x value - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	17.8	55.2	11.9	31.2	1.8	16.8	18.7
	2023	1554	15.4	49.9	9.1	39.3	1.7	15.8	15.0
Kuwait	2019	640	20.2	65.5	16.5	16.5	1.4	20.6	19.6
	2023	1070	21.3	60.7	16.4	21.8	1.1	17.5	25.4
South Africa (9)	2019	2965	19.4	72.8	17.6	8.5	1.2	20.1	18.7
	2023	2925	22.2	71.5	20.5	7.0	1.1	25.7	19.0

International Avg. (3)	2019	4453	19.1	64.5	15.3	18.7	1.5	19.2	19.0
	2023	5549	19.7	60.7	15.3	22.7	1.3	19.7	19.8

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

Mathematics: Algebra / Applying

MP10_09B MP72095B: Values of x and y for system of equations - y value - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	18.6	46.7	10.7	40.9	1.8	18.7	18.6
	2023	1554	17.5	44.0	9.3	44.9	1.7	17.6	17.3
Kuwait	2019	640	15.5	69.4	12.7	16.4	1.4	14.2	17.1
	2023	1070	18.0	62.5	13.8	22.7	1.1	16.0	20.2
South Africa (9)	2019	2965	14.9	76.9	13.5	8.5	1.2	16.2	13.4
	2023	2926	21.5	72.0	19.7	7.2	1.1	24.5	18.7
International Avg. (3)	2019	4453	16.3	64.3	12.3	21.9	1.5	16.3	16.4
	2023	5550	19.0	59.5	14.3	24.9	1.3	19.4	18.8

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

Mathematics: Algebra / Reasoning

MP10_10 MP72109: Rule to express y in terms of x - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	11.6	50.8	6.7	40.4	2.1	11.9	11.3
	2023	1554	15.6	38.5	7.1	52.1	2.2	17.7	13.5
Kuwait	2019	640	10.6	72.2	8.5	17.8	1.5	9.4	12.0
	2023	1071	10.9	68.4	8.4	21.5	1.7	10.3	11.6
South Africa (9)	2019	2965	2.0	87.3	1.8	9.2	1.7	2.2	1.8
	2023	2940	2.8	87.6	2.5	8.3	1.5	2.6	2.9
International Avg. (3)	2019	4453	8.1	70.1	5.7	22.5	1.8	7.8	8.4
	2023	5565	9.8	64.9	6.0	27.3	1.8	10.2	9.3

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

Mathematics: Geometry / Reasoning

MP10_11 MP72125: Area of square given side length of hexagon - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	26.4	24.5	30.7	21.6	15.9	5.2	2.1	26.7	26.2
	2023	1554	24.3	22.5	32.8	21.1	16.3	4.8	2.5	23.6	24.9
Kuwait	2019	639	20.6	19.6	32.6	25.2	17.9	2.7	2.0	19.2	22.1
	2023	1071	18.9	18.3	36.1	23.1	19.3	1.6	1.7	19.2	18.6
South Africa (9)	2019	2965	8.9	8.6	43.1	17.5	27.5	1.4	2.0	7.8	10.2
	2023	2944	8.3	8.1	38.5	19.4	31.0	1.1	2.0	8.7	7.8
International Avg. (3)	2019	4452	18.6	17.6	35.4	21.4	20.4	3.1	2.0	17.9	19.5
	2023	5569	17.1	16.3	35.8	21.2	22.2	2.5	2.1	17.2	17.1

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

Mathematics: Geometry / Applying

MP10_12 MP72196: Diameter of semicircle on ice cream logo - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	25.6	55.8	19.2	22.7	2.3	24.8	26.4
	2023	1554	20.4	54.8	14.1	28.6	2.5	20.9	20.0
Kuwait	2019	640	16.1	73.8	14.2	9.6	2.4	13.0	19.6
	2023	1071	15.6	72.4	13.4	12.3	1.9	12.7	18.8
South Africa (9)	2019	2965	8.9	84.4	8.2	5.2	2.1	9.6	8.0
	2023	2940	11.1	82.4	10.3	5.1	2.2	10.6	11.7

International Avg. (3)	2019	4453	16.9	71.4	13.9	12.5	2.3	15.8	18.0
	2023	5565	15.7	69.9	12.6	15.3	2.2	14.7	16.8

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

Mathematics: Geometry / Reasoning
MP10_13 MP72237: Net of a triangular prism - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	48.4	22.4	14.3	11.7	45.5	3.3	2.8	51.0	46.1
	2023	1554	46.9	19.9	13.5	15.0	42.7	5.4	3.6	48.5	45.3
Kuwait	2019	637	42.3	22.6	16.4	15.8	40.1	2.4	2.8	46.3	38.0
	2023	1071	38.6	26.0	18.1	14.3	36.8	2.7	2.1	41.3	35.9
South Africa (9)	2019	2965	47.3	26.5	9.9	14.0	45.2	1.8	2.6	43.6	51.8
	2023	2938	45.8	22.2	13.7	16.1	44.0	1.1	2.9	42.8	49.1
International Avg. (3)	2019	4450	46.0	23.8	13.6	13.8	43.6	2.5	2.7	46.9	45.3
	2023	5563	43.8	22.7	15.1	15.1	41.1	3.0	2.9	44.2	43.4

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

Mathematics: Data and Probability / Applying
MP10_14 MP72232: Important for fair basketball tryout (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	56.3	41.4	53.4	2.1	3.1	60.0	53.0
	2023	1554	51.9	45.0	48.5	2.8	3.8	55.0	49.0
Kuwait	2019	635	30.3	65.2	28.4	3.4	3.0	32.3	28.2
	2023	1071	35.0	61.3	33.0	3.4	2.4	38.0	31.9
South Africa (9)	2019	2965	23.8	72.7	22.7	1.9	2.8	24.1	23.4
	2023	2945	20.4	75.1	19.2	2.4	3.4	23.2	17.4
International Avg. (3)	2019	4448	36.8	59.8	34.8	2.5	3.0	38.8	34.9
	2023	5570	35.8	60.4	33.6	2.8	3.2	38.7	32.8

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

Mathematics: Data and Probability / Applying

MP10_14A MP72232A: Important for fair basketball tryout - distance from hoop - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	94.5	88.7	5.2	3.0	3.1	94.7	94.3
	2023	1554	94.5	86.6	5.0	4.6	3.8	95.5	93.6
Kuwait	2019	636	91.6	84.8	7.8	4.5	3.0	93.9	89.2
	2023	1071	90.7	83.9	8.6	5.1	2.4	91.6	89.8
South Africa (9)	2019	2965	86.5	79.7	12.4	5.1	2.8	86.1	87.0
	2023	2945	86.5	78.7	12.2	5.7	3.4	86.0	86.9

International Avg. (3)	2019	4449	90.9	84.4	8.4	4.2	2.9	91.6	90.2
	2023	5570	90.6	83.1	8.6	5.1	3.2	91.0	90.1

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

Mathematics: Data and Probability / Applying
MP10_14B MP72232B: Important for fair basketball tryout - number of players - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	68.4	29.0	62.8	5.1	3.1	67.5	69.3
	2023	1554	68.4	27.9	60.6	7.7	3.8	69.0	67.9
Kuwait	2019	635	52.5	43.5	48.0	5.6	3.0	49.3	55.9
	2023	1071	56.1	39.7	50.7	7.2	2.4	54.0	58.3
South Africa (9)	2019	2965	49.2	46.2	44.8	6.2	2.8	48.3	50.2
	2023	2945	40.4	53.0	35.9	7.7	3.4	41.5	39.1
International Avg. (3)	2019	4448	56.7	39.6	51.9	5.6	3.0	55.1	58.4
	2023	5570	55.0	40.2	49.1	7.5	3.2	54.8	55.1

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

Mathematics: Data and Probability / Applying
MP10_14C MP72232C: Important for fair basketball tryout - color of ball - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	88.0	11.0	80.5	5.4	3.1	91.6	84.6
	2023	1554	83.3	14.9	74.0	7.4	3.8	86.4	80.4
Kuwait	2019	635	75.4	22.5	69.1	5.4	3.0	82.9	67.3
	2023	1071	77.5	20.5	70.5	6.7	2.4	84.3	70.3
South Africa (9)	2019	2965	71.0	26.0	63.4	7.8	2.8	72.5	69.2
	2023	2945	72.8	23.9	63.8	9.0	3.4	74.1	71.6
International Avg. (3)	2019	4448	78.1	19.8	71.0	6.2	3.0	82.4	73.7
	2023	5570	77.9	19.7	69.4	7.7	3.2	81.6	74.1

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

Mathematics: Data and Probability / Applying
MP10_14D MP72232D: Important for fair basketball tryout - weight of ball - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	84.9	77.9	13.9	5.1	3.1	88.9	81.1
	2023	1554	82.8	74.2	15.4	6.6	3.8	84.7	81.0
Kuwait	2019	635	64.6	59.2	32.4	5.4	3.0	63.6	65.7
	2023	1071	74.1	67.3	23.5	6.9	2.4	74.6	73.6
South Africa (9)	2019	2965	66.8	59.8	29.7	7.7	2.8	67.5	66.1
	2023	2945	64.0	55.9	31.5	9.3	3.4	67.1	60.5
International Avg. (3)	2019	4448	72.1	65.6	25.3	6.1	3.0	73.3	71.0
	2023	5570	73.6	65.8	23.5	7.6	3.2	75.5	71.7

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

Mathematics: Data and Probability / Reasoning

MP10_15 MP72206: Pie charts for proportions of people by age - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	848	8.5	54.3	5.0	35.6	5.0	9.4	7.6
	2023	1554	7.7	47.4	4.0	42.7	5.9	7.9	7.6
Kuwait	2019	640	6.0	69.5	4.5	20.3	5.8	4.7	7.9
	2023	1071	4.7	59.6	2.9	32.7	4.8	3.1	6.6
South Africa (9)	2019	2965	3.9	83.3	3.4	9.5	3.7	4.9	2.8
	2023	2936	3.3	85.6	2.9	6.8	4.7	3.8	2.7
International Avg. (3)	2019	4453	6.2	69.0	4.3	21.8	4.8	6.3	6.1
	2023	5561	5.2	64.2	3.3	27.4	5.1	5.0	5.6

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

Mathematics: Number / Knowing

MP11_01 MP62271: Randy's blue balloons - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	39.1	11.8	26.4	20.0	37.3	4.0	0.4	38.5	39.6
	2023	1534	35.3	12.0	24.2	25.4	33.6	4.6	0.2	34.0	36.5
Kuwait	2019	646	54.0	14.0	12.1	18.4	52.1	3.2	0.3	53.9	54.1
	2023	1067	66.2	8.6	10.1	12.3	60.8	7.8	0.4	69.5	62.6
South Africa (9)	2019	2982	29.6	15.8	21.5	29.6	28.1	5.0	0.1	29.2	30.0
	2023	2983	29.0	15.6	22.6	30.3	27.9	3.4	0.1	28.4	29.1
International Avg. (3)	2019	4478	40.9	13.8	20.0	22.7	39.2	4.1	0.3	40.5	41.2
	2023	5584	43.5	12.0	19.0	22.7	40.8	5.3	0.3	44.0	42.7

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

Mathematics: Number / Applying

MP11_02 MP62152: Least number of crates for Harry's apples - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	16.4	72.6	14.3	12.7	0.4	11.8	20.7
	2023	1534	12.6	69.9	10.1	19.6	0.4	9.0	16.0
Kuwait	2019	647	13.0	82.6	12.3	4.7	0.3	8.3	18.2
	2023	1068	13.2	76.6	11.7	11.3	0.4	8.6	18.1
South Africa (9)	2019	2982	10.1	84.1	9.4	6.5	0.1	8.8	11.6
	2023	2983	12.4	83.8	11.9	4.2	0.1	11.9	13.0
International Avg. (3)	2019	4479	13.2	79.7	12.0	8.0	0.3	9.6	16.8
	2023	5585	12.7	76.8	11.2	11.7	0.3	9.8	15.7

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

Mathematics: Number / Applying

MP11_03 MP62215: Fill in bicycle sale table - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	15.3	64.0	8.6	8.1	18.8	0.6	10.3	19.7
	2023	1534	16.5	53.3	12.4	5.5	28.4	0.4	11.4	20.8
Kuwait	2019	648	11.8	74.9	11.9	4.8	7.9	0.5	8.9	14.8
	2023	1067	10.4	71.1	9.3	4.1	14.8	0.7	7.0	13.8
South Africa (9)	2019	2982	9.2	77.7	10.5	3.2	8.4	0.2	6.8	12.2
	2023	2980	8.6	79.1	10.6	2.6	7.5	0.1	7.3	10.0

International Avg. (3)	2019	4480	12.1	72.2	10.3	5.3	11.7	0.4	8.6	15.6
	2023	5581	11.8	67.8	10.8	4.1	16.9	0.4	8.6	14.9

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

Mathematics: Number / Reasoning

MP11_04 MP62143: Number of girls in a class given boys:girls - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	13.5	67.1	10.5	21.4	1.0	10.6	16.1
	2023	1534	13.5	58.8	9.2	31.4	0.6	9.7	17.2
Kuwait	2019	648	3.9	85.8	3.5	9.6	1.1	3.3	4.6
	2023	1067	6.7	76.9	5.5	16.6	1.0	5.3	8.2
South Africa (9)	2019	2983	5.3	85.4	4.8	9.5	0.3	4.3	6.6
	2023	2981	5.1	88.4	4.7	6.7	0.2	5.0	5.3
International Avg. (3)	2019	4481	7.6	79.5	6.3	13.5	0.8	6.1	9.1
	2023	5582	8.4	74.7	6.5	18.2	0.6	6.7	10.2

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

Mathematics: Algebra / Knowing

MP11_05 MP62230: Identify expression equivalent to $(3x + 6) / 9x$ - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	21.9	15.1	21.1	20.4	39.9	2.5	1.0	23.5	20.4
	2023	1534	25.4	12.2	24.0	16.7	41.8	4.8	0.6	24.8	25.9
Kuwait	2019	646	25.0	17.0	24.0	22.9	32.3	2.5	1.2	22.8	27.4
	2023	1068	28.2	11.6	26.9	19.6	37.3	3.5	1.2	26.7	29.8
South Africa (9)	2019	2982	19.5	13.3	19.1	29.1	36.6	1.5	0.4	19.0	20.2
	2023	2988	14.3	11.0	14.1	45.5	28.1	1.0	0.2	12.4	15.9

International Avg. (3)	2019	4478	22.1	15.1	21.4	24.1	36.3	2.2	0.9	21.7	22.7
	2023	5590	22.6	11.6	21.7	27.3	35.7	3.1	0.7	21.3	23.8

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

Mathematics: Algebra / Applying

MP11_06 MP62095: Equation for Bruno's monthly cell phone cost - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	36.1	34.2	28.8	21.7	10.0	4.4	1.0	38.1	34.2
	2023	1534	33.1	30.5	32.3	21.1	8.3	7.0	0.7	34.6	31.6
Kuwait	2019	647	35.3	34.0	30.9	23.0	8.4	2.5	1.2	37.3	33.0
	2023	1068	30.2	28.4	33.5	22.1	10.2	4.5	1.3	30.0	30.3
South Africa (9)	2019	2982	22.3	21.7	32.5	35.8	7.3	2.2	0.5	22.3	22.3
	2023	2986	23.0	22.5	31.9	34.6	8.7	2.0	0.3	23.2	22.1
International Avg. (3)	2019	4479	31.2	29.9	30.7	26.8	8.6	3.0	0.9	32.6	29.8
	2023	5588	28.8	27.1	32.6	25.9	9.1	4.5	0.8	29.3	28.0

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

Mathematics: Algebra / Applying

MP11_07 MP62076: Room divided into classroom M and laboratory L - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	44.6	42.8	33.7	12.6	7.0	2.8	1.2	46.0	43.3
	2023	1534	46.5	44.5	30.9	12.3	8.0	3.5	0.8	48.2	44.8
Kuwait	2019	647	39.5	38.3	31.0	15.8	11.7	2.0	1.2	42.6	36.1
	2023	1068	41.4	39.6	29.1	18.5	8.3	3.2	1.4	40.4	42.5
South Africa (9)	2019	2982	34.5	33.9	35.7	17.3	11.3	1.3	0.5	36.0	32.7
	2023	2987	30.8	30.2	37.3	17.9	12.8	1.4	0.4	33.1	28.5
International Avg. (3)	2019	4479	39.5	38.3	33.5	15.2	10.0	2.0	1.0	41.6	37.4
	2023	5589	39.6	38.1	32.4	16.2	9.7	2.7	0.8	40.6	38.6

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

Mathematics: Algebra / Applying

MP11_08 MP62030: Find cost of taxi ride with table - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	49.3	45.3	44.1	9.4	1.2	54.6	44.5
	2023	1534	43.6	48.9	37.8	12.4	1.0	47.0	40.4
Kuwait	2019	645	31.8	64.4	30.0	3.8	1.7	34.6	28.7
	2023	1067	28.0	65.9	25.7	7.0	1.4	28.6	27.4
South Africa (9)	2019	2982	48.9	49.9	47.7	1.7	0.6	51.6	45.9
	2023	2982	47.4	51.2	46.2	2.1	0.5	50.8	44.5

International Avg. (3)	2019	4477	43.3	53.2	40.6	5.0	1.2	46.9	39.7
	2023	5583	39.7	55.3	36.6	7.2	0.9	42.1	37.4

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

Mathematics: Geometry / Knowing

MP11_09 MP62171: Shaded square reflected over the line XY - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	52.2	11.4	18.7	16.6	50.9	0.7	1.7	54.2	50.2
	2023	1534	48.2	13.4	20.6	15.9	46.4	2.7	1.1	52.3	44.2
Kuwait	2019	648	43.6	11.8	26.4	16.0	41.9	2.1	1.7	47.1	39.5
	2023	1068	37.2	8.3	32.6	19.9	36.0	1.8	1.5	36.4	38.0
South Africa (9)	2019	2985	34.3	24.4	23.0	16.7	33.5	1.6	0.9	31.8	37.3
	2023	2986	34.3	27.3	20.4	16.6	33.6	1.4	0.7	34.5	34.0
International Avg. (3)	2019	4483	43.3	15.9	22.7	16.4	42.1	1.5	1.4	44.4	42.3
	2023	5588	39.9	16.3	24.5	17.4	38.7	2.0	1.1	41.1	38.7

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

Mathematics: Geometry / Reasoning

MP11_10 MP62301: Sculpture from solid cube - number of faces - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	5.7	67.6	4.1	26.5	1.8	4.4	6.9
	2023	1534	5.7	60.6	3.6	34.5	1.3	5.8	5.6
Kuwait	2019	648	4.3	87.6	3.9	6.8	1.7	2.4	6.5
	2023	1068	5.7	81.7	4.9	12.0	1.5	3.8	7.6
South Africa (9)	2019	2985	5.6	90.1	5.3	3.5	1.1	4.2	7.2
	2023	2983	4.6	91.4	4.5	3.3	0.9	4.0	5.2

International Avg. (3)	2019	4483	5.2	81.8	4.4	12.3	1.5	3.7	6.9
	2023	5585	5.3	77.9	4.3	16.6	1.2	4.5	6.1

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

Mathematics: Geometry / Reasoning

MP11_11 MP62194: Number of cubes in solid figure - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	70.2	7.0	10.9	67.0	10.6	2.0	2.6	69.9	70.5
	2023	1534	66.2	5.5	15.5	63.1	11.4	2.9	1.7	64.8	67.5
Kuwait	2019	647	49.5	9.2	27.5	47.9	12.2	1.4	1.9	46.1	53.2
	2023	1068	52.6	7.8	26.3	50.4	11.2	2.5	1.7	47.7	57.7
South Africa (9)	2019	2985	50.9	9.3	23.2	49.0	14.8	2.3	1.5	50.5	51.2
	2023	2987	52.3	9.2	24.0	50.9	13.3	1.6	1.1	50.6	54.0
International Avg. (3)	2019	4482	56.8	8.5	20.5	54.6	12.5	1.9	2.0	55.5	58.3
	2023	5589	57.0	7.5	21.9	54.8	12.0	2.3	1.5	54.4	59.7

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

Mathematics: Data and Probability / Applying
MP11_12 MP62344: Total bowls to raise average to 15 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	20.6	58.5	15.1	23.1	3.2	19.4	21.5
	2023	1534	17.6	57.2	12.2	28.7	1.9	18.3	16.9
Kuwait	2019	648	9.8	79.8	8.7	9.6	2.0	9.2	10.5
	2023	1068	7.8	76.2	6.5	15.5	1.8	7.0	8.6
South Africa (9)	2019	2985	10.7	82.1	9.9	6.2	1.8	12.4	8.7
	2023	2983	13.5	80.8	12.6	5.3	1.3	15.0	12.2
International Avg. (3)	2019	4483	13.7	73.5	11.2	13.0	2.3	13.7	13.6
	2023	5585	13.0	71.4	10.4	16.5	1.7	13.5	12.6

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

Mathematics: Data and Probability / Applying
MP11_13 MP62320: Fishing histogram - proportion of fish released - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	22.9	12.1	34.1	24.5	21.0	3.6	4.7	22.5	23.2
	2023	1534	22.2	11.0	40.3	20.8	20.5	4.6	2.9	18.8	25.4
Kuwait	2019	646	19.1	10.3	42.4	23.8	18.0	3.0	2.5	19.4	18.6
	2023	1068	18.9	9.6	46.2	20.5	17.8	3.2	2.6	15.8	22.1
South Africa (9)	2019	2985	15.2	12.5	50.8	17.6	14.5	2.2	2.5	15.6	14.7
	2023	2989	15.7	10.9	52.5	18.0	15.1	1.7	1.8	17.1	14.7
International Avg. (3)	2019	4481	19.1	11.6	42.4	21.9	17.8	2.9	3.2	19.2	18.8
	2023	5591	18.9	10.5	46.3	19.8	17.8	3.2	2.4	17.2	20.7

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

Mathematics: Data and Probability / Reasoning

MP11_14 MP62296: Draw a spinner given chance of outcomes - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	850	52.7	42.3	47.2	5.5	5.0	53.6	51.8
	2023	1534	51.4	41.5	44.0	11.2	3.4	51.2	51.6
Kuwait	2019	648	27.9	64.7	25.0	7.2	3.1	26.7	29.2
	2023	1068	22.1	65.6	18.6	12.9	2.9	18.4	26.2
South Africa (9)	2019	2985	15.2	75.4	13.5	8.1	3.0	14.3	16.3
	2023	2982	14.2	79.2	13.1	5.3	2.4	13.2	15.1
International Avg. (3)	2019	4483	31.9	60.8	28.6	6.9	3.7	31.5	32.4
	2023	5584	29.3	62.1	25.2	9.8	2.9	27.6	31.0

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

Mathematics: Number / Reasoning

MP12_01 MP72001: Two integers with product of -24 and sum of 5 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	28.2	53.6	21.0	25.1	0.3	29.4	27.1
	2023	1533	24.3	50.0	16.1	33.8	0.1	25.0	23.6
Kuwait	2019	662	14.3	75.2	12.5	12.1	0.2	11.7	17.4
	2023	1080	14.6	67.3	11.5	20.9	0.3	12.0	17.4
South Africa (9)	2019	2990	5.1	81.7	4.4	13.8	0.1	4.6	5.7
	2023	2976	6.2	83.4	5.5	11.1	0.0	6.1	6.2
International Avg. (3)	2019	4506	15.8	70.2	12.6	17.0	0.2	15.2	16.7
	2023	5589	15.0	66.9	11.0	21.9	0.2	14.4	15.7

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

Mathematics: Number / Knowing

MP12_02 MP72019: Order fractions and decimals from smallest to largest - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	14.6	82.0	14.0	3.3	0.7	15.1	14.2
	2023	1533	12.9	79.5	11.8	8.4	0.3	9.8	16.1
Kuwait	2019	662	13.3	83.4	12.8	3.6	0.2	10.7	16.3
	2023	1080	15.8	79.4	14.9	5.1	0.6	9.6	22.6
South Africa (9)	2019	2990	5.6	91.9	5.4	2.5	0.1	4.5	6.8
	2023	2977	5.8	92.6	5.7	1.6	0.2	4.8	6.9
International Avg. (3)	2019	4506	11.2	85.8	10.7	3.2	0.3	10.1	12.4
	2023	5590	11.5	83.8	10.8	5.0	0.4	8.1	15.2

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

Mathematics: Number / Knowing

MP12_03 MP72189: $7/100 + 6/1000 =$ - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	43.1	7.9	41.4	27.9	18.9	3.1	0.8	46.2	40.2
	2023	1533	37.2	7.3	35.6	29.0	23.8	3.9	0.4	37.7	36.7
Kuwait	2019	661	37.9	5.4	37.2	32.6	22.9	1.6	0.2	35.3	40.8
	2023	1080	32.2	9.9	31.0	35.0	20.5	2.8	0.7	30.6	33.8
South Africa (9)	2019	2990	44.2	8.4	43.4	21.3	25.2	1.6	0.1	44.6	43.7
	2023	2981	62.7	7.8	61.8	14.9	14.0	1.3	0.1	69.0	56.7
International Avg. (3)	2019	4505	41.7	7.2	40.7	27.3	22.3	2.1	0.4	42.0	41.6
	2023	5594	44.0	8.3	42.8	26.3	19.4	2.7	0.4	45.8	42.4

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

Mathematics: Number / Knowing

MP12_04 MP72024: Value of P for expression with fraction and decimal - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	50.2	40.2	40.6	18.2	1.1	55.6	45.3
	2023	1533	39.5	41.9	27.4	30.2	0.5	41.0	38.1
Kuwait	2019	662	21.0	72.1	19.1	8.5	0.2	22.4	19.4
	2023	1080	23.4	62.9	19.2	17.1	0.8	21.8	25.1
South Africa (9)	2019	2990	13.4	80.5	12.4	6.7	0.4	12.3	14.6
	2023	2978	19.9	74.5	18.6	6.7	0.2	21.5	18.1
International Avg. (3)	2019	4506	28.2	64.3	24.0	11.1	0.6	30.1	26.4
	2023	5591	27.6	59.8	21.7	18.0	0.5	28.1	27.1

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

Mathematics: Number / Applying

MP12_05 MP72043: Ratio of tablet screen side lengths - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	26.8	24.2	28.1	24.7	15.0	6.8	1.1	28.9	25.0
	2023	1533	25.3	24.6	29.7	23.0	13.9	8.2	0.7	27.4	23.3
Kuwait	2019	658	23.6	24.0	35.9	22.6	13.1	4.2	0.2	20.0	27.6
	2023	1079	23.4	26.7	33.4	22.0	12.0	5.0	0.9	21.1	25.7
South Africa (9)	2019	2990	18.2	20.8	39.0	17.5	18.5	3.6	0.6	16.4	20.3
	2023	2979	20.3	22.6	36.6	19.7	18.1	2.5	0.5	17.7	23.3
International Avg. (3)	2019	4502	22.9	23.0	34.3	21.6	15.6	4.9	0.6	21.8	24.3
	2023	5591	23.0	24.6	33.2	21.6	14.6	5.2	0.7	22.1	24.1

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

Mathematics: Algebra / Knowing

MP12_06 MP72221: Value of $y = 2x^2 - 2x + 5$ given x - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	45.1	14.2	41.9	15.4	21.3	6.0	1.2	47.7	42.9
	2023	1533	45.2	11.9	42.2	22.0	17.3	5.7	0.9	47.9	42.5
Kuwait	2019	661	37.0	9.7	36.2	20.0	31.9	2.0	0.2	33.8	40.7
	2023	1080	31.7	14.3	30.2	21.8	29.1	3.5	1.2	29.0	34.5
South Africa (9)	2019	2990	32.7	8.8	31.4	18.1	37.6	3.2	0.9	34.9	30.3
	2023	2980	37.8	6.6	36.6	15.6	38.2	2.4	0.6	44.2	31.6

International Avg. (3)	2019	4505	38.3	10.9	36.5	17.8	30.3	3.7	0.8	38.8	38.0
	2023	5593	38.2	10.9	36.3	19.8	28.2	3.9	0.9	40.4	36.2

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

Mathematics: Algebra / Knowing

MP12_07 MP72220: Simplify $4(3a + 4) - 3(4a - 6)$ - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	32.4	18.9	20.5	23.1	29.9	6.2	1.5	39.1	26.1
	2023	1533	28.4	20.7	26.3	17.9	25.8	8.2	1.0	31.2	25.8
Kuwait	2019	659	16.8	26.5	34.8	19.4	16.3	2.7	0.3	16.3	17.4
	2023	1080	20.6	25.7	30.1	17.7	19.0	5.7	1.7	20.1	21.1
South Africa (9)	2019	2990	32.1	22.2	25.1	18.3	31.0	1.8	1.5	33.9	30.1
	2023	2979	50.8	14.4	19.5	14.0	49.5	1.5	1.0	52.8	48.4
International Avg. (3)	2019	4503	27.1	22.5	26.8	20.2	25.7	3.6	1.1	29.8	24.6
	2023	5592	33.3	20.3	25.3	16.6	31.4	5.2	1.2	34.7	31.7

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

Mathematics: Algebra / Applying
MP12_08 MP72225: Number of pizzas (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	27.8	59.8	23.1	15.2	1.9	22.3	32.6
	2023	1533	24.2	59.5	18.9	20.3	1.3	20.3	27.7
Kuwait	2019	662	14.8	78.6	13.6	7.5	0.3	10.1	20.2
	2023	1080	18.4	69.4	15.7	12.9	1.9	16.2	21.0
South Africa (9)	2019	2990	10.3	82.5	9.5	6.1	2.0	9.7	11.0
	2023	2977	10.4	83.7	9.7	5.5	1.2	9.6	11.2

International Avg. (3)	2019	4506	17.6	73.6	15.4	9.6	1.4	14.0	21.2
	2023	5590	17.7	70.9	14.8	12.9	1.5	15.4	20.0

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

Mathematics: Algebra / Applying

MP12_08A MP72225A: Number of pizzas - small - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	28.6	59.0	23.6	15.4	1.9	22.8	33.5
	2023	1533	25.2	58.0	19.6	21.1	1.3	21.3	28.8
Kuwait	2019	662	16.1	76.6	14.7	8.4	0.3	11.6	21.2
	2023	1080	19.6	68.3	16.6	13.1	1.9	17.3	22.2
South Africa (9)	2019	2990	11.2	80.7	10.2	7.1	2.0	10.4	12.2
	2023	2979	10.7	82.5	9.9	6.4	1.2	9.9	11.6

International Avg. (3)	2019	4506	18.6	72.1	16.2	10.3	1.4	14.9	22.3
	2023	5592	18.5	69.6	15.4	13.5	1.5	16.2	20.9

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

Mathematics: Algebra / Applying
MP12_08B MP72225B: Number of pizzas - large - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	30.9	55.4	24.8	17.8	1.9	23.4	37.4
	2023	1533	25.5	57.2	19.6	21.8	1.3	21.6	29.1
Kuwait	2019	662	16.4	76.6	15.0	8.1	0.3	12.5	20.9
	2023	1080	19.6	67.3	16.4	14.3	1.9	17.2	22.5
South Africa (9)	2019	2990	11.1	80.6	10.1	7.3	2.0	10.3	12.0
	2023	2977	10.7	82.0	9.9	7.0	1.2	9.8	11.8
International Avg. (3)	2019	4506	19.5	70.9	16.6	11.1	1.4	15.4	23.4
	2023	5590	18.6	68.8	15.3	14.4	1.5	16.2	21.1

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

Mathematics: Algebra / Applying

MP12_09A MP72110A: Triangle tiles for square shape - 5 by 5 square - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	28.5	58.6	23.4	15.9	2.2	33.8	23.7
	2023	1533	25.5	54.4	18.6	25.1	1.9	28.1	23.0
Kuwait	2019	662	9.1	81.6	8.1	9.4	0.8	8.5	9.7
	2023	1080	12.9	71.6	10.6	15.4	2.3	9.7	16.7
South Africa (9)	2019	2990	6.6	86.6	6.1	4.5	2.8	6.2	7.1
	2023	2978	6.8	87.5	6.3	4.4	1.8	6.5	7.1
International Avg. (3)	2019	4506	14.7	75.6	12.5	9.9	1.9	16.2	13.5
	2023	5591	15.1	71.2	11.9	15.0	2.0	14.8	15.6

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

Mathematics: Algebra / Reasoning

MP12_09B MP72110B: Triangle tiles for square shape - rule - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	25.2	37.8	12.7	47.0	2.5	28.5	21.9
	2023	1533	19.2	34.4	8.2	55.1	2.3	19.9	18.4
Kuwait	2019	662	6.3	76.6	5.2	17.2	1.0	5.4	7.4
	2023	1080	9.8	59.5	6.5	31.1	2.9	7.8	12.2
South Africa (9)	2019	2990	2.6	85.7	2.2	8.7	3.4	2.4	2.7
	2023	2977	2.7	85.6	2.4	9.9	2.2	2.9	2.6
International Avg. (3)	2019	4506	11.4	66.7	6.7	24.3	2.3	12.1	10.7
	2023	5590	10.6	59.9	5.7	32.0	2.4	10.2	11.1

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

Mathematics: Geometry / Applying
MP12_10 MP72150: Cost of shipping box by volume - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	64.0	10.5	11.9	59.4	11.1	4.0	3.1	64.8	63.3
	2023	1533	58.3	13.2	15.2	54.1	10.3	4.5	2.7	58.2	58.4
Kuwait	2019	659	57.8	13.8	12.5	55.6	14.3	2.6	1.1	60.6	54.6
	2023	1079	50.4	16.4	14.1	46.4	15.2	4.8	3.2	49.6	51.2
South Africa (9)	2019	2990	58.7	15.1	7.6	55.2	16.2	2.5	3.4	56.5	61.1
	2023	2976	57.9	17.0	8.6	55.6	14.9	1.5	2.4	58.9	56.7
International Avg. (3)	2019	4503	60.1	13.1	10.7	56.7	13.9	3.1	2.5	60.6	59.7
	2023	5588	55.5	15.5	12.7	52.0	13.5	3.6	2.8	55.5	55.5

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

Mathematics: Geometry / Applying

MP12_11 MP72139: Length of surfboard shadow - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	10.5	71.2	8.3	17.2	3.3	10.1	10.8
	2023	1533	10.7	62.3	7.5	27.3	2.9	7.5	13.6
Kuwait	2019	661	8.5	83.6	7.7	7.2	1.4	7.2	10.0
	2023	1079	8.6	77.9	7.3	11.5	3.3	6.1	11.4
South Africa (9)	2019	2990	4.8	86.6	4.3	4.8	4.2	4.0	5.7
	2023	2982	6.4	87.6	6.0	3.3	3.1	4.8	8.3
International Avg. (3)	2019	4505	7.9	80.5	6.8	9.7	3.0	7.1	8.8
	2023	5594	8.6	75.9	6.9	14.0	3.1	6.1	11.1

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

Mathematics: Geometry / Reasoning

MP12_12 MP72229: Distance on circular road around city center - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	5.3	64.2	0.6	3.3	27.7	4.2	3.6	6.7
	2023	1533	3.0	54.6	0.9	1.2	39.5	3.8	3.8	2.3
Kuwait	2019	661	1.7	83.8	1.2	0.8	12.4	1.8	2.0	1.3
	2023	1079	2.7	74.9	2.0	1.1	18.0	3.9	1.2	4.5
South Africa (9)	2019	2990	1.2	85.8	0.7	0.7	6.8	6.1	1.2	1.2
	2023	2982	1.4	89.0	1.3	0.6	5.0	4.1	1.0	1.9
International Avg. (3)	2019	4505	2.7	77.9	0.8	1.6	15.6	4.0	2.3	3.1
	2023	5594	2.4	72.8	1.4	1.0	20.9	3.9	2.0	2.9

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

Mathematics: Data and Probability / Applying
MP12_13 MP72171: Probability of spinner landing on W - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	15.5	64.0	11.7	18.4	5.9	11.7	18.7
	2023	1533	21.8	53.7	15.0	26.8	4.5	21.6	22.0
Kuwait	2019	661	13.7	75.7	12.0	9.7	2.6	10.3	17.6
	2023	1079	17.6	66.1	14.1	15.1	4.7	12.3	23.6
South Africa (9)	2019	2990	8.4	75.7	6.9	10.2	7.2	8.9	7.7
	2023	2982	7.1	81.8	6.3	6.8	5.1	6.1	8.5

International Avg. (3)	2019	4505	12.5	71.8	10.2	12.7	5.2	10.3	14.7
	2023	5594	15.5	67.2	11.8	16.3	4.7	13.3	18.0

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

Mathematics: Data and Probability / Knowing

MP12_14A MP72211A: Selling prices of houses - mean - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	854	54.3	9.2	47.7	20.7	10.3	4.9	7.1	54.5	54.2
	2023	1533	45.8	12.5	41.0	20.8	15.3	5.5	4.9	46.0	45.5
Kuwait	2019	661	36.7	16.8	35.0	25.1	18.5	2.0	2.6	40.1	32.9
	2023	1077	33.4	21.6	30.9	22.1	17.9	2.7	4.8	34.8	32.0
South Africa (9)	2019	2990	18.1	40.5	15.8	15.2	15.8	4.6	8.1	18.6	17.4
	2023	2973	17.6	44.2	16.2	17.4	14.0	3.1	5.2	16.2	19.3
International Avg. (3)	2019	4505	36.3	22.2	32.8	20.3	14.9	3.9	5.9	37.7	34.8
	2023	5583	32.3	26.1	29.4	20.1	15.7	3.8	5.0	32.3	32.3

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

Mathematics: Number / Knowing

MP13_01 MP62001: 276 x 85 is equal to - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	44.3	13.5	40.8	24.1	13.9	7.4	0.3	39.6	48.4
	2023	1552	40.5	12.6	36.0	27.9	12.3	10.7	0.5	40.3	40.7
Kuwait	2019	656	39.2	13.8	37.6	30.6	13.9	4.0	0.1	43.5	34.5
	2023	1080	43.6	15.2	41.4	22.8	15.5	4.8	0.3	45.2	42.1
South Africa (9)	2019	2975	43.9	16.2	42.3	25.9	11.9	3.5	0.2	43.8	44.1
	2023	3001	55.8	12.2	54.5	20.3	10.5	2.2	0.2	58.3	53.4
International Avg. (3)	2019	4487	42.5	14.5	40.2	26.9	13.2	4.9	0.2	42.3	42.3
	2023	5633	46.7	13.4	44.0	23.7	12.8	5.9	0.3	47.9	45.4

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

Mathematics: Number / Applying

MP13_02 MP62214: Ahmed buys ice cream and a book - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	34.4	59.7	31.2	8.6	0.4	32.7	35.8
	2023	1552	34.6	55.8	29.5	13.9	0.8	27.8	40.8
Kuwait	2019	657	17.0	77.4	15.8	6.4	0.4	16.6	17.3
	2023	1081	17.6	76.4	16.3	6.8	0.5	12.5	22.9
South Africa (9)	2019	2975	7.2	88.8	6.9	4.1	0.2	6.3	8.2
	2023	2994	8.4	88.7	8.1	2.9	0.2	7.3	9.8
International Avg. (3)	2019	4488	19.5	75.3	18.0	6.4	0.4	18.6	20.4
	2023	5627	20.2	73.6	18.0	7.9	0.5	15.9	24.5

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

Mathematics: Number / Applying

MP13_03 MP62146: Find percent of fir trees in a park given a ratio - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	34.3	32.9	20.3	31.8	11.0	3.4	0.4	31.6	36.6
	2023	1552	28.9	27.1	22.1	31.7	12.9	5.4	0.9	25.8	31.8
Kuwait	2019	655	21.9	21.3	34.4	31.6	9.6	2.5	0.6	18.5	25.8
	2023	1079	21.0	20.4	34.3	31.4	11.0	2.4	0.5	17.0	25.0
South Africa (9)	2019	2975	17.6	17.0	33.5	33.6	12.8	2.8	0.2	15.0	20.5
	2023	2996	17.4	17.0	31.0	34.6	15.0	2.2	0.3	16.2	18.7
International Avg. (3)	2019	4486	24.6	23.7	29.4	32.3	11.1	2.9	0.4	21.7	27.7
	2023	5627	22.4	21.5	29.1	32.6	13.0	3.3	0.5	19.6	25.2

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

Mathematics: Number / Applying

MP13_04 MP62154: Number of eggs Minji needs to bake cookies - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	43.7	51.3	39.8	8.2	0.6	42.2	45.0
	2023	1552	43.8	48.4	37.7	12.9	1.0	37.1	50.0
Kuwait	2019	657	21.6	73.6	20.3	5.4	0.8	15.9	28.4
	2023	1081	25.1	69.0	23.1	7.2	0.6	16.4	34.0
South Africa (9)	2019	2975	24.6	72.7	23.8	3.2	0.3	20.8	28.9
	2023	2996	24.4	73.2	23.6	2.8	0.4	22.8	26.3

International Avg. (3)	2019	4488	30.0	65.9	28.0	5.6	0.5	26.3	34.1
	2023	5629	31.1	63.6	28.1	7.6	0.7	25.4	36.8

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

Mathematics: Algebra / Knowing

MP13_05 MP62067: Find value of x when y = 5 - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	59.7	20.1	7.5	56.3	10.4	5.2	0.6	67.0	53.1
	2023	1552	56.1	21.9	9.0	53.0	10.6	4.4	1.1	59.9	52.4
Kuwait	2019	655	54.4	19.3	12.5	53.4	12.9	1.1	0.8	52.5	56.6
	2023	1079	47.4	26.5	12.2	45.8	12.2	2.7	0.7	44.8	49.9
South Africa (9)	2019	2975	45.8	19.6	17.3	45.0	16.2	1.6	0.3	45.9	45.8
	2023	3000	48.2	17.9	17.1	47.4	15.9	1.2	0.5	50.6	45.9
International Avg. (3)	2019	4486	53.3	19.7	12.4	51.6	13.2	2.6	0.6	55.1	51.8
	2023	5631	50.5	22.1	12.8	48.7	12.9	2.7	0.7	51.8	49.4

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

Mathematics: Algebra / Knowing

MP13_06 MP62341: Slope of line $y = 3x - 1$ - MC - Key: D

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	30.2	21.7	22.0	17.1	26.3	11.8	1.0	32.1	28.5
	2023	1552	27.6	26.2	22.9	15.2	24.5	10.1	1.2	26.7	28.5
Kuwait	2019	654	26.0	31.5	20.6	18.1	24.6	4.2	0.9	27.5	24.3
	2023	1078	27.8	30.0	20.2	17.8	26.2	5.1	0.7	26.4	29.2
South Africa (9)	2019	2975	25.8	28.0	28.0	15.2	24.7	3.4	0.5	25.2	26.4
	2023	2997	24.9	25.7	31.8	15.2	24.2	2.4	0.7	24.7	24.7
International Avg. (3)	2019	4485	27.3	27.1	23.5	16.8	25.2	6.5	0.8	28.3	26.4
	2023	5627	26.8	27.3	25.0	16.1	24.9	5.9	0.8	25.9	27.5

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

Mathematics: Algebra / Reasoning

MP13_07 MP62242: Relationship for a linear graph in words - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	40.9	37.8	21.9	19.1	13.8	5.9	1.6	37.3	44.0
	2023	1552	35.4	32.5	25.2	19.3	14.9	6.7	1.3	34.5	36.1
Kuwait	2019	655	33.6	32.0	31.9	19.9	11.6	3.6	0.9	34.3	32.7
	2023	1080	30.2	29.0	34.3	19.5	13.1	3.5	0.7	28.9	31.6
South Africa (9)	2019	2975	32.8	31.6	36.7	14.6	13.5	3.0	0.6	31.7	34.0
	2023	2998	33.1	32.4	36.2	14.8	14.4	1.4	0.8	31.4	35.5
International Avg. (3)	2019	4486	35.7	33.8	30.2	17.8	13.0	4.2	1.1	34.4	36.9
	2023	5630	32.9	31.3	31.9	17.9	14.1	3.9	0.9	31.6	34.4

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

Mathematics: Geometry / Applying

MP13_08A MP62250A: Julia's hexagon box - decorated strip - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	24.7	61.0	20.1	17.4	1.6	24.3	25.2
	2023	1552	20.8	61.2	16.0	21.2	1.6	20.4	21.1
Kuwait	2019	656	14.7	78.2	13.5	7.0	1.2	13.2	16.5
	2023	1081	16.0	74.8	14.3	10.2	0.8	14.6	17.5
South Africa (9)	2019	2975	12.3	83.5	11.7	3.9	0.9	12.5	12.0
	2023	2998	12.6	83.9	12.1	3.1	0.9	11.5	14.1
International Avg. (3)	2019	4487	17.3	74.2	15.1	9.4	1.2	16.7	17.9
	2023	5631	16.5	73.3	14.1	11.5	1.1	15.5	17.6

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

Mathematics: Geometry / Applying

MP13_08B MP62250B: Julia's hexagon box - blue paper for sides - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	16.9	62.4	12.7	22.5	2.4	19.7	14.4
	2023	1552	12.0	61.2	8.3	28.1	2.3	10.3	13.6
Kuwait	2019	656	6.8	84.2	6.1	8.4	1.2	7.1	6.4
	2023	1081	5.0	82.3	4.3	12.2	1.1	2.9	7.3
South Africa (9)	2019	2975	2.7	91.3	2.5	4.9	1.3	2.7	2.5
	2023	2997	3.1	91.9	2.9	4.1	1.1	2.4	3.9
International Avg. (3)	2019	4487	8.8	79.3	7.1	11.9	1.7	9.9	7.8
	2023	5630	6.7	78.5	5.2	14.8	1.5	5.2	8.3

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

Mathematics: Geometry / Reasoning

MP13_09 MP62170: Fill in table for number of faces coated with paint - CR - 2 Points

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	2pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	30.3	40.7	34.3	8.0	14.4	2.6	31.6	29.3
	2023	1552	26.5	42.5	28.7	6.2	20.1	2.5	25.3	27.6
Kuwait	2019	656	18.4	59.5	29.5	2.0	7.8	1.2	21.7	14.6
	2023	1082	21.0	53.1	31.4	2.6	11.6	1.3	19.2	22.9
South Africa (9)	2019	2975	21.9	54.4	37.2	1.8	5.2	1.3	21.6	22.2
	2023	2995	19.0	60.0	30.8	2.3	5.7	1.2	18.6	19.3
International Avg. (3)	2019	4487	23.5	51.5	33.7	4.0	9.1	1.7	25.0	22.0
	2023	5629	22.2	51.9	30.3	3.7	12.5	1.6	21.1	23.3

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

Mathematics: Geometry / Applying

MP13_10 MP62192: Distance from base of ladder to base of building - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	22.7	68.9	20.2	7.7	3.1	24.0	21.5
	2023	1552	17.7	72.6	15.6	9.2	2.6	19.2	16.3
Kuwait	2019	657	8.1	85.0	7.5	6.2	1.2	7.3	9.1
	2023	1081	9.2	83.0	8.4	7.2	1.4	5.9	12.6
South Africa (9)	2019	2975	5.3	91.0	5.1	2.4	1.5	5.0	5.6
	2023	2995	5.3	90.9	5.1	2.6	1.4	5.0	5.8
International Avg. (3)	2019	4488	12.0	81.6	10.9	5.5	2.0	12.1	12.1
	2023	5628	10.7	82.2	9.7	6.3	1.8	10.1	11.6

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

Mathematics: Data and Probability / Applying
MP13_11 MP62072: Graph for Charles' walk or bike to Olympic park - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	856	37.7	57.1	34.5	4.8	3.6	36.9	38.4
	2023	1552	29.1	66.6	27.3	3.3	2.7	28.7	29.4
Kuwait	2019	657	15.1	82.7	14.7	1.4	1.2	16.3	13.7
	2023	1082	28.0	68.7	26.7	3.2	1.4	29.7	26.3
South Africa (9)	2019	2975	26.6	70.5	25.5	2.0	1.9	24.2	29.4
	2023	2998	17.5	79.7	17.0	2.0	1.4	15.8	19.7
International Avg. (3)	2019	4488	26.4	70.1	24.9	2.7	2.2	25.8	27.1
	2023	5632	24.9	71.7	23.7	2.8	1.8	24.7	25.1

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

Mathematics: Data and Probability / Knowing

MP13_13 MP62120: Umut picks marbles without replacement - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	857	42.7	12.9	11.4	39.6	28.9	0.8	6.3	39.7	45.4
	2023	1552	40.8	11.7	15.6	38.4	28.5	1.5	4.3	39.6	41.9
Kuwait	2019	655	25.9	19.8	25.7	25.1	26.4	1.4	1.6	22.9	29.2
	2023	1081	26.7	18.0	27.4	25.7	24.8	2.0	2.0	26.0	27.5
South Africa (9)	2019	2975	18.0	22.6	24.0	17.2	31.7	1.6	2.9	17.6	18.5
	2023	2996	16.7	23.4	23.6	16.1	32.9	1.5	2.5	14.5	19.4
International Avg. (3)	2019	4487	28.9	18.5	20.4	27.3	29.0	1.3	3.6	26.7	31.0
	2023	5629	28.1	17.7	22.2	26.7	28.7	1.7	2.9	26.7	29.6

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

Mathematics: Number / Knowing

MP14_01 MP72005: Number with most factors - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	52.6	31.6	5.9	51.7	8.9	1.4	0.4	55.3	50.3
	2023	1566	43.3	39.6	7.2	41.9	8.0	2.8	0.4	44.4	42.2
Kuwait	2019	657	43.4	39.2	4.9	42.2	11.0	2.8	0.0	45.8	40.7
	2023	1081	41.8	40.0	6.7	40.5	9.7	2.7	0.4	39.2	44.4
South Africa (9)	2019	2957	43.3	37.3	6.1	42.7	12.5	1.3	0.0	45.0	41.5
	2023	3012	40.1	37.3	7.8	39.5	13.9	1.4	0.0	41.9	38.5
International Avg. (3)	2019	4479	46.5	36.0	5.6	45.5	10.8	1.8	0.1	48.7	44.2
	2023	5659	41.7	39.0	7.2	40.6	10.5	2.3	0.3	41.8	41.7

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

Mathematics: Number / Knowing

MP14_02 MP72021: Value of X in 10/15 = X/18 - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	35.2	50.1	27.3	22.2	0.4	42.6	28.9
	2023	1566	29.0	49.0	20.0	30.5	0.4	29.8	28.3
Kuwait	2019	656	33.0	61.9	30.5	7.3	0.3	35.8	29.6
	2023	1079	29.7	63.2	26.7	9.8	0.4	31.7	27.5
South Africa (9)	2019	2957	15.7	79.6	14.8	5.6	0.0	16.3	15.1
	2023	2999	22.5	73.4	21.3	5.2	0.1	23.4	22.0

International Avg. (3)	2019	4478	28.0	63.9	24.2	11.7	0.2	31.6	24.5
	2023	5644	27.0	61.9	22.7	15.2	0.3	28.3	25.9

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

Mathematics: Number / Reasoning

MP14_03 MP72026: Make two fractions with largest product - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	37.9	59.3	36.2	3.9	0.5	35.2	40.2
	2023	1566	33.1	62.8	31.1	5.4	0.7	31.2	34.9
Kuwait	2019	657	22.4	75.1	21.7	2.8	0.3	20.8	24.3
	2023	1079	27.5	69.3	26.3	4.0	0.4	26.0	29.0
South Africa (9)	2019	2957	10.7	86.3	10.4	3.3	0.1	9.9	11.7
	2023	3004	13.4	84.2	13.0	2.6	0.2	13.8	12.8
International Avg. (3)	2019	4479	23.7	73.6	22.8	3.3	0.3	21.9	25.4
	2023	5649	24.7	72.1	23.5	4.0	0.4	23.7	25.6

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

Mathematics: Number / Applying

MP14_04A MP72041A: Ratio of boys to girls - Class I - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	36.1	56.8	32.2	10.5	0.6	43.1	30.1
	2023	1566	30.9	58.5	26.2	14.5	0.9	35.5	26.5
Kuwait	2019	657	30.6	66.2	29.1	4.4	0.3	34.0	26.7
	2023	1080	30.8	63.5	28.3	7.8	0.4	32.7	28.8
South Africa (9)	2019	2957	47.6	50.9	46.2	2.7	0.1	54.2	40.3
	2023	3005	43.5	54.5	41.9	3.5	0.2	50.4	36.4

International Avg. (3)	2019	4479	38.1	58.0	35.8	5.9	0.3	43.8	32.3
	2023	5651	35.1	58.8	32.1	8.6	0.5	39.5	30.6

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

Mathematics: Number / Applying

MP14_04B MP72041B: Ratio of boys to girls - eighth grade - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	29.2	61.3	25.3	12.7	0.6	35.5	23.9
	2023	1566	23.7	62.4	19.4	17.2	1.1	26.2	21.3
Kuwait	2019	657	22.5	72.9	21.1	5.2	0.8	23.3	21.6
	2023	1080	25.8	67.0	23.3	8.9	0.7	24.3	27.4
South Africa (9)	2019	2957	26.1	71.2	25.2	3.5	0.1	29.9	21.9
	2023	3005	23.3	73.2	22.3	4.2	0.4	27.3	19.4

International Avg. (3)	2019	4479	25.9	68.5	23.9	7.1	0.5	29.6	22.5
	2023	5651	24.3	67.5	21.7	10.1	0.7	25.9	22.7

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

Mathematics: Algebra / Knowing

MP14_05 MP72223: Expression for money in savings account - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	42.1	32.0	40.8	17.2	6.9	2.5	0.6	38.8	44.9
	2023	1566	35.0	35.5	32.7	17.7	7.5	5.4	1.2	31.0	39.0
Kuwait	2019	654	33.6	45.2	32.6	12.9	6.4	2.1	0.8	29.0	38.8
	2023	1081	29.1	44.4	28.0	14.8	8.9	3.2	0.8	25.6	32.6
South Africa (9)	2019	2957	29.7	38.9	28.9	15.8	13.8	2.5	0.1	31.1	28.1
	2023	3012	30.2	34.8	29.4	20.1	13.2	2.1	0.4	29.9	30.7
International Avg. (3)	2019	4476	35.1	38.7	34.1	15.3	9.0	2.3	0.5	33.0	37.3
	2023	5659	31.5	38.2	30.1	17.5	9.9	3.6	0.8	28.8	34.1

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

Mathematics: Algebra / Knowing

MP14_06 MP72094: Value of k when $(k + 7) / 3 = 6$ - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	43.5	45.7	35.1	18.3	0.9	48.1	39.7
	2023	1566	38.3	45.9	28.4	24.3	1.4	37.2	39.2
Kuwait	2019	657	33.7	60.9	31.0	7.3	0.8	31.1	36.7
	2023	1080	30.8	60.4	26.9	11.9	0.8	27.1	34.7
South Africa (9)	2019	2957	29.6	67.4	28.3	3.9	0.4	30.2	28.9
	2023	3004	33.6	62.7	31.8	5.0	0.6	35.5	31.8

International Avg. (3)	2019	4479	35.6	58.0	31.5	9.8	0.7	36.5	35.1
	2023	5650	34.2	56.3	29.0	13.8	0.9	33.3	35.2

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

Mathematics: Algebra / Applying

MP14_07 MP72059: Formula for students' overall scores in course - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	18.8	61.9	14.4	22.5	1.3	24.8	13.4
	2023	1566	12.7	52.3	7.6	38.5	1.6	13.2	12.1
Kuwait	2019	657	12.0	74.6	10.2	14.2	0.9	14.4	9.0
	2023	1080	12.6	67.3	9.7	22.2	0.8	10.8	14.6
South Africa (9)	2019	2957	11.2	82.4	10.4	6.8	0.4	11.8	10.5
	2023	3002	17.0	75.8	15.6	7.7	0.9	20.1	14.1
International Avg. (3)	2019	4479	14.0	73.0	11.7	14.5	0.9	17.0	11.0
	2023	5648	14.1	65.2	11.0	22.8	1.1	14.7	13.6

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

Mathematics: Algebra / Knowing

MP14_08 MP72080: Expression equivalent to $x + 2y + 6$ - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	30.8	28.3	20.1	36.0	7.6	6.6	1.4	35.3	26.9
	2023	1566	26.2	24.0	20.7	40.6	6.4	6.4	1.8	25.7	26.6
Kuwait	2019	653	25.8	24.9	22.7	42.9	5.9	2.4	1.3	26.6	24.9
	2023	1078	19.5	18.6	21.6	46.6	8.5	3.8	0.9	18.9	20.1
South Africa (9)	2019	2957	12.6	12.2	11.6	64.9	8.2	2.3	0.7	11.8	13.5
	2023	3011	14.8	14.3	15.2	52.8	14.3	2.1	1.4	15.8	14.0

International Avg. (3)	2019	4475	23.1	21.8	18.1	47.9	7.2	3.8	1.1	24.6	21.8
	2023	5655	20.2	19.0	19.2	46.7	9.7	4.1	1.4	20.1	20.2

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

Mathematics: Algebra / Applying

MP14_09 MP72081: Pair of equations for ticket price - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	10.7	80.4	9.6	7.8	2.1	11.4	10.1
	2023	1566	12.3	76.7	10.8	10.7	1.8	12.6	12.0
Kuwait	2019	657	9.7	83.9	9.0	5.8	1.2	7.9	11.9
	2023	1080	11.0	81.9	10.1	7.1	0.9	10.8	11.2
South Africa (9)	2019	2957	11.1	81.2	10.2	7.8	0.8	11.3	10.9
	2023	3004	12.5	79.3	11.3	7.6	1.8	10.8	14.7

International Avg. (3)	2019	4479	10.5	81.9	9.6	7.1	1.4	10.2	11.0
	2023	5650	11.9	79.3	10.7	8.5	1.5	11.4	12.6

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

Mathematics: Geometry / Knowing

MP14_10 MP72140: Shape reflected over dotted line (DERIVED) - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	38.8	57.9	36.7	3.0	2.5	39.1	38.6
	2023	1566	34.0	62.8	32.3	2.7	2.2	33.8	34.2
Kuwait	2019	657	25.9	71.3	24.9	2.4	1.3	27.9	23.6
	2023	1080	20.9	75.0	19.8	3.9	1.2	23.3	18.5
South Africa (9)	2019	2957	21.0	76.0	20.2	2.3	1.4	21.1	20.9
	2023	3001	15.5	80.4	14.8	2.8	2.1	17.1	14.1
International Avg. (3)	2019	4479	28.6	68.4	27.3	2.6	1.8	29.4	27.7
	2023	5647	23.5	72.7	22.3	3.1	1.8	24.7	22.2

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

Mathematics: Geometry / Knowing

MP14_10A MP72140A: Shape reflected over dotted line - A - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	64.1	33.5	59.7	4.3	2.5	65.4	63.0
	2023	1566	60.0	37.2	55.9	4.7	2.2	57.5	62.5
Kuwait	2019	657	64.8	33.9	62.3	2.5	1.3	66.8	62.5
	2023	1080	58.4	39.0	54.8	5.0	1.2	57.1	59.8
South Africa (9)	2019	2957	53.8	43.0	50.2	5.4	1.4	52.7	55.1
	2023	3006	50.3	46.4	46.9	4.6	2.1	52.6	48.0
International Avg. (3)	2019	4479	60.9	36.8	57.4	4.1	1.8	61.6	60.2
	2023	5652	56.3	40.9	52.5	4.8	1.8	55.7	56.8

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

Mathematics: Geometry / Knowing

MP14_10B MP72140B: Shape reflected over dotted line - B - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	81.6	76.0	17.1	4.3	2.5	83.6	79.9
	2023	1566	78.9	73.5	19.7	4.5	2.2	76.7	80.9
Kuwait	2019	657	69.6	66.0	28.8	3.9	1.3	75.3	63.2
	2023	1080	63.2	59.2	34.4	5.2	1.2	66.8	59.5
South Africa (9)	2019	2957	76.9	71.5	21.4	5.6	1.4	78.2	75.5
	2023	3007	71.2	66.7	26.9	4.3	2.1	74.3	68.2
International Avg. (3)	2019	4479	76.1	71.2	22.5	4.6	1.8	79.0	72.9
	2023	5653	71.1	66.5	27.0	4.7	1.8	72.6	69.6

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

Mathematics: Geometry / Knowing

MP14_10C MP72140C: Shape reflected over dotted line - C - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	75.7	22.6	70.5	4.4	2.5	77.9	73.9
	2023	1566	71.2	26.6	65.6	5.6	2.2	72.7	69.7
Kuwait	2019	657	68.3	30.1	64.8	3.8	1.3	69.9	66.5
	2023	1080	65.1	32.6	60.9	5.4	1.2	67.9	62.3
South Africa (9)	2019	2957	62.9	34.3	58.2	6.1	1.4	63.8	62.0
	2023	3005	59.3	37.9	55.3	4.7	2.1	60.7	58.0
International Avg. (3)	2019	4479	69.0	29.0	64.5	4.8	1.8	70.5	67.4
	2023	5651	65.2	32.4	60.6	5.2	1.8	67.1	63.3

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

Mathematics: Geometry / Knowing

MP14_10D MP72140D: Shape reflected over dotted line - D - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	86.8	80.5	12.3	4.8	2.5	89.4	84.5
	2023	1566	83.8	77.8	15.0	5.0	2.2	85.0	82.7
Kuwait	2019	657	79.5	75.8	19.5	3.4	1.3	82.4	76.2
	2023	1080	75.6	71.0	22.9	4.9	1.2	75.4	75.9
South Africa (9)	2019	2957	84.4	78.5	14.5	5.6	1.4	83.5	85.5
	2023	3005	80.8	75.6	18.0	4.3	2.1	83.5	77.6
International Avg. (3)	2019	4479	83.6	78.3	15.4	4.6	1.8	85.1	82.0
	2023	5651	80.1	74.8	18.6	4.7	1.8	81.3	78.7

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

Mathematics: Geometry / Knowing

MP14_10E MP72140E: Shape reflected over dotted line - E - MC - Key: B

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	78.0	20.3	72.2	5.0	2.5	77.6	78.4
	2023	1566	74.1	24.0	68.7	5.0	2.2	74.5	73.6
Kuwait	2019	657	61.5	36.8	58.8	3.0	1.3	62.8	60.0
	2023	1080	58.8	38.5	54.9	5.5	1.2	59.6	58.0
South Africa (9)	2019	2957	59.2	37.6	54.5	6.5	1.4	61.4	56.7
	2023	3007	56.0	40.9	52.1	5.0	2.1	58.4	53.7
International Avg. (3)	2019	4479	66.2	31.6	61.8	4.8	1.8	67.3	65.1
	2023	5653	63.0	34.5	58.6	5.1	1.8	64.2	61.8

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

Mathematics: Geometry / Knowing

MP14_10F MP72140F: Shape reflected over dotted line - F - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	79.6	73.8	18.9	4.8	2.5	82.2	77.4
	2023	1566	79.9	74.5	18.7	4.6	2.2	81.1	78.8
Kuwait	2019	657	68.0	64.7	30.4	3.6	1.3	73.7	61.6
	2023	1080	70.6	66.0	27.4	5.3	1.2	73.7	67.4
South Africa (9)	2019	2957	73.5	68.1	24.6	5.9	1.4	74.6	72.2
	2023	3007	68.8	64.2	29.2	4.5	2.1	71.2	66.1
International Avg. (3)	2019	4479	73.7	68.9	24.6	4.8	1.8	76.8	70.4
	2023	5653	73.1	68.2	25.1	4.8	1.8	75.3	70.8

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

Mathematics: Geometry / Reasoning

MP14_11 MP72120: Value of angle x with parallel lines a and b - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	22.7	67.6	19.8	9.7	2.9	25.9	19.8
	2023	1566	20.0	65.0	16.2	16.3	2.5	20.1	19.9
Kuwait	2019	657	16.3	76.7	14.9	6.3	2.1	15.2	17.6
	2023	1079	11.9	77.3	10.4	10.3	1.9	10.7	13.1
South Africa (9)	2019	2957	6.9	87.3	6.5	4.4	1.8	6.7	7.1
	2023	3004	10.7	83.7	10.0	3.8	2.5	10.5	11.0
International Avg. (3)	2019	4478	15.3	77.2	13.7	6.8	2.3	15.9	14.8
	2023	5649	14.2	75.3	12.2	10.1	2.3	13.8	14.7

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

Mathematics: Geometry / Reasoning

MP14_12 MP72131: Areas of triangles ABC and ABD - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	3.4	88.3	3.1	5.2	3.4	3.6	3.2
	2023	1566	1.7	90.8	1.5	5.1	2.6	1.5	1.9
Kuwait	2019	657	5.7	89.9	5.4	2.6	2.1	6.6	4.7
	2023	1079	8.1	86.9	7.6	3.1	2.4	8.4	7.8
South Africa (9)	2019	2957	1.3	93.3	1.2	2.9	2.5	1.3	1.2
	2023	3005	3.4	90.0	3.2	3.6	3.1	2.6	4.3

International Avg. (3)	2019	4478	3.5	90.5	3.2	3.6	2.7	3.8	3.0
	2023	5650	4.4	89.2	4.1	3.9	2.7	4.1	4.7

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

Mathematics: Geometry / Applying

MP14_13 MP72147: Surface area of rectangular prism - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	9.9	72.7	8.0	14.8	4.5	11.7	8.3
	2023	1566	4.2	67.8	2.9	26.1	3.2	5.0	3.3
Kuwait	2019	657	7.8	84.0	7.1	6.0	2.9	6.7	9.0
	2023	1079	6.9	81.0	6.0	10.3	2.7	3.8	10.3
South Africa (9)	2019	2957	2.8	90.3	2.6	3.9	3.1	3.5	2.1
	2023	3005	2.7	88.9	2.5	5.1	3.4	1.8	3.8

International Avg. (3)	2019	4478	6.8	82.4	5.9	8.3	3.5	7.3	6.5
	2023	5650	4.6	79.3	3.8	13.8	3.1	3.6	5.8

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

Mathematics: Data and Probability / Applying
MP14_14 MP72154: Bar graph of Internet users in world - MC - Key: C

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	864	53.2	8.4	17.3	49.0	17.4	3.0	4.9	47.9	57.9
	2023	1566	48.7	9.7	21.5	44.4	15.7	5.0	3.8	44.1	53.0
Kuwait	2019	655	38.7	9.7	21.7	37.1	27.3	1.1	3.1	33.4	44.7
	2023	1079	38.8	12.5	23.0	36.9	22.8	2.0	2.8	34.9	42.7
South Africa (9)	2019	2957	30.1	9.3	26.1	28.2	30.0	2.4	4.0	28.5	32.0
	2023	3004	29.6	12.7	28.1	27.6	24.7	2.8	4.1	26.7	32.8
International Avg. (3)	2019	4476	40.7	9.1	21.7	38.1	24.9	2.2	4.0	36.6	44.9
	2023	5649	39.0	11.6	24.2	36.3	21.1	3.2	3.6	35.2	42.8

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

Mathematics: Data and Probability / Applying
MP14_15 MP72192: Graph that best shows favorite fruit - MC - Key: A

COUNTRY	YEAR	N	DIFF %	A %	B %	C %	D %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	35.6	32.7	37.8	6.8	14.5	3.2	5.0	37.0	34.4
	2023	1566	34.6	31.2	39.7	6.7	12.4	5.7	4.3	34.9	34.4
Kuwait	2019	655	42.9	40.3	39.0	5.6	9.2	2.9	3.1	43.0	42.7
	2023	1076	36.9	34.4	40.2	7.6	11.1	3.5	3.2	36.3	37.4
South Africa (9)	2019	2957	32.4	30.1	49.2	4.5	9.1	2.5	4.7	30.7	34.3
	2023	3002	28.0	26.0	51.4	4.5	11.2	2.5	4.4	28.8	27.2
International Avg. (3)	2019	4477	37.0	34.4	42.0	5.6	10.9	2.8	4.3	36.9	37.1
	2023	5644	33.2	30.5	43.7	6.3	11.6	3.9	4.0	33.4	33.0

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

Mathematics: Data and Probability / Reasoning

MP14_16 MP72161: Mean heights of basketball team - CR - 1 Point

COUNTRY	YEAR	N	DIFF %	0pt %	1pt %	OMITTED %	NOT REACHED %	GIRL PCT RIGHT	BOY PCT RIGHT
Iran, Islamic Rep. of	2019	865	27.1	65.4	24.3	4.3	6.0	30.2	24.5
	2023	1566	15.4	77.8	14.1	3.0	5.1	14.0	16.6
Kuwait	2019	657	11.1	84.1	10.5	1.4	4.0	9.7	12.5
	2023	1079	14.7	80.3	13.8	1.6	4.3	14.6	14.8
South Africa (9)	2019	2957	9.1	82.7	8.2	3.2	5.9	9.6	8.5
	2023	3004	11.4	80.7	10.4	3.2	5.7	10.5	12.7
International Avg. (3)	2019	4479	15.7	77.4	14.3	2.9	5.3	16.5	15.1
	2023	5649	13.8	79.6	12.8	2.6	5.0	13.0	14.7

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