

Mathematics: Algebra / Knowing (MA13001 - M1_01)
 Label: Composite function
 Type: MC Key: D

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	430	10.4	12.6	6.3	60.4	3.5	6.8	60.4	4.5	2.2	61.5	59.2
Iran, Islamic Rep. of	1210	1.9	3.0	1.0	91.4	0.3	2.3	91.4	1.9	0.5	91.4	91.4
Italy	1073	23.9	13.0	2.6	50.0	1.6	8.8	50.0	8.1	0.7	51.8	49.1
Lebanon	811	1.3	3.0	0.6	93.6	0.4	1.1	93.6	0.8	0.3	96.9	92.2
Netherlands	770	10.8	4.6	3.2	76.3	2.4	2.7	76.3	1.8	0.8	79.5	75.3
Norway	971	38.6	14.0	5.9	28.9	5.6	7.0	28.9	6.2	0.8	27.6	29.7
Philippines	2054	25.1	17.2	3.4	49.9	3.9	0.5	49.9	0.5	0.0	45.9	56.7
Russian Federation	1589	10.5	5.5	1.8	80.0	1.2	1.0	80.0	0.9	0.1	76.0	83.3
Slovenia	1077	13.8	12.8	2.6	67.6	1.2	2.0	67.6	1.7	0.4	67.0	68.4
Sweden	1144	25.6	14.5	6.3	43.8	5.9	3.9	43.8	1.8	2.1	43.9	43.8
International Avg.	1113	16.2	10.0	3.4	64.2	2.6	3.6	64.2	2.8	0.8	64.1	64.9

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Reasoning (MA13002 - M1_02)
 Label: Identify the graph of function
 Type: MC Key: A

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	430	48.3	11.0	9.6	5.6	10.2	15.3	48.3	13.1	2.2	48.0	48.6
Iran, Islamic Rep. of	1210	63.8	2.2	15.5	2.4	10.6	5.5	63.8	4.9	0.6	57.4	68.8
Italy	1074	50.9	9.5	9.2	5.1	14.5	10.8	50.9	10.1	0.7	52.5	50.0
Lebanon	809	69.4	3.7	7.1	3.3	11.9	4.6	69.4	4.3	0.4	68.7	69.7
Netherlands	771	87.4	1.1	1.8	1.7	6.2	1.9	87.4	0.8	1.1	85.6	87.9
Norway	971	43.2	13.9	7.0	9.0	17.2	9.7	43.2	8.3	1.4	44.5	42.4
Philippines	2054	38.4	13.2	25.0	6.8	15.7	1.1	38.4	1.1	0.0	37.5	39.7
Russian Federation	1588	75.0	2.8	7.3	3.1	10.9	0.9	75.0	0.8	0.1	72.9	76.7
Slovenia	1077	55.4	8.4	5.3	7.2	19.1	4.6	55.4	4.0	0.5	53.3	58.6
Sweden	1144	41.4	12.3	7.2	10.4	22.1	6.7	41.4	4.4	2.3	37.7	43.7
International Avg.	1113	57.3	7.8	9.5	5.5	13.8	6.1	57.3	5.2	0.9	55.8	58.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
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Mathematics: Algebra / Reasoning (MA13003 - M1_03)
 Label: Predictions of 2 models compared
 Type: MC Key: E

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	430	11.3	8.4	16.7	12.1	24.0	27.5	24.0	25.1	2.5	23.6	24.4
Iran, Islamic Rep. of	1210	12.4	5.1	8.4	6.9	42.0	25.2	42.0	24.5	0.7	33.0	49.1
Italy	1071	17.2	8.6	10.1	5.8	39.5	18.8	39.5	18.1	0.7	37.6	40.6
Lebanon	809	21.6	7.4	4.1	4.1	53.7	9.0	53.7	8.4	0.7	54.2	53.5
Netherlands	769	15.2	1.5	1.7	1.2	78.1	2.1	78.1	0.9	1.2	76.7	78.6
Norway	950	11.0	7.0	10.0	6.3	58.5	7.2	58.5	5.5	1.7	58.7	58.5
Philippines	2054	12.3	16.5	18.8	9.9	41.1	1.4	41.1	1.4	0.0	38.2	46.2
Russian Federation	1589	16.6	5.9	7.1	4.1	63.2	3.2	63.2	3.1	0.1	56.4	68.5
Slovenia	1077	18.9	5.3	8.4	6.4	53.1	8.0	53.1	7.4	0.6	45.8	64.5
Sweden	1144	8.3	8.3	12.2	7.4	55.3	8.5	55.3	5.8	2.7	52.6	57.0
International Avg.	1110	14.5	7.4	9.7	6.4	50.9	11.1	50.9	10.0	1.1	47.7	54.1

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
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Mathematics: Calculus / Knowing (MA13004 - M1_04)
 Label: Solve the limit of function
 Type: MC Key: B

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	430	7.6	47.0	15.8	5.7	8.5	15.4	47.0	12.8	2.6	53.6	39.6
Iran, Islamic Rep. of	1210	2.1	87.0	1.6	0.4	4.1	4.9	87.0	4.0	0.9	86.3	87.5
Italy	1075	3.2	75.1	6.9	0.3	9.9	4.7	75.1	3.6	1.1	84.7	69.9
Lebanon	811	0.4	93.3	1.4	0.3	2.9	1.8	93.3	0.9	0.9	97.1	91.7
Netherlands	769	6.5	69.3	7.3	1.4	11.7	3.8	69.3	2.3	1.5	65.9	70.3
Norway	970	13.8	37.0	11.8	5.9	18.3	13.1	37.0	11.0	2.1	35.3	38.1
Philippines	2054	14.2	30.7	10.0	7.2	36.5	1.5	30.7	1.4	0.1	28.8	33.9
Russian Federation	1589	7.8	63.6	8.5	3.8	11.3	5.1	63.6	4.9	0.2	61.9	65.0
Slovenia	1077	14.8	51.1	8.7	2.7	14.0	8.7	51.1	7.8	0.9	49.5	53.6
Sweden	1144	17.2	27.4	15.0	5.4	25.3	9.6	27.4	6.0	3.6	23.6	29.8
International Avg.	1113	8.8	58.2	8.7	3.3	14.2	6.8	58.2	5.5	1.4	58.7	58.0

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA13006 - M1_06)
 Label: Using chain rule
 Type: MC Key: D

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	430	11.4	13.4	22.8	37.4	3.7	11.3	37.4	7.5	3.8	37.7	37.0
Iran, Islamic Rep. of	1210	3.4	4.0	10.2	64.1	5.7	12.6	64.1	11.1	1.5	63.6	64.5
Italy	1073	6.7	6.8	21.4	42.0	8.9	14.3	42.0	12.6	1.7	47.5	39.0
Lebanon	811	3.8	1.8	10.4	74.4	4.6	5.0	74.4	4.0	1.0	82.8	71.0
Netherlands	768	7.5	3.5	19.3	55.0	10.0	4.7	55.0	2.6	2.1	49.8	56.5
Norway	970	18.9	15.4	20.7	21.7	10.4	12.8	21.7	10.2	2.6	17.2	24.4
Philippines	2054	14.3	20.3	31.1	22.6	8.4	3.3	22.6	3.2	0.1	20.2	26.6
Russian Federation	1589	5.3	2.7	22.7	61.6	5.0	2.6	61.6	2.3	0.4	62.1	61.2
Slovenia	1077	5.3	9.1	26.3	35.8	12.5	10.9	35.8	10.0	0.9	36.7	34.4
Sweden	1144	9.7	21.6	26.5	26.5	7.6	8.1	26.5	4.4	3.7	29.2	24.8
International Avg.	1113	8.6	9.9	21.1	44.1	7.7	8.6	44.1	6.8	1.8	44.7	43.9

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA13007 - M1_07)
 Label: Slope sums of equilateral triangle
 Type: MC Key: A

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	430	33.2	6.1	11.5	19.0	9.3	20.9	33.2	16.9	4.0	32.3	34.2
Iran, Islamic Rep. of	1210	60.8	1.6	5.9	9.2	3.8	18.8	60.8	17.2	1.5	53.5	66.6
Italy	1075	42.3	2.5	9.6	15.0	5.8	24.7	42.3	23.1	1.7	41.9	42.5
Lebanon	811	54.0	2.8	8.6	17.2	7.1	10.3	54.0	9.2	1.1	51.3	55.0
Netherlands	770	74.9	1.4	6.1	9.9	3.8	3.9	74.9	1.5	2.4	70.2	76.2
Norway	971	51.5	1.4	18.4	13.6	6.4	8.7	51.5	5.8	2.9	48.3	53.4
Philippines	2054	29.1	3.7	20.7	25.9	19.1	1.5	29.1	1.3	0.1	24.7	36.5
Russian Federation	1589	51.9	2.7	11.5	22.3	6.4	5.1	51.9	4.8	0.4	47.1	55.8
Slovenia	1077	52.7	3.3	17.5	14.4	4.6	7.4	52.7	6.4	1.0	47.3	61.2
Sweden	1144	44.8	6.2	21.0	13.2	6.7	8.1	44.8	4.3	3.8	41.6	46.8
International Avg.	1113	49.5	3.2	13.1	16.0	7.3	11.0	49.5	9.1	1.9	45.8	52.8

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Reasoning (MA13008 - M1_08)
 Label: Length of PT is equal to
 Type: MC Key: D

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	430	8.0	9.1	12.9	60.5	9.5	60.5	4.1	5.4	64.2	56.3
Iran, Islamic Rep. of	1210	5.0	4.7	6.8	73.7	9.9	73.7	7.4	2.5	71.8	75.1
Italy	1073	7.0	11.1	7.9	64.6	9.4	64.6	6.9	2.5	73.3	60.0
Lebanon	806	2.5	2.6	3.1	89.7	2.1	89.7	0.7	1.4	92.0	88.8
Netherlands	770	3.6	3.5	10.4	78.8	3.6	78.8	1.0	2.6	78.3	79.0
Norway	965	10.2	14.1	17.8	48.5	9.4	48.5	6.0	3.3	52.2	46.3
Philippines	2054	19.4	16.7	16.8	46.5	0.6	46.5	0.4	0.2	43.0	52.6
Russian Federation	1589	3.7	2.8	4.8	87.4	1.4	87.4	0.9	0.5	86.2	88.3
Slovenia	1077	9.6	10.5	12.8	63.4	3.7	63.4	2.4	1.2	60.0	68.7
Sweden	1144	10.7	15.5	24.8	41.1	8.0	41.1	3.7	4.4	41.5	40.8
International Avg.	1112	7.9	9.1	11.8	65.4	5.8	65.4	3.3	2.4	66.3	65.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Applying (MA13009 - M1_09)
 Label: Integer coordinates of function
 Type: MC Key: C

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	430	8.1	8.1	43.2	28.4	12.3	43.2	6.8	5.4	43.0	43.3
Iran, Islamic Rep. of	1210	2.0	6.8	62.7	20.3	8.1	62.7	5.1	3.1	56.6	67.6
Italy	1075	2.3	6.6	46.3	29.4	15.4	46.3	12.7	2.7	48.5	45.2
Lebanon	811	1.3	5.2	56.8	31.4	5.4	56.8	3.9	1.5	57.1	56.7
Netherlands	771	3.7	5.6	30.1	56.1	4.5	30.1	1.5	3.0	25.9	31.4
Norway	971	4.7	10.5	45.5	31.0	8.3	45.5	4.3	4.0	44.2	46.3
Philippines	2054	3.5	7.9	23.1	64.4	1.1	23.1	0.9	0.2	21.1	26.6
Russian Federation	1589	1.2	3.2	77.2	16.4	2.0	77.2	1.3	0.7	73.3	80.2
Slovenia	1077	2.4	5.7	59.6	28.1	4.3	59.6	2.8	1.4	57.9	62.3
Sweden	1144	5.1	9.7	38.8	40.0	6.5	38.8	1.7	4.7	33.7	41.9
International Avg.	1113	3.4	6.9	48.3	34.5	6.8	48.3	4.1	2.7	46.1	50.2

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
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Mathematics: Algebra / Knowing (MA13011 - M2_01)
 Label: Find an equivalent fraction
 Type: MC Key: A

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	418	69.9	10.5	8.2	7.2	2.4	1.7	69.9	1.3	0.5	70.1	69.8
Iran, Islamic Rep. of	1227	80.5	5.2	2.7	4.5	4.3	2.8	80.5	2.8	0.0	80.6	80.4
Italy	1061	61.6	10.8	6.3	11.6	5.1	4.6	61.6	4.6	0.0	66.3	59.1
Lebanon	810	86.1	2.4	1.1	1.0	8.8	0.6	86.1	0.6	0.0	87.0	85.7
Netherlands	771	35.3	18.2	6.3	35.8	3.4	1.1	35.3	1.1	0.0	37.0	34.8
Norway	965	24.7	12.4	12.5	39.1	7.5	3.7	24.7	3.7	0.0	26.1	23.8
Philippines	2034	42.3	15.7	12.4	23.0	6.2	0.4	42.3	0.4	0.0	37.7	50.4
Russian Federation	1597	82.2	5.5	3.7	4.8	3.2	0.5	82.2	0.5	0.0	81.2	83.1
Slovenia	1066	59.6	9.7	7.6	15.6	5.8	1.8	59.6	1.8	0.0	59.0	60.6
Sweden	1159	22.6	8.4	12.0	45.5	8.0	3.5	22.6	3.5	0.0	19.9	24.3
International Avg.	1111	56.5	9.9	7.3	18.8	5.5	2.1	56.5	2.0	0.0	56.5	57.2

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Knowing (MA13012 - M2_02)
 Label: Cubing a trigonometric function
 Type: MC Key: C

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	418	3.9	13.4	18.4	38.6	6.2	19.5	18.4	19.0	0.5	13.2	24.0
Iran, Islamic Rep. of	1227	1.6	8.4	35.4	30.8	6.1	17.7	35.4	17.7	0.0	33.0	37.3
Italy	1060	1.8	11.5	24.0	34.0	7.0	21.7	24.0	21.7	0.0	17.4	27.5
Lebanon	809	0.2	7.1	77.6	6.4	6.1	2.6	77.6	2.6	0.0	81.3	76.1
Netherlands	767	2.6	8.0	32.2	44.6	8.9	3.6	32.2	3.6	0.0	29.4	33.1
Norway	963	2.5	12.6	24.2	44.0	6.7	10.0	24.2	10.0	0.0	24.3	24.1
Philippines	2034	4.7	22.7	17.3	42.2	11.2	1.8	17.3	1.8	0.0	15.1	21.1
Russian Federation	1596	1.5	5.6	65.2	16.5	9.1	2.2	65.2	2.2	0.0	64.7	65.6
Slovenia	1066	2.8	7.9	23.4	31.2	26.5	8.3	23.4	8.3	0.0	24.3	21.8
Sweden	1159	6.1	20.1	40.2	21.6	8.3	3.7	40.2	3.7	0.0	40.2	40.2
International Avg.	1110	2.8	11.7	35.8	31.0	9.6	9.1	35.8	9.1	0.0	34.3	37.1

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Applying (MA13013 - M2_03)
 Label: Value of x to make function negative
 Type: MC Key: E

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	418	7.1	11.9	7.8	7.9	58.3	7.0	58.3	6.2	0.8	58.8	57.7
Iran, Islamic Rep. of	1227	3.6	11.0	2.3	4.4	69.8	8.9	69.8	8.9	0.0	68.5	70.9
Italy	1061	2.7	15.3	4.9	4.4	67.7	4.9	67.7	4.9	0.0	72.7	65.2
Lebanon	810	4.4	12.7	1.6	3.5	71.5	6.3	71.5	6.3	0.0	76.1	69.6
Netherlands	771	4.6	5.6	2.1	1.9	84.6	1.2	84.6	1.2	0.0	85.6	84.3
Norway	965	8.3	13.6	8.9	13.6	47.6	7.9	47.6	7.9	0.0	50.6	45.7
Philippines	2034	15.0	17.0	9.2	17.9	38.1	2.8	38.1	2.8	0.0	36.4	41.1
Russian Federation	1597	1.1	4.8	1.6	2.7	88.6	1.1	88.6	1.1	0.0	87.8	89.3
Slovenia	1066	11.3	16.5	6.8	9.2	47.4	8.7	47.4	8.7	0.0	46.1	49.5
Sweden	1159	10.3	17.4	12.3	13.1	40.6	6.3	40.6	6.3	0.0	40.0	41.0
International Avg.	1111	6.8	12.6	5.8	7.9	61.4	5.5	61.4	5.4	0.1	62.3	61.4

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA13015 - M2_05)
 Label: Derivative of exponential function
 Type: MC Key: C

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	418	7.5	13.9	67.3	6.5	1.4	3.4	67.3	2.6	0.8	61.9	73.1
Iran, Islamic Rep. of	1227	4.1	24.2	38.0	5.7	3.2	24.8	38.0	24.8	0.0	40.6	35.9
Italy	1060	8.4	10.7	68.1	8.8	1.7	2.3	68.1	2.3	0.0	71.7	66.1
Lebanon	810	2.4	2.4	93.5	0.6	0.4	0.8	93.5	0.8	0.0	94.9	92.9
Netherlands	772	5.5	5.8	81.2	5.8	1.1	0.7	81.2	0.7	0.0	84.4	80.3
Norway	964	11.1	17.2	57.1	10.1	3.0	1.5	57.1	1.5	0.0	59.3	55.8
Philippines	2034	13.1	40.4	27.2	9.1	8.9	1.3	27.2	1.3	0.0	26.5	28.4
Russian Federation	1596	11.2	8.1	73.3	6.0	0.7	0.7	73.3	0.7	0.0	73.1	73.4
Slovenia	1066	17.2	13.5	48.1	15.7	3.5	2.0	48.1	2.0	0.0	48.7	47.1
Sweden	1159	12.3	15.8	52.0	14.2	5.0	0.7	52.0	0.7	0.0	49.7	53.6
International Avg.	1111	9.3	15.2	60.6	8.3	2.9	3.8	60.6	3.7	0.1	61.1	60.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Applying (MA13016 - M2_06)
 Label: Cylinder radius with maximum volume
 Type: MC Key: D

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	418	10.3	16.7	21.3	29.9	10.1	11.8	29.9	11.0	0.8	32.6	27.0
Iran, Islamic Rep. of	1227	8.9	12.3	12.6	28.1	13.3	24.8	28.1	24.7	0.1	21.3	33.6
Italy	1061	6.3	11.3	11.1	32.1	23.2	16.0	32.1	16.0	0.0	28.4	34.0
Lebanon	807	13.1	12.6	14.0	20.5	18.9	21.0	20.5	21.0	0.0	15.7	22.5
Netherlands	766	6.7	24.4	14.6	44.8	7.9	1.7	44.8	1.7	0.0	39.0	46.5
Norway	963	9.7	18.4	12.8	34.4	21.4	3.4	34.4	3.4	0.0	36.7	33.0
Philippines	2034	13.8	14.9	27.0	18.4	23.6	2.3	18.4	2.3	0.0	16.7	21.4
Russian Federation	1597	8.7	18.8	11.6	46.7	11.9	2.3	46.7	2.3	0.0	44.4	48.6
Slovenia	1066	8.8	12.3	17.2	30.5	24.1	7.1	30.5	7.1	0.0	26.9	36.3
Sweden	1159	11.1	21.5	16.6	33.9	14.0	2.9	33.9	2.8	0.1	34.2	33.7
International Avg.	1110	9.7	16.3	15.9	31.9	16.8	9.3	31.9	9.2	0.1	29.6	33.7

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA13017 - M2_07)
 Label: Equation of perpendicular line
 Type: MC Key: E

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	418	24.7	10.3	11.2	12.9	24.4	16.4	24.4	15.6	0.8	21.7	27.4
Iran, Islamic Rep. of	1227	21.1	2.5	6.6	4.6	49.0	16.2	49.0	16.1	0.1	43.7	53.3
Italy	1060	21.3	5.7	9.2	9.2	44.6	10.1	44.6	10.1	0.0	46.6	43.5
Lebanon	806	17.8	0.8	6.2	5.6	66.2	3.4	66.2	3.3	0.1	66.2	66.2
Netherlands	762	33.6	7.7	10.7	8.7	33.4	5.9	33.4	5.9	0.0	32.7	33.6
Norway	962	27.2	9.6	14.0	12.7	22.9	13.6	22.9	13.6	0.0	23.1	22.8
Philippines	2034	26.7	8.4	16.6	10.9	34.7	2.8	34.7	2.8	0.0	32.2	38.8
Russian Federation	1597	34.1	3.5	5.5	5.7	48.6	2.7	48.6	2.7	0.0	46.9	49.9
Slovenia	1066	17.9	4.9	12.6	10.3	46.6	7.7	46.6	7.7	0.0	46.9	46.2
Sweden	1159	26.4	11.0	17.6	14.3	23.3	7.4	23.3	7.1	0.3	23.2	23.3
International Avg.	1109	25.1	6.4	11.0	9.5	39.4	8.6	39.4	8.5	0.1	38.3	40.5

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Knowing (MA13018 - M2_08)
 Label: Difference of two vectors
 Type: MC Key: B

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	418	3.1	70.0	14.9	3.0	4.2	4.7	70.0	3.9	0.8	69.6	70.5
Iran, Islamic Rep. of	1227	0.7	89.7	4.3	0.7	1.3	3.3	89.7	2.9	0.4	91.1	88.6
Italy	1061	2.0	50.9	24.6	3.7	3.3	15.5	50.9	15.5	0.0	49.2	51.8
Lebanon	809	0.4	85.7	11.3	0.2	0.8	1.5	85.7	1.4	0.1	86.4	85.5
Netherlands	772	2.4	55.2	24.4	11.5	4.1	2.5	55.2	2.3	0.2	50.6	56.5
Norway	964	0.7	78.0	18.5	0.6	1.6	0.5	78.0	0.5	0.0	79.0	77.4
Philippines	2034	1.7	64.6	27.0	2.2	3.2	1.2	64.6	1.2	0.0	64.1	65.5
Russian Federation	1597	1.0	81.7	14.6	0.6	1.8	0.3	81.7	0.3	0.0	81.4	81.9
Slovenia	1066	2.8	50.2	29.5	8.5	2.8	6.3	50.2	6.1	0.1	52.2	46.9
Sweden	1159	3.4	44.7	32.7	7.0	5.2	7.0	44.7	6.2	0.8	42.3	46.3
International Avg.	1111	1.8	67.1	20.2	3.8	2.8	4.3	67.1	4.0	0.2	66.6	67.1

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Knowing (MA13019 - M2_09)
 Label: Equation representing set of points
 Type: MC Key: B

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	418	23.8	27.2	21.6	8.3	19.1	27.2	18.3	0.8	28.4	25.9
Iran, Islamic Rep. of	1227	16.2	40.6	11.2	5.0	27.0	40.6	26.6	0.4	36.0	44.3
Italy	1061	19.1	23.5	16.8	10.5	30.1	23.5	30.1	0.1	20.8	24.9
Lebanon	809	19.4	32.2	20.9	9.1	18.4	32.2	18.3	0.1	35.0	31.0
Netherlands	766	27.7	24.2	33.4	7.1	7.6	24.2	7.4	0.2	21.2	25.1
Norway	965	28.5	20.8	29.0	6.8	14.9	20.8	14.9	0.0	14.5	24.7
Philippines	2034	40.9	15.2	36.2	5.5	2.1	15.2	2.1	0.0	14.7	16.2
Russian Federation	1597	30.0	33.5	22.7	9.2	4.5	33.5	4.5	0.0	30.8	35.7
Slovenia	1066	27.6	16.9	35.9	6.5	13.1	16.9	12.9	0.2	15.2	19.7
Sweden	1159	26.8	20.4	31.2	9.9	11.7	20.4	10.7	1.0	17.1	22.6
International Avg.	1110	26.0	25.5	25.9	7.8	14.9	25.5	14.6	0.3	23.4	27.0

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA13020 - M2_10)
 Label: Value of vector in triangle
 Type: MC Key: C

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	418	18.9	7.8	40.3	7.1	11.2	14.7	40.3	13.8	0.9	41.7	38.7
Iran, Islamic Rep. of	1227	11.5	6.7	29.4	3.3	10.8	38.2	29.4	37.6	0.7	23.4	34.3
Italy	1061	13.4	9.2	23.2	8.4	8.8	37.0	23.2	36.9	0.1	19.3	25.2
Lebanon	807	12.2	4.7	51.1	3.5	9.2	19.3	51.1	19.1	0.2	50.3	51.5
Netherlands	763	16.8	24.8	23.6	13.8	12.8	8.1	23.6	7.8	0.3	18.4	25.1
Norway	963	15.4	20.0	36.2	8.3	12.0	8.2	36.2	8.2	0.0	37.3	35.5
Philippines	2034	31.1	19.9	29.2	6.3	10.3	3.2	29.2	3.2	0.0	29.1	29.4
Russian Federation	1596	16.9	5.3	62.2	2.3	10.4	3.0	62.2	3.0	0.0	57.4	66.0
Slovenia	1066	15.5	15.5	36.8	6.5	12.6	13.2	36.8	13.0	0.2	37.0	36.5
Sweden	1159	15.7	29.7	18.9	14.6	9.9	11.1	18.9	10.1	1.0	21.5	17.3
International Avg.	1109	16.8	14.4	35.1	7.4	10.8	15.6	35.1	15.3	0.3	33.5	36.0

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Knowing (MA13021 - M3_01)
 Label: Shape created by rotating line
 Type: MC Key: A

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	432	55.2	9.4	12.3	15.8	4.2	3.2	55.2	2.4	0.8	57.6	52.7
Iran, Islamic Rep. of	1222	55.7	5.5	10.3	12.6	7.6	8.3	55.7	7.3	1.0	55.3	56.1
Italy	1071	69.8	5.2	7.8	10.3	2.7	4.1	69.8	4.0	0.1	66.7	71.6
Lebanon	809	47.3	7.9	8.9	17.9	11.9	6.1	47.3	5.8	0.3	45.0	48.2
Netherlands	756	80.1	2.6	5.3	9.8	1.6	0.6	80.1	0.3	0.3	79.4	80.3
Norway	967	67.0	4.1	7.0	17.3	3.3	1.3	67.0	1.3	0.0	67.7	66.5
Philippines	2057	69.0	2.1	3.9	21.5	3.0	0.5	69.0	0.5	0.0	69.7	67.9
Russian Federation	1588	76.5	5.4	4.1	11.3	2.7	0.2	76.5	0.2	0.0	72.4	79.5
Slovenia	1083	54.3	9.4	12.4	18.7	3.9	1.3	54.3	0.9	0.4	49.5	61.3
Sweden	1148	74.0	2.5	6.9	12.4	2.0	2.2	74.0	1.1	1.1	74.3	73.8
International Avg.	1113	64.9	5.4	7.9	14.8	4.3	2.8	64.9	2.4	0.4	63.8	65.8

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA13024 - M3_04)
 Label: Integral of function
 Type: MC Key: B

COUNTRY	N	A	B	C	D	E	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	432	5.4	15.1	14.6	11.3	8.1	45.4	15.1	44.0	1.5	12.9	17.3
Iran, Islamic Rep. of	1222	4.1	32.8	13.5	5.5	6.9	37.3	32.8	35.6	1.7	27.1	37.3
Italy	1071	3.5	46.3	9.6	8.0	8.4	24.2	46.3	23.9	0.4	44.3	47.4
Lebanon	810	1.8	74.7	5.9	2.8	8.9	5.9	74.7	5.3	0.7	78.2	73.3
Netherlands	756	1.7	87.5	6.2	0.9	1.7	2.0	87.5	1.2	0.8	88.4	87.2
Norway	966	6.2	53.9	17.5	5.4	8.8	8.2	53.9	7.8	0.4	51.3	55.5
Philippines	2057	11.9	38.8	23.8	7.6	13.6	4.3	38.8	4.3	0.0	37.0	41.9
Russian Federation	1585	5.3	71.9	9.7	5.0	5.3	2.8	71.9	2.8	0.0	70.1	73.3
Slovenia	1083	4.8	43.9	15.6	7.9	12.3	15.4	43.9	14.6	0.8	41.0	48.2
Sweden	1148	8.1	41.5	24.6	5.8	11.1	8.9	41.5	6.9	1.9	41.5	41.5
International Avg.	1113	5.3	50.6	14.1	6.0	8.5	15.5	50.6	14.6	0.8	49.2	52.3

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA13025A - M3_05A)
 Label: Function/where not continuous
 Type: CR Key: X

COUNTRY	N	10	79	99	OMIT	NOT REACH		V1	1.GIRL % Right	2.BOY % Right
						ED				
Armenia	432	46.5	11.3	42.2	40.3	1.8	46.5	46.7	46.3	
Iran, Islamic Rep. of	1222	59.6	22.9	17.6	15.1	2.5	59.6	57.3	61.3	
Italy	1069	51.8	20.3	28.0	26.2	1.7	51.8	52.9	51.1	
Lebanon	811	64.9	29.8	5.4	4.5	0.9	64.9	69.3	63.0	
Netherlands	756	36.9	55.7	7.4	6.3	1.0	36.9	37.9	36.6	
Norway	967	35.3	36.1	28.6	27.9	0.7	35.3	35.2	35.3	
Philippines	2057	24.6	56.8	18.7	18.6	0.1	24.6	20.7	31.2	
Russian Federation	1589	58.7	29.1	12.2	12.1	0.1	58.7	58.3	59.0	
Slovenia	1083	58.1	27.2	14.7	13.3	1.3	58.1	53.9	64.2	
Sweden	1148	22.5	51.5	26.0	23.3	2.7	22.5	21.5	23.0	
International Avg.	1113	45.9	34.1	20.1	18.8	1.3	45.9	45.4	47.1	

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA13025B - M3_05B)
 Label: Function/where not differentiable
 Type: CR Key: X

COUNTRY	N	10	70	71	72	79	99	OMIT	NOT REACH ED	V1	1.GIRL % Right	2.BOY % Right
Armenia	432	6.1	15.5	6.1	0.2	9.1	63.0	58.7	4.3	6.1	4.1	8.1
Iran, Islamic Rep. of	1222	36.7	20.8	6.6	0.9	11.7	23.3	19.6	3.6	36.7	31.8	40.5
Italy	1071	8.2	25.6	3.9	4.9	16.3	41.2	35.8	5.4	8.2	6.6	9.1
Lebanon	811	14.1	29.7	15.2	9.4	21.4	10.2	8.7	1.5	14.1	16.1	13.3
Netherlands	756	7.7	45.4	3.9	26.1	10.7	6.2	5.0	1.2	7.7	7.4	7.8
Norway	967	1.7	25.1	1.4	15.2	16.6	39.9	37.4	2.5	1.7	2.1	1.4
Philippines	2057	2.5	15.4	7.1	1.8	44.3	28.9	27.6	1.3	2.5	1.7	4.0
Russian Federation	1589	15.9	25.9	5.6	8.4	19.7	24.5	23.0	1.5	15.9	14.1	17.3
Slovenia	1083	3.3	23.7	1.6	15.3	19.5	36.6	34.9	1.8	3.3	2.7	4.1
Sweden	1148	3.4	28.3	1.6	16.0	21.2	29.5	23.1	6.4	3.4	2.4	4.1
International Avg.	1114	10.0	25.5	5.3	9.8	19.0	30.3	27.4	2.9	10.0	8.9	11.0

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA13026A - M3_06A)
 Label: Triangle abc/reflection
 Type: CR Key: X

COUNTRY	N	10	70	71	79	99	OMIT	NOT REACH ED	V1	1.GIRL % Right	2.BOY % Right
Armenia	431	14.1	2.0	32.0	8.7	43.3	37.8	5.5	14.1	10.6	17.5
Iran, Islamic Rep. of	1222	64.4	7.3	2.5	11.4	14.4	10.6	3.8	64.4	61.0	67.0
Italy	1070	54.9	2.5	6.7	21.2	14.8	8.8	6.0	54.9	56.5	54.0
Lebanon	811	75.9	3.1	2.2	11.1	7.7	6.0	1.7	75.9	80.8	73.9
Netherlands	756	81.2	9.1	3.2	4.6	1.8	0.6	1.2	81.2	79.6	81.7
Norway	966	63.2	7.0	3.2	19.3	7.3	4.5	2.8	63.2	63.0	63.3
Philippines	2057	16.5	8.5	10.1	52.2	12.6	11.2	1.4	16.5	12.8	22.8
Russian Federation	1588	75.0	2.1	6.2	10.7	5.9	4.4	1.6	75.0	74.5	75.5
Slovenia	1083	69.7	7.6	2.7	16.9	3.1	0.9	2.2	69.7	68.7	71.2
Sweden	1148	18.8	8.3	5.2	34.5	33.2	26.0	7.2	18.8	17.9	19.4
International Avg.	1113	53.4	5.8	7.4	19.1	14.4	11.1	3.3	53.4	52.5	54.6

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA13026B - M3_06B)
 Label: Triangle abc/rotation
 Type: CR Key: X

COUNTRY	N	10	70	71	72	79	99	OMIT	NOT REACHED	V1	1.GIRL % Right	2.BOY % Right
Armenia	431	1.5	0.3	1.6	0.4	14.3	81.9	75.9	6.0	1.5	.	3.0
Iran, Islamic Rep. of	1222	13.5	2.9	4.7	0.4	42.1	36.4	31.6	4.8	13.5	9.1	16.9
Italy	1070	14.7	2.7	1.8	1.2	43.4	36.1	29.2	6.9	14.7	11.7	16.5
Lebanon	811	29.5	2.1	10.8	0.6	40.3	16.8	14.7	2.1	29.5	30.4	29.1
Netherlands	756	36.9	14.0	10.5	2.2	29.1	7.4	6.1	1.3	36.9	27.9	39.6
Norway	966	15.0	7.7	5.0	0.7	50.1	21.5	18.7	2.8	15.0	9.2	18.7
Philippines	2057	4.5	2.2	0.9	0.4	67.1	24.9	23.5	1.4	4.5	2.2	8.5
Russian Federation	1588	33.1	1.3	8.6	2.2	39.0	15.7	14.0	1.8	33.1	25.5	38.7
Slovenia	1083	9.7	11.0	2.8	0.2	55.6	20.8	18.6	2.2	9.7	6.4	14.6
Sweden	1148	9.7	2.3	3.0	0.7	41.6	42.8	32.4	10.4	9.7	5.0	12.7
International Avg.	1113	16.8	4.6	5.0	0.9	42.3	30.4	26.5	4.0	16.8	14.1	19.8

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Reasoning (MA13027 - M3_07)
 Label: Limit of the perimeter of polygon
 Type: CR Key: X

COUNTRY	N	20	10	11	70	71	79	99	OMIT	NOT REACH ED	V1	V2	1.GIRL % Right	2.BOY % Right
Armenia	431	27.5	5.8	1.2	0.3	0.0	5.3	59.9	47.6	12.3	34.5	27.5	31.0	23.9
Iran, Islamic Rep. of	1222	24.3	0.5	8.3	3.0	4.6	22.2	37.1	30.8	6.2	33.1	24.3	14.9	31.6
Italy	1071	23.9	1.5	10.6	1.8	1.8	11.9	48.4	37.4	10.9	36.0	23.9	18.0	27.3
Lebanon	811	25.9	0.3	2.1	5.4	10.3	22.4	33.6	30.9	2.6	28.4	25.9	20.6	28.1
Netherlands	756	67.6	0.1	1.4	7.8	1.6	11.2	10.3	8.6	1.7	69.1	67.6	63.2	69.0
Norway	966	19.1	0.0	3.1	4.9	1.5	22.1	49.2	44.0	5.3	22.2	19.1	12.1	23.6
Philippines	2057	6.3	0.2	0.8	1.8	12.2	48.4	30.2	28.0	2.2	7.3	6.3	3.0	12.0
Russian Federation	1589	40.6	1.2	5.8	1.7	2.7	15.8	32.2	29.2	3.0	47.6	40.6	31.7	47.1
Slovenia	1083	10.0	1.1	3.7	0.5	5.2	46.0	33.6	27.6	6.0	14.7	10.0	6.0	15.7
Sweden	1148	20.4	0.1	3.5	7.6	0.1	28.9	39.5	28.0	11.5	23.9	20.4	17.2	22.4
International Avg.	1113	26.6	1.1	4.1	3.5	4.0	23.4	37.4	31.2	6.2	31.7	26.6	21.8	30.1

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Knowing (MA13028 - M3_08)
 Label: Steps for mathematical induction
 Type: CR Key: X

COUNTRY	N	10	70	71	72	79	99	OMIT	NOT REACHED	V1	1.GIRL % Right	2.BOY % Right
Armenia	431	22.8	1.0	0.0	4.9	3.7	67.7	54.2	13.5	22.8	22.5	23.2
Iran, Islamic Rep. of	1222	58.9	4.2	1.9	1.1	18.3	15.6	8.0	7.6	58.9	63.7	55.2
Italy	1071	1.3	0.6	1.2	0.0	11.3	85.5	68.0	17.6	1.3	1.6	1.2
Lebanon	811	21.4	11.5	0.4	0.0	30.5	36.2	33.0	3.2	21.4	28.2	18.6
Netherlands	756	2.4	1.4	0.4	0.4	58.8	36.6	34.0	2.5	2.4	0.6	2.9
Norway	966	0.1	0.2	0.0	0.0	23.3	76.4	63.5	12.8	0.1	.	0.2
Philippines	2057	0.8	0.7	0.0	0.2	43.1	55.2	51.3	4.0	0.8	0.3	1.6
Russian Federation	1589	12.1	0.8	4.9	0.4	24.0	57.8	51.1	6.7	12.1	10.9	13.0
Slovenia	1083	10.0	1.1	0.5	0.4	28.8	59.2	50.2	9.0	10.0	10.4	9.5
Sweden	1148	2.0	0.9	0.7	0.1	29.7	66.7	52.0	14.7	2.0	0.3	3.1
International Avg.	1113	13.2	2.2	1.0	0.7	27.2	55.7	46.5	9.2	13.2	15.4	12.8

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Reasoning (MA13029 - M3_09)
 Label: Prove e is midpoint of quadrilateral
 Type: CR Key: X

COUNTRY	N	20	10	79	99	OMIT	NOT REACHED		V1	V2	1.GIRL % Right	2.BOY % Right
							ED	ED				
Armenia	431	21.5	12.2	8.6	57.7	31.5	26.2	33.7	21.5	24.2	18.9	
Iran, Islamic Rep. of	1222	38.2	5.6	25.7	30.6	22.5	8.1	43.7	38.2	32.7	42.4	
Italy	1071	20.4	5.9	21.9	51.9	26.0	25.9	26.3	20.4	21.1	20.0	
Lebanon	811	74.5	13.9	4.8	6.9	3.1	3.8	88.3	74.5	75.9	73.9	
Netherlands	756	32.9	12.7	42.5	12.0	7.3	4.7	45.6	32.9	39.3	31.0	
Norway	967	15.3	6.9	39.6	38.2	20.1	18.1	22.2	15.3	13.9	16.3	
Philippines	2057	25.3	3.5	53.6	17.6	11.7	5.9	28.8	25.3	22.0	30.8	
Russian Federation	1588	41.8	12.9	24.5	20.7	11.7	9.1	54.7	41.8	40.4	42.8	
Slovenia	1083	23.0	7.4	35.0	34.6	21.2	13.4	30.4	23.0	21.5	25.3	
Sweden	1148	8.5	3.3	44.6	43.6	24.1	19.5	11.8	8.5	8.5	8.5	
International Avg.	1113	30.1	8.4	30.1	31.4	17.9	13.5	38.6	30.1	30.0	31.0	

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Knowing (MA23005 - M4_01)
 Label: Which term has a value of 243
 Type: MC Key: B

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	440	11.2	63.3	9.3	10.3	6.0	63.3	6.0	0.0	60.3	66.7
Iran, Islamic Rep. of	1197	11.0	54.2	7.1	16.4	11.2	54.2	11.2	0.0	49.4	57.9
Italy	1081	13.2	38.8	10.5	26.2	11.3	38.8	11.3	0.0	30.6	43.0
Lebanon	799	25.1	48.3	3.8	16.5	6.4	48.3	6.4	0.0	52.4	46.6
Netherlands	765	30.2	63.4	2.0	3.7	0.6	63.4	0.5	0.1	63.7	63.3
Norway	965	13.2	60.2	5.5	18.2	2.8	60.2	2.8	0.0	54.5	63.8
Philippines	2056	9.5	39.3	10.8	38.1	2.2	39.3	2.2	0.0	34.4	47.7
Russian Federation	1588	11.0	76.3	3.5	8.3	1.0	76.3	1.0	0.0	74.8	77.4
Slovenia	1090	12.1	50.8	7.5	22.9	6.7	50.8	6.7	0.0	42.7	61.7
Sweden	1144	14.9	43.1	12.4	25.3	4.3	43.1	4.2	0.1	34.8	48.7
International Avg.	1113	15.1	53.8	7.2	18.6	5.2	53.8	5.2	0.0	49.8	57.7

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Knowing (MA23145 - M4_02)
 Label: How many 3 digit numbers formed
 Type: CR Key: X

COUNTRY	N	10	70	79	99	OMIT	NOT	V1	1.GIRL	2.BOY
							REACH ED		% Right	% Right
Armenia	440	30.8	2.0	46.8	20.3	20.3	0.0	30.8	31.9	29.6
Iran, Islamic Rep. of	1197	42.2	5.3	38.5	14.0	14.0	0.0	42.2	40.2	43.8
Italy	1082	15.9	4.1	63.0	17.0	17.0	0.0	15.9	14.2	16.8
Lebanon	802	41.5	9.0	40.0	9.5	9.5	0.0	41.5	47.7	39.1
Netherlands	765	63.9	6.8	26.6	2.8	2.7	0.1	63.9	62.0	64.5
Norway	966	29.9	11.0	49.7	9.4	9.4	0.0	29.9	25.5	32.5
Philippines	2056	22.2	1.7	70.9	5.1	5.1	0.0	22.2	17.6	30.1
Russian Federation	1588	37.6	2.7	48.0	11.7	11.7	0.0	37.6	32.7	41.6
Slovenia	1090	45.4	2.6	46.1	5.9	5.9	0.0	45.4	39.7	53.0
Sweden	1144	19.1	9.7	63.2	8.1	7.9	0.1	19.1	15.3	21.6
International Avg.	1113	34.8	5.5	49.3	10.4	10.4	0.0	34.8	32.7	37.3

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Applying (MA23187 - M4_03)
 Label: New diameter of soup can
 Type: CR Key: X

COUNTRY	N	20	21	10	11	12	70	79	99	OMIT	NOT REACH ED	V1	V2	1.GIRL % Right	2.BOY % Right
Armenia	440	23.7	0.2	8.5	1.6	0.0	0.4	21.3	44.2	44.2	0.0	34.1	24.0	23.2	24.9
Iran, Islamic Rep. of	1196	36.6	0.4	17.2	5.2	0.6	0.2	24.6	15.2	15.2	0.0	60.0	37.0	33.2	39.9
Italy	1069	32.1	0.1	5.3	0.0	0.0	0.2	39.3	23.0	22.9	0.1	37.5	32.2	27.4	34.6
Lebanon	802	42.2	0.1	7.4	0.0	0.0	0.2	34.5	15.6	15.6	0.0	49.7	42.4	44.7	41.4
Netherlands	765	58.9	0.4	10.8	12.6	0.4	0.5	15.6	0.8	0.7	0.1	83.0	59.2	59.6	59.1
Norway	966	55.6	0.7	2.7	15.3	0.2	0.5	17.6	7.5	7.5	0.0	74.4	56.3	57.7	55.4
Philippines	2057	24.6	0.0	4.4	0.1	0.0	0.3	62.2	8.4	8.4	0.0	29.2	24.7	23.6	26.5
Russian Federation	1588	55.8	0.1	8.1	2.0	0.2	0.0	21.5	12.4	12.4	0.0	66.0	55.9	54.9	56.6
Slovenia	1090	45.2	0.0	16.3	1.6	0.0	0.0	27.5	9.4	9.4	0.0	63.1	45.2	45.6	44.8
Sweden	1144	59.5	0.2	5.2	9.8	0.0	0.2	19.3	5.9	5.8	0.1	74.6	59.7	62.1	58.0
International Avg.	1112	43.4	0.2	8.6	4.8	0.1	0.2	28.4	14.2	14.2	0.0	57.2	43.6	43.2	44.1

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Reasoning (MA23201 - M4_04)
 Label: What is the error Carl made
 Type: CR Key: X

COUNTRY	N	10	79	99	OMIT	NOT	V1	1.GIRL	2.BOY
						REACH		% Right	% Right
						ED			
Armenia	439	49.3	34.7	16.0	16.0	0.0	49.3	48.5	50.1
Iran, Islamic Rep. of	1196	43.4	45.8	10.8	10.8	0.0	43.4	36.5	48.7
Italy	1081	40.7	39.8	19.6	19.5	0.1	40.7	47.1	37.4
Lebanon	802	79.1	15.0	5.9	5.9	0.0	79.1	83.8	77.3
Netherlands	765	62.2	32.3	5.5	5.4	0.1	62.2	63.3	61.8
Norway	966	23.7	54.4	22.0	22.0	0.0	23.7	18.6	26.8
Philippines	2057	14.7	73.9	11.5	11.5	0.0	14.7	12.0	19.1
Russian Federation	1587	67.7	28.4	3.9	3.9	0.0	67.7	68.7	67.0
Slovenia	1090	34.5	50.6	15.0	15.0	0.0	34.5	33.7	35.5
Sweden	1144	32.1	41.4	26.5	26.2	0.3	32.1	30.1	33.5
International Avg.	1113	44.7	41.6	13.7	13.6	0.0	44.7	44.2	45.7

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA23154 - M4_05)
 Label: Second derivative of function given
 Type: CR Key: X

COUNTRY	N	20	10	79	99	OMIT	NOT	V1	V2	1.GIRL % Right	2.BOY % Right
							REACH ED				
Armenia	440	40.9	19.4	14.2	25.5	25.5	0.0	60.3	40.9	42.5	39.2
Iran, Islamic Rep. of	1196	63.2	15.8	17.4	3.6	3.6	0.1	78.9	63.2	63.5	62.9
Italy	1082	40.6	11.8	36.8	10.9	10.8	0.1	52.4	40.6	46.3	37.6
Lebanon	802	74.3	13.9	10.8	0.9	0.9	0.0	88.2	74.3	75.1	74.0
Netherlands	765	57.1	21.1	20.6	1.2	1.0	0.1	78.2	57.1	52.5	58.6
Norway	966	21.1	8.5	62.0	8.4	8.4	0.0	29.6	21.1	18.8	22.6
Philippines	2057	17.9	6.1	58.7	17.3	17.3	0.0	24.0	17.9	15.2	22.6
Russian Federation	1587	63.9	11.2	20.3	4.5	4.5	0.0	75.1	63.9	65.3	62.8
Slovenia	1090	31.4	11.1	49.2	8.3	8.3	0.0	42.4	31.4	29.3	34.3
Sweden	1144	35.7	10.2	44.4	9.6	9.3	0.3	46.0	35.7	37.6	34.5
International Avg.	1113	44.6	12.9	33.4	9.0	9.0	0.1	57.5	44.6	44.6	44.9

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Reasoning (MA23206 - M4_06)
 Label: Sign of derivative function
 Type: MC Key: D

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	440	33.8	7.9	9.5	41.1	7.8	41.1	7.6	0.2	39.1	43.3
Iran, Islamic Rep. of	1196	13.5	6.0	9.6	59.2	11.7	59.2	11.6	0.1	53.7	63.4
Italy	1081	44.1	1.6	4.4	45.2	4.8	45.2	4.7	0.1	46.7	44.4
Lebanon	801	16.5	0.5	2.2	80.2	0.6	80.2	0.6	0.0	80.3	80.2
Netherlands	765	5.3	1.3	5.6	87.3	0.4	87.3	0.2	0.3	84.0	88.4
Norway	966	28.1	8.3	8.0	53.4	2.3	53.4	2.3	0.0	45.3	58.3
Philippines	2057	60.4	9.8	10.3	18.2	1.3	18.2	1.3	0.0	15.3	23.1
Russian Federation	1588	23.9	1.1	4.6	69.6	0.8	69.6	0.8	0.0	65.6	72.7
Slovenia	1090	41.4	4.4	11.8	39.1	3.3	39.1	3.3	0.0	32.8	47.6
Sweden	1144	16.0	5.2	8.8	68.4	1.6	68.4	1.3	0.3	64.7	71.0
International Avg.	1113	28.3	4.6	7.5	56.2	3.5	56.2	3.4	0.1	52.7	59.2

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Reasoning (MA23166 - M4_07)
 Label: Units of commodity to max profit
 Type: CR Key: X

COUNTRY	N	10	11	70	71	72	79	99	OMIT	NOT	V1	1.GIRL	2.BOY
										REACH		% Right	% Right
										ED			
Armenia	440	2.1	0.0	1.4	0.0	0.2	18.4	77.9	77.4	0.5	2.1	0.3	4.1
Iran, Islamic Rep. of	1196	7.6	0.1	0.8	0.2	0.1	50.6	40.7	40.5	0.2	7.7	4.6	10.0
Italy	1081	2.4	0.0	0.4	0.0	0.0	26.1	71.2	71.2	0.1	2.4	2.4	2.3
Lebanon	802	4.7	0.0	0.1	0.1	0.1	59.2	35.8	35.8	0.0	4.7	6.2	4.2
Netherlands	765	27.6	9.6	3.8	1.2	7.9	42.7	7.3	6.9	0.4	37.2	31.2	39.0
Norway	966	7.4	3.8	1.4	0.7	6.9	43.6	36.2	36.2	0.0	11.2	7.1	13.8
Philippines	2057	3.5	0.0	0.7	0.0	0.1	74.5	21.1	21.1	0.0	3.5	1.6	6.9
Russian Federation	1587	20.8	0.0	0.7	0.0	0.1	36.8	41.5	41.5	0.0	20.9	19.1	22.3
Slovenia	1090	2.3	0.0	0.2	0.0	0.5	71.1	26.0	26.0	0.0	2.3	1.1	4.0
Sweden	1144	11.2	2.0	0.8	0.3	1.1	63.7	20.9	20.3	0.6	13.3	12.2	14.0
International Avg.	1113	9.0	1.6	1.0	0.2	1.7	48.6	37.9	37.7	0.2	10.5	8.6	12.1

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Applying (MA23043 - M4_08)
 Label: Area enclosed by graphs of functions
 Type: CR Key: X

COUNTRY	N	20	21	10	11	12	70	79	99	OMIT	NOT REACH ED	V1	V2	1.GIRL % Right	2.BOY % Right
Armenia	440	0.6	0.0	3.0	0.2	0.0	0.9	26.9	68.4	67.6	0.8	3.8	0.6	1.1	.
Iran, Islamic Rep. of	1196	7.4	0.1	4.8	0.0	0.7	0.2	71.0	16.0	15.8	0.2	12.9	7.5	2.2	11.6
Italy	1081	8.5	0.0	9.1	0.0	0.0	0.1	34.6	47.8	47.6	0.1	17.5	8.5	9.8	7.8
Lebanon	802	18.4	0.0	13.1	0.1	1.4	0.0	51.7	15.3	15.3	0.0	33.0	18.4	23.4	16.4
Netherlands	765	34.1	32.3	8.1	2.9	1.0	4.1	12.2	5.2	4.8	0.4	78.5	66.5	72.7	64.5
Norway	966	7.3	12.6	4.3	1.4	0.2	6.2	21.5	46.4	46.3	0.1	25.9	19.9	17.1	21.7
Philippines	2057	1.4	0.0	0.8	0.0	0.6	0.0	69.0	28.2	28.2	0.0	2.8	1.4	1.2	1.8
Russian Federation	1587	32.0	0.0	9.6	0.1	0.3	0.0	39.8	18.1	18.1	0.0	42.1	32.0	29.6	34.0
Slovenia	1090	14.5	0.0	16.2	0.0	1.7	0.0	54.8	12.9	12.8	0.1	32.3	14.5	12.9	16.6
Sweden	1144	14.7	4.4	10.7	0.8	0.1	2.2	34.8	32.4	31.7	0.7	30.6	19.1	19.9	18.5
International Avg.	1113	13.9	4.9	8.0	0.5	0.6	1.4	41.6	29.1	28.8	0.2	27.9	18.8	19.0	21.4

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Reasoning (MA23076 - M4_09)
 Label: How long is distance between B and Q
 Type: MC Key: C

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	440	12.9	27.1	47.4	4.5	8.2	47.4	7.2	1.0	50.7	43.7
Iran, Islamic Rep. of	1197	14.9	20.7	30.5	6.4	27.5	30.5	27.3	0.2	23.6	35.9
Italy	1081	11.0	19.1	49.5	7.6	12.8	49.5	12.7	0.1	46.2	51.2
Lebanon	802	13.2	13.9	55.6	6.5	10.7	55.6	10.5	0.2	57.4	54.9
Netherlands	765	2.9	10.9	78.1	6.2	1.8	78.1	1.3	0.6	77.3	78.4
Norway	966	10.8	25.2	46.1	13.4	4.5	46.1	4.3	0.2	41.7	48.8
Philippines	2056	28.1	34.4	25.3	10.9	1.3	25.3	1.3	0.0	23.3	28.7
Russian Federation	1588	7.1	16.1	69.4	5.5	2.0	69.4	1.9	0.0	65.0	72.9
Slovenia	1090	9.7	18.3	57.1	9.3	5.7	57.1	5.6	0.1	51.1	65.2
Sweden	1144	12.4	25.7	48.5	9.2	4.1	48.5	3.3	0.8	41.5	53.3
International Avg.	1113	12.3	21.1	50.8	7.9	7.9	50.8	7.5	0.3	47.8	53.3

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA23176 - M4_10)
 Label: What is the height of the lighthouse
 Type: MC Key: B

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	440	13.7	32.1	17.0	15.2	22.0	32.1	20.0	2.0	26.6	38.2
Iran, Islamic Rep. of	1197	10.4	27.4	16.6	7.6	38.0	27.4	37.5	0.4	19.6	33.4
Italy	1080	8.7	53.2	18.6	8.5	11.0	53.2	10.5	0.5	48.6	55.5
Lebanon	801	1.7	64.3	19.5	5.2	9.2	64.3	8.9	0.3	67.4	63.1
Netherlands	762	1.5	85.2	9.5	1.4	2.5	85.2	1.9	0.6	84.1	85.5
Norway	965	5.1	60.4	19.7	8.7	6.1	60.4	5.8	0.3	62.6	59.0
Philippines	2056	9.6	46.5	25.9	14.3	3.7	46.5	3.7	0.0	45.0	49.2
Russian Federation	1587	9.1	66.3	13.9	6.6	4.1	66.3	4.1	0.0	62.4	69.4
Slovenia	1090	4.1	56.8	18.1	7.2	13.8	56.8	13.6	0.2	53.0	61.8
Sweden	1144	3.6	63.1	21.1	5.9	6.3	63.1	4.8	1.5	62.8	63.3
International Avg.	1112	6.8	55.5	18.0	8.1	11.7	55.5	11.1	0.6	53.2	57.9

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Reasoning (MA23098 - M4_11)
 Label: Which is equivalent to equation
 Type: MC Key: C

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	440	11.8	19.9	40.1	18.4	9.8	40.1	7.2	2.6	38.6	41.8
Iran, Islamic Rep. of	1198	10.6	15.5	58.6	6.6	8.7	58.6	8.0	0.6	55.6	60.9
Italy	1080	9.1	24.1	34.0	12.1	20.7	34.0	20.3	0.5	30.0	36.0
Lebanon	800	13.0	23.8	35.4	15.3	12.5	35.4	12.2	0.3	33.0	36.3
Netherlands	765	8.2	22.2	48.7	16.1	4.8	48.7	4.0	0.8	51.0	48.0
Norway	961	12.1	35.0	32.7	15.2	5.0	32.7	4.6	0.4	31.7	33.4
Philippines	2057	14.8	35.4	39.4	9.3	1.1	39.4	1.1	0.0	39.5	39.2
Russian Federation	1588	8.9	23.4	55.1	9.3	3.4	55.1	3.4	0.0	49.6	59.4
Slovenia	1090	10.0	26.3	43.2	13.5	7.0	43.2	6.6	0.4	37.0	51.6
Sweden	1144	10.1	25.1	39.5	14.8	10.5	39.5	8.7	1.8	39.1	39.8
International Avg.	1112	10.9	25.1	42.7	13.0	8.3	42.7	7.6	0.7	40.5	44.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Knowing (MA23144 - M5_01)
 Label: Sum of infinite geometric series
 Type: MC Key: C

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	428	5.8	30.7	49.7	6.6	7.2	49.7	5.8	1.4	44.3	55.4
Iran, Islamic Rep. of	1215	13.0	12.6	49.6	5.5	19.3	49.6	17.4	1.8	44.7	53.5
Italy	1067	2.9	68.0	10.2	5.5	13.3	10.2	12.8	0.5	9.2	10.8
Lebanon	801	12.8	29.9	36.9	5.3	15.1	36.9	14.7	0.3	44.7	33.6
Netherlands	762	11.0	28.4	51.3	5.0	4.3	51.3	4.1	0.2	48.6	52.1
Norway	960	12.8	22.3	49.5	9.1	6.3	49.5	5.6	0.7	49.2	49.7
Philippines	2037	11.1	60.9	21.1	5.0	1.9	21.1	1.9	0.0	18.8	25.1
Russian Federation	1596	12.0	8.7	72.8	4.0	2.6	72.8	2.4	0.2	74.7	71.3
Slovenia	1079	15.4	26.6	36.9	9.5	11.6	36.9	11.1	0.5	36.0	38.2
Sweden	1159	11.9	42.4	29.4	8.4	7.9	29.4	6.8	1.1	24.5	32.7
International Avg.	1110	10.9	33.1	40.7	6.4	8.9	40.7	8.3	0.7	39.5	42.3

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Applying (MA23185 - M5_02)
 Label: Values of a and b in given function
 Type: MC Key: A

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	428	44.4	15.4	19.3	6.9	14.0	44.4	12.3	1.7	44.4	44.4
Iran, Islamic Rep. of	1215	36.1	7.3	39.3	3.6	13.6	36.1	10.5	3.0	32.6	38.9
Italy	1068	56.3	10.6	11.9	5.7	15.4	56.3	14.8	0.7	60.9	54.1
Lebanon	801	11.7	4.7	77.6	1.6	4.5	11.7	3.8	0.7	10.4	12.2
Netherlands	762	79.7	7.8	6.5	3.0	3.0	79.7	2.6	0.4	80.3	79.5
Norway	959	27.4	19.7	25.5	10.6	16.8	27.4	15.9	0.9	27.7	27.2
Philippines	2037	41.3	28.4	18.9	7.1	4.4	41.3	4.4	0.0	41.3	41.2
Russian Federation	1596	76.0	8.0	9.7	2.0	4.3	76.0	4.1	0.2	75.9	76.1
Slovenia	1079	54.4	10.4	18.5	5.5	11.0	54.4	10.2	0.8	55.3	53.2
Sweden	1159	39.6	16.7	20.4	11.3	12.1	39.6	9.8	2.2	41.4	38.4
International Avg.	1110	46.7	12.9	24.8	5.7	9.9	46.7	8.8	1.1	47.0	46.5

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Applying (MA23054 - M5_03)
 Label: What is the value of x in equation
 Type: CR Key: X

COUNTRY	N	20	21	10	70	71	79	99	OMIT	NOT REACH ED	V1	V2	1.GIRL % Right	2.BOY % Right
Armenia	428	28.9	0.2	17.3	0.0	0.6	16.1	36.9	34.8	2.2	46.4	29.1	25.2	33.2
Iran, Islamic Rep. of	1215	19.9	0.0	16.8	0.3	0.3	36.7	26.0	22.5	3.6	36.7	19.9	14.5	24.2
Italy	1068	13.5	0.0	16.5	0.0	0.7	27.0	42.4	40.7	1.7	30.0	13.5	13.0	13.7
Lebanon	801	30.1	1.4	30.7	0.2	0.1	27.5	10.1	9.5	0.7	62.2	31.4	34.9	30.0
Netherlands	766	10.5	17.8	16.7	1.9	8.7	31.2	13.1	12.7	0.4	45.0	28.3	31.9	27.2
Norway	961	2.5	3.7	2.4	0.7	16.9	38.7	35.1	33.5	1.6	8.6	6.2	6.5	6.1
Philippines	2037	3.4	0.5	11.2	0.1	4.6	63.9	16.3	16.3	0.0	15.1	3.9	3.4	4.7
Russian Federation	1595	67.5	0.0	12.2	0.0	1.5	13.0	5.8	5.5	0.3	79.7	67.5	70.6	65.0
Slovenia	1079	18.3	0.0	8.6	0.0	12.3	40.3	20.4	19.4	1.0	26.9	18.3	18.0	18.8
Sweden	1159	1.3	2.4	2.4	0.8	5.3	39.7	48.1	45.1	3.0	6.1	3.7	1.6	5.1
International Avg.	1111	19.6	2.6	13.5	0.4	5.1	33.4	25.4	24.0	1.4	35.7	22.2	22.0	22.8

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Knowing (MA23064 - M5_04)
 Label: What is the value of k in polynomial
 Type: MC Key: A

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	428	17.7	17.0	22.9	14.9	27.5	17.7	25.2	2.3	19.2	16.2
Iran, Islamic Rep. of	1215	20.3	11.6	9.9	14.3	43.8	20.3	39.6	4.2	18.6	21.7
Italy	1068	22.7	13.5	14.4	14.1	35.2	22.7	33.3	1.9	17.2	25.5
Lebanon	800	72.3	9.3	2.6	8.4	7.5	72.3	6.5	1.0	67.0	74.5
Netherlands	757	25.7	23.4	22.2	12.8	15.8	25.7	15.3	0.5	23.5	26.4
Norway	960	23.0	17.7	22.9	12.1	24.3	23.0	22.5	1.8	20.2	24.8
Philippines	2037	33.4	17.0	20.3	25.9	3.3	33.4	3.3	0.0	31.3	37.1
Russian Federation	1595	47.0	15.3	16.3	11.6	9.8	47.0	9.5	0.3	46.6	47.3
Slovenia	1079	35.9	12.9	17.7	18.6	14.8	35.9	13.7	1.1	35.9	36.0
Sweden	1159	25.5	21.2	22.2	14.8	16.2	25.5	13.1	3.2	24.3	26.3
International Avg.	1110	32.4	15.9	17.2	14.8	19.8	32.4	18.2	1.6	30.4	33.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Applying (MA23131A - M5_05A)
 Label: Length of straight line AB in meters
 Type: CR Key: X

COUNTRY	N	10	70	79	99	OMIT	NOT REACHED		V1	1.GIRL % Right	2.BOY % Right
							ED				
Armenia	428	14.7	1.6	12.6	71.1	67.6	3.5	14.7		9.8	19.9
Iran, Islamic Rep. of	1215	25.9	2.2	24.3	47.6	41.7	5.9	25.9		18.0	32.2
Italy	1068	29.7	2.4	16.5	51.4	49.1	2.3	29.7		24.0	32.5
Lebanon	801	37.2	2.4	27.4	32.9	31.9	1.1	37.2		37.5	37.1
Netherlands	766	77.2	1.5	12.3	9.0	8.0	1.0	77.2		74.1	78.2
Norway	961	51.9	2.6	18.7	26.9	24.8	2.0	51.9		48.7	53.9
Philippines	2037	11.4	7.3	52.1	29.1	29.0	0.1	11.4		8.8	16.0
Russian Federation	1596	59.7	6.9	15.0	18.4	17.6	0.8	59.7		55.3	63.3
Slovenia	1079	20.2	4.5	28.4	46.8	45.2	1.6	20.2		15.1	27.6
Sweden	1159	38.7	2.1	29.4	29.7	26.3	3.4	38.7		35.7	40.8
International Avg.	1111	36.7	3.4	23.7	36.3	34.1	2.2	36.7		32.7	40.2

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Applying (MA23131B - M5_05B)
 Label: Cost to paint the deck
 Type: CR Key: X

COUNTRY	N	10	11	70	79	99	OMIT	NOT	V1	1.GIRL	2.BOY
								REACH		% Right	% Right
								ED			
Armenia	428	0.5	0.0	1.0	18.4	80.2	76.0	4.2	0.5	0.9	.
Iran, Islamic Rep. of	1215	4.6	0.0	3.0	24.7	67.7	61.2	6.5	4.6	0.7	7.7
Italy	1068	8.4	0.0	1.8	20.4	69.3	65.8	3.5	8.5	7.4	9.0
Lebanon	801	8.4	0.0	4.5	34.9	52.2	50.4	1.8	8.4	6.7	9.2
Netherlands	766	63.9	0.2	2.3	21.9	11.7	10.7	1.0	64.2	63.2	64.5
Norway	961	30.0	0.4	2.6	28.4	38.5	36.3	2.2	30.5	27.1	32.6
Philippines	2037	1.7	0.0	2.4	58.8	37.1	37.0	0.1	1.7	1.2	2.7
Russian Federation	1596	26.1	0.1	8.7	35.2	29.9	29.1	0.9	26.2	23.0	28.9
Slovenia	1079	5.1	0.3	3.0	25.4	66.2	64.4	1.8	5.4	3.7	7.9
Sweden	1159	17.6	0.5	3.1	38.3	40.6	36.8	3.8	18.1	15.8	19.7
International Avg.	1111	16.6	0.2	3.2	30.6	49.3	46.8	2.6	16.8	15.0	20.2

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Reasoning (MA23157 - M5_06)
 Label: Find point of maxima and inflection
 Type: CR Key: X

COUNTRY	N	20	10	11	79	99	OMIT	NOT	V1	V2	1.GIRL % Right	2.BOY % Right
								REACH ED				
Armenia	428	5.3	10.2	3.8	22.2	58.6	54.3	4.4	19.2	5.3	2.8	7.9
Iran, Islamic Rep. of	1215	20.0	2.2	19.5	26.0	32.3	25.3	7.0	41.7	20.0	12.4	26.1
Italy	1068	8.0	5.3	12.6	25.4	48.8	44.9	3.9	25.8	8.0	4.9	9.5
Lebanon	801	13.7	7.5	41.7	26.6	10.4	8.4	2.1	63.0	13.7	11.2	14.8
Netherlands	766	14.6	3.0	54.2	22.0	6.1	5.0	1.1	71.9	14.6	9.9	16.1
Norway	961	5.7	0.8	43.4	28.1	22.0	19.5	2.5	50.0	5.7	3.4	7.2
Philippines	2037	2.2	1.0	30.2	49.4	17.2	17.1	0.1	33.4	2.2	1.5	3.5
Russian Federation	1596	36.0	18.0	24.0	11.4	10.6	9.7	0.9	78.1	36.0	32.5	39.0
Slovenia	1079	3.7	5.4	25.1	44.9	20.8	19.0	1.8	34.3	3.7	3.1	4.6
Sweden	1159	9.1	10.4	11.2	44.8	24.5	20.3	4.2	30.7	9.1	8.5	9.4
International Avg.	1111	11.8	6.4	26.6	30.1	25.1	22.3	2.8	44.8	11.8	9.0	13.8

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Reasoning (MA23045 - M5_07)
 Label: What is the value of a
 Type: MC Key: C

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	428	13.1	19.9	22.8	12.4	31.7	22.8	27.4	4.4	16.3	29.8
Iran, Islamic Rep. of	1215	14.3	13.8	20.1	11.4	40.3	20.1	33.2	7.1	11.5	27.0
Italy	1067	15.4	22.9	21.1	8.2	32.4	21.1	28.2	4.2	16.6	23.3
Lebanon	801	27.4	13.6	19.8	10.3	29.0	19.8	26.9	2.1	13.6	22.4
Netherlands	760	5.4	25.2	60.0	2.2	7.2	60.0	6.1	1.1	66.6	58.0
Norway	960	18.4	27.4	23.3	13.8	17.1	23.3	13.6	3.4	22.2	24.0
Philippines	2037	28.0	21.8	12.9	34.2	2.9	12.9	2.7	0.2	10.5	17.2
Russian Federation	1595	17.3	21.9	37.4	13.7	9.6	37.4	8.6	1.0	32.4	41.6
Slovenia	1079	25.4	21.0	21.1	13.2	19.3	21.1	17.4	1.9	18.8	24.4
Sweden	1159	15.5	26.9	27.5	15.0	15.1	27.5	10.5	4.6	24.7	29.4
International Avg.	1110	18.0	21.5	26.6	13.5	20.5	26.6	17.5	3.0	23.3	29.7

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA23082 - M5_08)
 Label: Coordinates of fourth vertex D
 Type: MC Key: A

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	428	44.9	19.1	12.1	7.7	16.3	44.9	11.9	4.4	42.1	47.8
Iran, Islamic Rep. of	1215	51.6	11.1	6.1	4.8	26.4	51.6	17.6	8.8	47.0	55.3
Italy	1061	55.9	13.5	8.7	8.0	14.0	55.9	9.0	5.0	53.2	57.3
Lebanon	.	.	.	.	.	.	.	.	.	.	.
Netherlands	764	73.3	7.7	8.4	5.1	5.5	73.3	2.8	2.6	77.3	72.1
Norway	958	56.3	13.2	10.0	8.8	11.8	56.3	7.1	4.7	57.9	55.3
Philippines	2037	58.0	16.0	13.2	9.8	3.0	58.0	2.7	0.3	57.3	59.3
Russian Federation	1595	73.3	9.1	6.2	3.6	7.8	73.3	6.7	1.1	73.1	73.4
Slovenia	1079	52.5	19.8	5.9	7.1	14.8	52.5	11.8	3.0	49.3	57.0
Sweden	1159	48.8	20.8	11.7	8.4	10.3	48.8	4.8	5.5	46.9	50.1
International Avg.	1144	57.2	14.5	9.1	7.0	12.2	57.2	8.3	3.9	56.0	58.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Knowing (MA23020 - M5_09)
 Label: Amplitude and period of function
 Type: MC Key: D

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	428	12.3	11.8	21.4	32.2	22.3	32.2	17.7	4.5	32.4	32.1
Iran, Islamic Rep. of	1215	15.0	4.9	10.6	40.2	29.3	40.2	19.6	9.7	37.1	42.7
Italy	1067	21.6	8.0	11.4	31.9	27.1	31.9	21.7	5.4	26.6	34.5
Lebanon	801	26.7	3.2	6.7	45.4	18.0	45.4	13.8	4.3	49.6	43.6
Netherlands	766	21.9	1.6	3.1	69.5	3.9	69.5	0.5	3.4	64.2	71.1
Norway	959	31.2	4.2	5.7	46.2	12.7	46.2	7.6	5.1	47.4	45.4
Philippines	2037	43.9	7.8	12.9	33.1	2.3	33.1	2.0	0.3	34.3	31.0
Russian Federation	1596	26.1	5.3	7.4	56.9	4.3	56.9	2.9	1.3	53.7	59.5
Slovenia	1079	27.6	7.3	15.4	39.2	10.5	39.2	7.4	3.0	39.6	38.5
Sweden	1159	34.9	5.6	7.5	42.4	9.7	42.4	3.6	6.1	40.5	43.6
International Avg.	1111	26.1	6.0	10.2	43.7	14.0	43.7	9.7	4.3	42.5	44.2

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA23094 - M5_10)
 Label: Find length of BC in triangle ABC
 Type: CR Key: X

COUNTRY	N	20	21	22	10	11	12	70	79	99	OMIT	NOT REACHED		V1	V2	1.GIRL % Right	2.BOY % Right
												ED					
Armenia	428	23.6	0.5	0.0	2.5	3.6	0.0	0.5	27.2	42.1	34.3	7.7	30.2	24.0	18.8	29.6	
Iran, Islamic Rep. of	1215	13.2	0.0	0.0	2.7	5.8	0.0	0.0	53.3	25.0	14.2	10.7	21.7	13.2	10.9	15.0	
Italy	1068	2.2	0.5	0.1	3.7	0.9	0.0	0.0	44.0	48.6	38.7	9.9	7.3	2.8	2.9	2.8	
Lebanon	801	10.8	0.0	0.0	10.9	6.2	0.0	0.0	58.8	13.3	8.6	4.7	27.9	10.8	13.7	9.7	
Netherlands	766	7.6	0.1	0.3	19.2	7.4	0.6	0.6	51.9	12.3	8.6	3.7	35.3	8.0	8.3	7.9	
Norway	961	4.9	0.1	0.5	15.6	9.1	0.5	0.2	50.6	18.5	12.2	6.2	30.7	5.5	6.0	5.2	
Philippines	2037	2.1	0.0	0.0	8.5	3.4	0.0	0.1	78.3	7.5	7.0	0.5	14.0	2.1	1.3	3.4	
Russian Federation	1596	32.1	0.8	0.0	9.9	6.5	0.2	0.3	36.1	14.2	12.5	1.7	49.4	32.9	33.6	32.3	
Slovenia	1079	9.6	0.0	0.0	7.3	5.4	0.0	0.0	67.1	10.6	6.9	3.7	22.3	9.6	10.3	8.6	
Sweden	1159	2.8	0.0	0.3	19.0	4.9	0.1	0.1	53.0	19.9	12.5	7.4	27.0	3.1	3.7	2.7	
International Avg.	1111	10.9	0.2	0.1	9.9	5.3	0.1	0.2	52.0	21.2	15.6	5.6	26.6	11.2	10.9	11.7	

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Applying (MA23069 - M6_01)
 Label: Sum of infinite geometric series
 Type: MC Key: D

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	1.GIRL % Right	2.BOY % Right
Armenia	219	8.5	20.3	13.0	49.6	8.7	49.6	8.7	47.3	52.4
Iran, Islamic Rep. of	593	8.7	14.2	6.6	51.8	18.7	51.8	18.7	42.7	58.9
Italy	543	5.1	41.7	8.4	20.2	24.6	20.2	24.6	16.3	22.2
Lebanon	400	9.2	23.6	6.6	41.4	19.1	41.4	19.1	46.2	39.6
Netherlands	389	9.5	16.5	6.0	65.7	2.3	65.7	2.3	60.0	67.5
Norway	485	12.9	20.2	10.6	49.9	6.4	49.9	6.4	47.2	51.4
Philippines	1027	12.0	49.9	11.0	24.6	2.4	24.6	2.4	20.5	31.5
Russian Federation	794	5.9	10.6	3.7	78.1	1.7	78.1	1.7	75.7	80.2
Slovenia	542	10.1	25.3	7.7	42.0	15.0	42.0	15.0	38.3	47.2
Sweden	570	12.8	45.9	7.9	24.2	9.3	24.2	9.3	23.1	24.9
International Avg.	556	9.5	26.8	8.2	44.7	10.8	44.7	10.8	41.7	47.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Applying (MA23135 - M6_02)
 Label: Values of x to satisfy inequality
 Type: CR Key: X

COUNTRY	N						1.GIRL		2.BOY	
		10	79	99	OMIT	V1	% Right	% Right	% Right	
Armenia	219	74.3	21.5	4.2	4.2	74.3	75.4	73.1		
Iran, Islamic Rep. of	593	54.5	42.0	3.6	3.6	54.5	50.2	57.8		
Italy	543	59.5	33.7	6.7	6.7	59.5	64.4	57.1		
Lebanon	401	50.9	45.7	3.4	3.4	50.9	52.8	50.2		
Netherlands	390	46.7	48.1	5.2	5.2	46.7	42.8	47.9		
Norway	485	16.3	63.7	20.0	20.0	16.3	11.9	18.8		
Philippines	1027	14.7	77.7	7.6	7.6	14.7	11.1	20.7		
Russian Federation	794	80.3	18.8	1.0	1.0	80.3	82.5	78.3		
Slovenia	542	26.2	70.6	3.2	3.2	26.2	20.6	34.2		
Sweden	570	30.2	59.9	9.9	9.9	30.2	22.5	35.3		
International Avg.	556	45.4	48.2	6.5	6.5	45.4	43.4	47.3		

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Reasoning (MA23208 - M6_03)
 Label: Volume V as function of diameter d
 Type: MC Key: A

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	219	31.0	28.5	14.3	12.8	13.4	31.0	13.4	0.0	35.1	25.9
Iran, Islamic Rep. of	593	47.4	9.8	18.8	17.0	7.0	47.4	7.0	0.0	43.4	50.5
Italy	543	37.7	17.1	10.1	30.0	5.1	37.7	5.1	0.0	33.3	39.8
Lebanon	400	30.4	31.4	12.7	18.8	6.6	30.4	6.6	0.0	23.7	33.0
Netherlands	390	60.4	20.8	10.0	8.9	0.0	60.4	0.0	0.0	58.9	60.8
Norway	484	36.9	23.1	16.0	23.1	0.9	36.9	0.9	0.0	32.3	39.5
Philippines	1027	34.4	21.0	10.9	32.9	0.7	34.4	0.7	0.0	31.9	38.7
Russian Federation	794	49.3	9.5	15.5	24.9	0.9	49.3	0.9	0.0	40.1	57.1
Slovenia	542	28.8	29.1	7.2	33.9	1.0	28.8	1.0	0.0	19.8	41.7
Sweden	570	41.6	27.2	9.1	20.6	1.6	41.6	1.4	0.1	36.1	45.3
International Avg.	556	39.8	21.7	12.5	22.3	3.7	39.8	3.7	0.0	35.4	43.3

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Applying (MA23165 - M6_04)
 Label: Limit of the given expression
 Type: CR Key: X

COUNTRY	N	10	11	12	70	71	79	99	OMIT	NOT	V1	1.GIRL	2.BOY
										REACH		% Right	% Right
										ED			
Armenia	219	21.0	0.8	0.0	1.7	0.0	25.3	51.3	51.3	0.0	21.7	22.7	20.6
Iran, Islamic Rep. of	593	79.9	0.0	0.0	0.1	0.0	18.4	1.6	1.6	0.0	79.9	77.2	82.0
Italy	543	53.9	0.2	0.0	0.2	0.0	34.7	10.9	10.9	0.0	54.1	55.9	53.3
Lebanon	401	76.6	0.0	0.2	0.3	0.0	21.9	1.0	1.0	0.0	76.8	73.1	78.2
Netherlands	390	2.4	4.3	2.1	1.0	2.2	75.0	13.1	13.1	0.0	8.7	5.8	9.6
Norway	485	12.0	1.1	1.9	0.8	0.5	41.7	42.1	42.1	0.0	15.0	16.2	14.3
Philippines	1027	36.8	0.4	0.1	0.0	0.0	56.1	6.6	6.6	0.0	37.3	32.5	45.4
Russian Federation	794	45.8	0.3	0.0	0.1	0.6	31.6	21.7	21.7	0.0	46.1	43.1	48.6
Slovenia	542	41.0	0.4	0.0	0.2	0.0	44.5	13.9	13.9	0.0	41.4	41.0	42.0
Sweden	570	2.7	5.0	2.0	0.2	0.7	51.4	38.0	37.8	0.1	9.7	8.0	10.8
International Avg.	556	37.2	1.2	0.6	0.5	0.4	40.1	20.0	20.0	0.0	39.1	37.6	40.5

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA23039 - M6_05)
 Label: Derivative of exponential function
 Type: MC Key: D

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	219	8.0	5.0	18.6	63.1	5.3	63.1	5.3	0.0	64.1	62.0
Iran, Islamic Rep. of	593	4.9	18.8	9.1	43.8	23.4	43.8	23.4	0.0	43.6	44.0
Italy	542	7.9	8.2	16.4	64.7	2.8	64.7	2.8	0.0	73.1	60.6
Lebanon	400	2.4	1.0	3.9	91.9	0.8	91.9	0.8	0.0	96.5	90.1
Netherlands	390	4.9	3.5	18.0	73.3	0.3	73.3	0.3	0.0	70.1	74.3
Norway	483	22.5	15.1	20.2	40.1	2.0	40.1	2.0	0.0	39.9	40.2
Philippines	1027	13.1	31.6	31.7	22.4	1.3	22.4	1.3	0.0	19.4	27.5
Russian Federation	794	10.3	3.2	6.3	79.9	0.2	79.9	0.2	0.0	80.7	79.3
Slovenia	542	17.7	13.2	18.4	49.5	1.3	49.5	1.3	0.0	52.2	45.5
Sweden	570	9.3	9.9	21.2	57.5	2.0	57.5	1.9	0.1	63.2	53.7
International Avg.	556	10.1	10.9	16.4	58.6	3.9	58.6	3.9	0.0	60.3	57.7

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA23159 - M6_06)
 Label: Derivative of the given expression
 Type: CR Key: X

COUNTRY	N	10	11	70	71	72	73	79	99	OMIT	NOT REACH ED	V1	1.GIRL % Right	2.BOY % Right
Armenia	219	54.6	1.9	0.9	0.3	2.3	0.0	25.1	15.0	15.0	0.0	56.5	53.3	60.4
Iran, Islamic Rep. of	593	78.6	0.0	0.1	0.1	10.3	0.0	8.9	2.0	2.0	0.0	78.6	80.6	77.0
Italy	543	60.0	0.1	0.0	0.0	10.6	0.0	16.7	12.7	12.7	0.0	60.0	76.9	51.8
Lebanon	401	90.9	0.0	0.2	4.1	0.2	0.0	3.5	1.0	1.0	0.0	90.9	93.3	90.0
Netherlands	390	47.6	0.0	0.0	0.0	40.3	4.2	7.3	0.5	0.5	0.0	47.6	50.2	46.8
Norway	485	28.6	0.3	0.2	0.0	33.4	0.1	29.6	7.9	7.9	0.0	28.8	33.5	26.2
Philippines	1027	20.7	0.0	0.0	0.0	10.4	0.1	56.6	12.2	12.2	0.0	20.7	18.9	23.9
Russian Federation	794	75.1	0.0	0.0	0.2	8.0	0.0	13.6	3.1	3.1	0.0	75.1	76.9	73.5
Slovenia	542	66.7	0.0	0.0	0.0	10.1	0.0	20.7	2.5	2.5	0.0	66.7	66.6	66.9
Sweden	570	19.4	0.3	0.2	0.0	18.7	3.1	48.2	10.1	10.0	0.1	19.7	19.7	19.7
International Avg.	556	54.2	0.3	0.1	0.5	14.4	0.8	23.0	6.7	6.7	0.0	54.5	57.0	53.6

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Reasoning (MA23198 - M6_07)
 Label: Why slope at points A and B are same
 Type: CR Key: X

COUNTRY	N	10	11	70	71	79	99	OMIT	NOT	V1	1.GIRL % Right	2.BOY % Right
									REACH ED			
Armenia	217	18.0	0.0	0.4	0.6	20.2	60.8	60.8	0.0	18.0	18.1	18.0
Iran, Islamic Rep. of	593	44.7	0.0	1.0	1.0	38.4	14.9	14.9	0.0	44.7	38.3	49.7
Italy	540	18.1	0.6	0.0	1.7	10.9	68.7	68.7	0.0	18.7	20.2	17.9
Lebanon	401	47.5	0.0	2.9	0.0	33.1	16.5	16.5	0.0	47.5	55.1	44.7
Netherlands	390	52.4	0.5	0.0	3.3	40.8	3.0	3.0	0.0	52.9	48.5	54.2
Norway	485	8.5	0.0	0.2	0.8	60.9	29.6	29.6	0.0	8.5	6.3	9.8
Philippines	1027	2.4	0.0	0.0	0.1	70.8	26.6	26.6	0.0	2.4	0.6	5.6
Russian Federation	794	39.2	0.0	0.0	1.7	36.8	22.3	22.3	0.0	39.2	36.3	41.7
Slovenia	542	10.0	0.0	0.0	2.2	64.1	23.7	23.7	0.0	10.0	6.7	14.8
Sweden	570	21.5	0.1	0.4	3.5	55.7	18.9	18.7	0.1	21.6	20.8	22.1
International Avg.	556	26.2	0.1	0.5	1.5	43.2	28.5	28.5	0.0	26.4	25.1	27.8

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA23042 - M6_08)
 Label: Integral of the given expression
 Type: MC Key: B

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	219	9.1	28.0	19.0	8.6	35.3	28.0	35.3	0.0	28.0	28.1
Iran, Islamic Rep. of	593	13.5	34.0	13.5	6.8	32.2	34.0	32.2	0.0	29.0	37.8
Italy	542	8.5	72.7	8.6	3.1	7.1	72.7	7.1	0.0	74.5	71.8
Lebanon	401	7.1	81.0	5.4	1.5	4.9	81.0	4.9	0.0	85.6	79.3
Netherlands	390	12.6	59.1	19.1	5.8	3.4	59.1	3.4	0.0	61.2	58.4
Norway	485	8.6	48.7	19.9	13.4	9.4	48.7	9.4	0.0	52.2	46.7
Philippines	1027	22.9	38.1	24.9	11.7	2.4	38.1	2.4	0.0	35.3	42.8
Russian Federation	794	12.5	71.5	8.9	4.6	2.6	71.5	2.6	0.0	70.7	72.1
Slovenia	542	7.1	63.7	13.3	9.4	6.5	63.7	6.5	0.0	63.1	64.6
Sweden	570	16.3	40.9	21.5	14.4	6.8	40.9	6.6	0.3	35.3	44.7
International Avg.	556	11.8	53.8	15.4	7.9	11.1	53.8	11.0	0.0	53.5	54.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Knowing (MA23055 - M6_09)
 Label: Equation of circle shown
 Type: MC Key: D

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	219	11.3	17.7	22.1	30.9	18.0	30.9	18.0	0.0	30.0	32.0
Iran, Islamic Rep. of	593	10.3	14.4	10.8	51.7	12.8	51.7	12.8	0.0	44.8	56.9
Italy	543	8.2	12.2	26.4	38.5	14.8	38.5	14.8	0.0	37.2	39.1
Lebanon	401	8.1	7.3	8.1	73.4	3.1	73.4	3.1	0.0	80.0	70.9
Netherlands	388	8.5	11.6	25.2	49.0	5.7	49.0	5.7	0.0	39.9	51.9
Norway	484	11.9	22.9	26.7	29.8	8.8	29.8	8.8	0.0	33.9	27.5
Philippines	1027	15.4	31.6	26.3	25.6	1.2	25.6	1.2	0.0	25.1	26.4
Russian Federation	794	8.5	12.3	18.3	58.6	2.3	58.6	2.3	0.0	58.7	58.6
Slovenia	542	11.9	18.8	26.5	36.6	6.2	36.6	6.2	0.0	31.8	43.6
Sweden	570	11.2	15.3	35.4	28.4	9.7	28.4	9.4	0.3	26.8	29.4
International Avg.	556	10.5	16.4	22.6	42.2	8.2	42.2	8.2	0.0	40.8	43.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Reasoning (MA23080 - M6_10)
 Label: Number of solutions of equation
 Type: MC Key: A

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	219	36.3	16.8	22.3	8.8	15.7	36.3	15.7	0.0	35.4	37.4
Iran, Islamic Rep. of	592	51.9	7.4	14.8	11.4	14.5	51.9	14.5	0.0	44.7	57.5
Italy	543	43.8	12.5	21.2	9.8	12.7	43.8	12.7	0.0	48.3	41.5
Lebanon	401	58.3	12.2	11.1	8.1	10.3	58.3	10.3	0.0	52.0	60.6
Netherlands	390	87.1	1.7	6.8	3.9	0.5	87.1	0.2	0.2	84.7	87.9
Norway	485	32.8	6.6	33.8	22.5	4.2	32.8	4.2	0.0	29.7	34.7
Philippines	1026	21.6	18.6	45.2	13.5	1.1	21.6	1.1	0.0	17.8	28.2
Russian Federation	794	58.9	7.8	16.4	14.2	2.8	58.9	2.8	0.0	49.9	66.5
Slovenia	542	27.6	16.9	34.8	10.9	9.9	27.6	9.9	0.0	22.2	35.3
Sweden	570	44.9	11.9	28.2	11.7	3.2	44.9	3.0	0.3	39.6	48.5
International Avg.	556	46.3	11.2	23.5	11.5	7.5	46.3	7.5	0.0	42.4	49.8

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA23021 - M6_11)
 Label: Equation for width of each window
 Type: MC Key: B

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	219	9.4	20.5	26.0	17.6	26.6	20.5	26.6	0.0	20.0	21.0
Iran, Islamic Rep. of	592	10.9	28.3	14.8	22.0	23.9	28.3	23.9	0.0	19.5	35.2
Italy	543	12.4	21.7	28.4	21.1	16.4	21.7	16.4	0.0	23.2	21.0
Lebanon	401	10.7	25.0	29.5	21.8	13.0	25.0	13.0	0.0	26.6	24.4
Netherlands	387	7.8	36.3	32.0	21.9	2.0	36.3	1.8	0.2	35.5	36.5
Norway	485	12.9	18.3	42.2	22.1	4.5	18.3	4.5	0.0	17.1	19.0
Philippines	1026	20.6	21.4	35.6	21.4	1.0	21.4	1.0	0.0	21.6	21.0
Russian Federation	794	10.4	39.8	24.8	22.3	2.7	39.8	2.7	0.0	34.3	44.5
Slovenia	542	10.0	26.1	39.9	20.3	3.7	26.1	3.7	0.0	23.6	29.6
Sweden	570	10.0	21.7	41.6	22.3	4.3	21.7	4.1	0.3	18.0	24.1
International Avg.	556	11.5	25.9	31.5	21.3	9.8	25.9	9.8	0.0	23.9	27.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Reasoning (MA23004 - M7_01)
 Label: Thickness of pile of papers
 Type: MC Key: B

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	207	3.3	32.4	19.0	21.0	24.2	32.4	18.7	5.5	24.2	41.8
Iran, Islamic Rep. of	610	8.6	39.6	9.8	14.1	28.0	39.6	26.3	1.8	27.0	50.1
Italy	528	21.5	38.9	7.5	13.3	18.8	38.9	16.7	2.1	24.0	45.8
Lebanon	400	15.2	32.0	9.0	16.6	27.2	32.0	27.0	0.2	30.2	32.7
Netherlands	390	2.6	82.3	8.6	2.6	3.9	82.3	3.1	0.8	77.2	83.8
Norway	478	17.1	53.8	9.9	11.9	7.4	53.8	6.6	0.8	43.7	60.1
Philippines	1007	21.6	39.9	11.6	25.2	1.8	39.9	1.7	0.1	36.5	45.7
Russian Federation	802	8.9	71.1	6.0	9.6	4.3	71.1	4.3	0.0	64.3	77.4
Slovenia	531	20.7	51.6	11.7	10.5	5.4	51.6	5.4	0.0	43.9	64.4
Sweden	585	15.4	57.7	12.6	7.7	6.6	57.7	5.4	1.1	47.8	64.6
International Avg.	554	13.5	49.9	10.6	13.2	12.8	49.9	11.5	1.2	41.9	56.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Applying (MA23063 - M7_02)
 Label: Which is equal to 5 over x
 Type: MC Key: B

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	207	24.3	14.8	20.3	9.6	31.0	14.8	20.2	10.8	11.8	18.1
Iran, Islamic Rep. of	610	32.7	9.3	13.3	4.1	40.5	9.3	36.3	4.2	3.8	13.9
Italy	528	23.9	12.7	17.3	8.4	37.7	12.7	34.9	2.8	11.1	13.4
Lebanon	400	14.5	62.2	9.0	5.9	8.5	62.2	7.9	0.6	67.9	59.7
Netherlands	387	28.5	26.2	29.5	3.4	12.5	26.2	10.1	2.4	28.6	25.5
Norway	479	33.6	12.8	25.5	10.2	17.9	12.8	15.4	2.4	13.2	12.6
Philippines	1007	49.3	17.3	20.9	8.9	3.5	17.3	3.4	0.1	14.4	22.5
Russian Federation	802	27.1	44.0	17.4	4.6	6.9	44.0	6.7	0.1	42.6	45.3
Slovenia	531	31.4	22.6	24.3	10.1	11.6	22.6	11.1	0.5	25.8	17.3
Sweden	585	28.9	21.5	30.1	7.1	12.4	21.5	9.1	3.3	21.8	21.4
International Avg.	554	29.4	24.3	20.8	7.2	18.2	24.3	15.5	2.7	24.1	25.0

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Knowing (MA23141 - M7_03)
 Label: Find values of a b and c in equation
 Type: CR Key: X

COUNTRY	N	10	11	12	13	19	70	71	72	79	99	OMIT	NOT REACHED	V1	1.GIRL % Right	2.BOY % Right
Armenia	207	8.4	6.1	0.0	0.0	1.2	0.0	0.0	4.6	9.9	69.7	58.1	11.6	15.7	10.9	21.1
Iran, Islamic Rep. of	610	1.2	29.0	0.0	0.0	1.4	0.0	1.1	12.3	15.0	40.0	34.6	5.3	31.7	30.2	32.8
Italy	529	7.5	14.4	0.1	0.0	0.1	0.3	0.5	12.1	6.5	58.4	55.1	3.3	22.2	22.6	22.0
Lebanon	400	7.5	54.2	1.9	0.2	0.5	0.9	16.9	0.0	7.4	10.3	9.7	0.6	64.4	71.6	61.3
Netherlands	391	1.3	11.4	0.0	1.3	1.8	1.5	2.3	29.9	27.2	23.4	19.6	3.8	15.7	14.4	16.1
Norway	480	0.8	1.5	0.1	6.4	0.8	1.9	0.7	9.4	15.4	63.0	59.9	3.1	9.6	10.0	9.4
Philippines	1007	2.5	6.6	0.1	0.0	0.1	0.2	0.2	7.6	48.6	34.2	34.0	0.1	9.3	6.6	14.0
Russian Federation	802	1.1	31.5	0.0	0.0	6.5	0.0	1.6	13.8	14.4	31.1	31.0	0.1	39.1	36.2	41.6
Slovenia	531	7.5	23.9	0.0	0.0	0.8	0.0	0.4	28.3	23.0	16.1	15.5	0.6	32.2	35.1	27.4
Sweden	585	1.6	5.4	0.4	0.3	0.5	0.3	0.0	17.8	19.3	54.5	50.6	3.9	8.1	9.1	7.4
International Avg.	554	3.9	18.4	0.3	0.8	1.4	0.5	2.4	13.6	18.7	40.1	36.8	3.3	24.8	24.7	25.3

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Algebra / Knowing (MA23133 - M7_04)
 Label: Minimum value of the given function
 Type: MC Key: D

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	207	11.8	25.0	15.0	21.3	27.0	21.3	12.9	14.1	15.9	27.3
Iran, Islamic Rep. of	610	21.1	6.8	13.7	34.6	23.8	34.6	17.0	6.8	28.1	40.0
Italy	529	12.6	16.7	19.9	13.5	37.3	13.5	32.7	4.6	10.5	14.8
Lebanon	400	22.1	5.0	18.8	43.2	11.0	43.2	9.6	1.4	43.5	43.0
Netherlands	390	26.6	5.5	12.9	44.7	10.4	44.7	5.6	4.8	44.4	44.8
Norway	478	12.7	24.5	20.7	22.4	19.8	22.4	16.0	3.8	23.8	21.4
Philippines	1007	16.6	24.3	37.4	16.8	4.9	16.8	4.7	0.2	15.7	18.8
Russian Federation	802	21.4	12.7	17.8	39.2	8.9	39.2	8.4	0.6	36.2	41.9
Slovenia	531	13.7	22.6	25.4	20.4	17.9	20.4	17.3	0.6	20.8	19.7
Sweden	585	12.0	23.7	22.8	24.0	17.5	24.0	11.5	6.0	21.8	25.6
International Avg.	554	17.0	16.7	20.4	28.0	17.8	28.0	13.6	4.3	26.1	29.7

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Applying (MA23158 - M7_05)
 Label: Distance car travels after braking
 Type: MC Key: D

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	207	12.0	16.3	22.8	20.5	28.4	20.5	13.2	15.2	11.9	30.2
Iran, Islamic Rep. of	610	9.2	18.1	6.5	37.5	28.7	37.5	21.0	7.7	31.0	43.0
Italy	528	8.5	18.5	22.5	12.1	38.3	12.1	32.8	5.5	5.3	15.3
Lebanon	400	13.8	24.2	11.7	20.8	29.5	20.8	26.8	2.7	26.8	18.2
Netherlands	384	10.3	20.6	20.4	35.2	13.6	35.2	7.0	6.7	35.4	35.1
Norway	478	12.4	17.5	32.0	21.8	16.4	21.8	12.6	3.8	22.6	21.3
Philippines	1007	26.6	40.3	15.8	13.4	3.9	13.4	3.6	0.3	13.4	13.5
Russian Federation	802	7.8	27.6	16.2	38.6	9.9	38.6	8.7	1.2	31.8	44.7
Slovenia	531	8.6	27.8	36.6	10.3	16.6	10.3	15.3	1.3	9.2	12.2
Sweden	585	8.6	25.8	30.2	20.9	14.5	20.9	7.1	7.5	18.1	22.8
International Avg.	553	11.8	23.7	21.5	23.1	20.0	23.1	14.8	5.2	20.5	25.6

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Reasoning (MA23151 - M7_06)
 Label: Graph that has properties shown
 Type: MC Key: C

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	207	9.7	11.0	29.8	20.5	29.0	29.8	13.6	15.5	27.2	32.6
Iran, Islamic Rep. of	610	11.6	9.1	48.3	9.1	21.8	48.3	13.1	8.8	44.3	51.6
Italy	529	11.8	9.8	40.4	14.5	23.5	40.4	17.6	5.9	32.6	44.0
Lebanon	400	10.7	11.0	63.0	5.6	9.7	63.0	6.6	3.1	67.8	61.0
Netherlands	388	18.4	5.2	60.5	4.8	11.1	60.5	3.7	7.4	61.4	60.2
Norway	473	11.8	17.9	30.9	21.5	17.8	30.9	13.7	4.1	28.5	32.5
Philippines	1007	13.3	16.2	38.7	28.5	3.3	38.7	2.9	0.4	36.7	42.4
Russian Federation	802	17.5	9.0	59.9	8.0	5.5	59.9	3.7	1.9	53.4	65.9
Slovenia	531	16.3	16.8	47.1	12.8	7.1	47.1	5.7	1.3	48.2	45.4
Sweden	585	13.8	16.6	36.2	19.6	13.8	36.2	5.7	8.1	32.7	38.7
International Avg.	553	13.5	12.3	45.5	14.5	14.3	45.5	8.6	5.6	43.3	47.4

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Applying (MA23035A - M7_07A)
 Label: Values of points of intersection
 Type: CR Key: X

COUNTRY	N	10	70	79	99	OMIT	NOT REACHED		V1	1.GIRL % Right	2.BOY % Right
							ED				
Armenia	207	24.0	0.6	6.6	68.7	52.5	16.2	24.0	14.8	34.4	
Iran, Islamic Rep. of	610	42.1	3.7	20.4	33.7	24.2	9.5	42.1	39.5	44.4	
Italy	529	42.4	8.2	6.5	42.9	36.4	6.5	42.4	48.3	39.7	
Lebanon	400	61.3	9.4	16.8	12.5	9.4	3.1	61.3	65.8	59.3	
Netherlands	391	40.8	22.2	16.1	20.9	11.2	9.6	40.8	46.8	39.0	
Norway	480	33.6	11.8	25.6	29.0	23.1	5.9	33.6	34.1	33.3	
Philippines	1007	8.8	3.6	51.9	35.7	35.1	0.7	8.8	5.6	14.5	
Russian Federation	802	60.3	7.4	18.0	14.4	12.1	2.3	60.3	62.9	57.9	
Slovenia	531	39.6	5.9	39.9	14.6	12.4	2.2	39.6	43.7	32.8	
Sweden	585	10.4	12.0	40.4	37.2	27.9	9.3	10.4	9.4	11.2	
International Avg.	554	36.3	8.5	24.2	31.0	24.4	6.5	36.3	37.1	36.7	

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Applying (MA23035B - M7_07B)
 Label: Max and min points of graph
 Type: CR Key: X

COUNTRY	N	10	70	71	79	99	OMIT	NOT	V1	1.GIRL	2.BOY
								REACH		% Right	% Right
								ED			
Armenia	207	13.1	0.6	0.0	15.1	71.2	46.7	24.5	13.1	6.6	20.4
Iran, Islamic Rep. of	610	10.8	2.3	12.9	35.5	38.4	25.4	13.1	10.8	10.2	11.4
Italy	529	12.1	4.0	12.4	16.0	55.5	47.9	7.6	12.1	17.3	9.7
Lebanon	400	20.8	7.1	7.2	38.7	26.2	22.2	4.0	20.8	23.8	19.6
Netherlands	391	34.4	9.4	8.9	24.0	23.2	10.3	12.9	34.4	32.9	34.8
Norway	480	26.2	10.9	3.9	26.4	32.7	25.2	7.4	26.2	30.7	23.4
Philippines	1007	3.1	2.1	0.3	57.9	36.6	35.7	0.9	3.1	2.8	3.6
Russian Federation	802	47.1	5.8	9.6	17.3	20.2	17.0	3.3	47.1	47.7	46.5
Slovenia	531	10.9	3.6	6.3	53.2	26.0	21.9	4.1	10.9	11.6	9.9
Sweden	585	6.7	5.3	6.7	35.2	46.1	33.9	12.2	6.7	8.5	5.4
International Avg.	554	18.5	5.1	6.8	31.9	37.6	28.6	9.0	18.5	19.2	18.5

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA23050 - M7_08)
 Label: Value of definite integral
 Type: MC Key: B

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	207	6.5	18.2	13.7	8.7	52.9	18.2	27.9	24.9	16.6	20.0
Iran, Islamic Rep. of	610	3.2	45.5	6.4	12.5	32.4	45.5	18.4	14.0	41.7	48.7
Italy	529	5.1	26.5	13.9	20.2	34.3	26.5	25.2	9.1	15.5	31.5
Lebanon	400	2.6	35.4	7.0	36.2	18.8	35.4	13.0	5.8	38.4	34.2
Netherlands	390	4.0	35.6	12.9	29.7	17.9	35.6	4.9	13.0	31.7	36.7
Norway	479	4.3	23.2	19.1	35.7	17.7	23.2	9.4	8.3	16.9	27.1
Philippines	1007	12.4	23.0	23.6	35.4	5.6	23.0	4.7	0.9	22.2	24.4
Russian Federation	802	4.7	41.4	13.9	28.6	11.4	41.4	7.9	3.6	38.1	44.3
Slovenia	531	2.8	32.4	15.4	28.3	21.0	32.4	16.9	4.1	29.1	37.9
Sweden	585	11.2	26.2	21.1	20.2	21.3	26.2	7.4	13.9	27.6	25.2
International Avg.	554	5.7	30.7	14.7	25.5	23.3	30.7	13.6	9.8	27.8	33.0

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Calculus / Knowing (MA23041 - M7_09)
 Label: What is the integral
 Type: MC Key: A

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	207	12.2	19.4	10.0	8.4	50.0	12.2	24.7	25.2	6.0	19.2
Iran, Islamic Rep. of	610	16.5	10.1	12.0	11.2	50.1	16.5	33.5	16.7	14.2	18.5
Italy	529	39.1	17.1	17.9	6.3	19.6	39.1	9.1	10.5	34.1	41.4
Lebanon	399	69.1	3.7	14.5	2.8	9.9	69.1	2.6	7.3	71.4	68.2
Netherlands	390	42.5	9.0	20.0	6.8	21.8	42.5	6.2	15.5	38.6	43.7
Norway	479	41.0	16.9	19.6	8.3	14.2	41.0	5.7	8.5	43.5	39.5
Philippines	1007	29.4	22.0	28.2	15.3	5.0	29.4	4.0	1.0	31.0	26.6
Russian Federation	802	52.2	19.4	15.2	6.0	7.3	52.2	2.7	4.6	51.1	53.1
Slovenia	531	30.6	29.8	18.7	10.7	10.3	30.6	4.5	5.8	29.7	31.9
Sweden	585	22.4	21.1	25.8	9.2	21.5	22.4	6.5	15.1	16.7	26.3
International Avg.	554	35.5	16.8	18.2	8.5	21.0	35.5	10.0	11.0	33.6	36.8

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA23182 - M7_10)
 Label: Possible values for x
 Type: MC Key: D

COUNTRY	N	A	B	C	D	OTHER INCOR RECT	DIFF	OMIT	NOT REACHED	1.GIRL % Right	2.BOY % Right
Armenia	207	21.0	7.4	13.2	29.8	28.6	29.8	2.9	25.7	21.0	39.8
Iran, Islamic Rep. of	610	10.8	7.4	10.9	40.5	30.5	40.5	11.9	18.6	29.9	49.3
Italy	529	19.7	7.6	14.5	28.9	29.3	28.9	18.1	11.2	25.4	30.5
Lebanon	400	8.8	2.3	7.7	61.9	19.3	61.9	11.8	7.5	65.3	60.4
Netherlands	390	19.1	4.8	15.1	40.0	21.0	40.0	3.1	17.9	37.6	40.7
Norway	479	16.1	7.3	23.5	35.1	18.0	35.1	7.8	10.2	34.3	35.5
Philippines	1007	17.7	6.9	32.0	40.6	2.8	40.6	1.4	1.3	38.2	44.8
Russian Federation	802	13.3	3.9	10.5	63.5	8.9	63.5	3.6	5.3	61.4	65.4
Slovenia	531	20.2	5.9	25.5	36.6	11.8	36.6	5.5	6.3	31.7	44.8
Sweden	585	18.9	10.3	18.5	34.0	18.3	34.0	1.8	16.5	36.6	32.3
International Avg.	554	16.5	6.4	17.1	41.1	18.8	41.1	6.8	12.1	38.1	44.4

DIFF = Percent correct OTHER INCORRECT = Sum of invalid, not reached and omitted responses
 Because of missing gender information, some totals may appear inconsistent.

Mathematics: Geometry / Applying (MA23170 - M7_11)
 Label: Is line l parallel with PQ
 Type: CR Key: X

COUNTRY	N	10	11	70	71	79	99	OMIT	NOT REACHED	V1	1.GIRL % Right	2.BOY % Right
Armenia	207	1.4	5.7	1.5	7.4	5.2	78.8	52.2	26.5	7.1	2.5	12.3
Iran, Islamic Rep. of	610	30.5	0.2	8.4	16.9	7.5	36.5	15.9	20.6	30.6	24.7	35.6
Italy	529	12.1	5.3	8.3	16.6	8.2	49.5	28.8	20.8	17.4	17.9	17.1
Lebanon	400	45.0	4.8	3.5	9.2	10.2	27.2	12.9	14.3	49.8	58.1	46.2
Netherlands	391	50.0	1.0	8.9	6.5	2.3	31.3	12.4	18.9	51.0	49.6	51.5
Norway	480	4.4	16.6	14.9	21.1	7.7	35.3	20.7	14.6	21.0	21.6	20.7
Philippines	1007	20.7	4.6	11.6	34.7	5.2	23.1	21.7	1.4	25.3	18.9	36.6
Russian Federation	802	17.1	9.3	15.3	22.3	4.0	32.0	24.4	7.7	26.3	23.6	28.8
Slovenia	531	11.5	6.5	18.0	40.9	5.1	18.1	9.9	8.2	18.0	15.8	21.6
Sweden	585	14.7	0.2	16.7	13.9	8.1	46.5	29.1	17.4	14.9	15.6	14.4
International Avg.	554	20.7	5.4	10.7	18.9	6.4	37.8	22.8	15.1	26.1	24.8	28.5

V1 = Percent scoring 1 or better V2 = Percent scoring 2 or better
 Percent right for boys and girls corresponds to the percent obtaining the maximum score on the item.
 Because of missing gender information, some totals may appear inconsistent.