

COUNTRY ID=Australia SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	74	1.2	73	1.7	74	1.2
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	59	2.0	56	2.5	62	2.5
C05	No	Determine number which continues pattern based on figures.	57	1.1	56	1.9	59	1.8
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	42	1.8	40	2.6	45	1.8
E05	No	Find relationship between numbers in a set of ordered pairs.	65	1.7	61	2.5	69	1.8
F11	No	Solve multi-step problem using linear equations.	46	1.8	46	2.5	46	2.3
G06	No	Find solution to $-3X$ for given value of X .	23	2.1	20	2.5	26	2.2
H10	No	Identify equation expressing xy relationship from table of values.	52	2.2	50	2.9	55	2.7
H12	No	Select symbolic linear equation which fits word problem.	79	1.4	75	2.2	82	1.9
I01	Yes	Identify meaning of symbol in word problem equation.	35	2.6	35	3.4	34	3.6
I04	Yes	Determine next number which occurs in two number sequences.	39	2.3	34	3.0	46	3.3
J18	Yes	Identify missing number in table showing xy relationship.	50	2.2	51	3.7	49	3.1
K04	Yes	Identify expression equivalent to linear inequality.	34	2.5	34	3.5	34	3.1
L11	Yes	Solve multi-step word problem using pattern.	32	1.8	29	3.0	34	2.6
L13	Yes	Identify matching patterns of symbols.	91	1.3	89	2.5	93	1.4
L16	Yes	Simplify and solve linear equation for X .	14	1.9	13	3.0	15	2.7
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	44	2.4	42	3.6	46	3.3
O07	Yes	Solve linear equation for X .	65	2.5	65	3.3	64	3.4
P10	Yes	Identify equivalent algebraic expressions.	51	2.7	52	4.7	49	3.3
P15	Yes	Identify equivalent expression for a cubic relationship.	63	3.0	57	4.0	69	3.6
Q01	Yes	Identify linear expression based on word problem.	31	2.3	27	3.1	35	3.1
Q02	Yes	Subtract fractional expressions of X .	40	2.5	35	3.2	44	3.2
Q07	Yes	Solve $P=LW$ for W given values for P and L .	59	2.2	52	3.9	67	2.5
R09	Yes	Identify equivalent expressions from properties of real numbers.	28	2.2	22	2.8	34	3.2
R11	Yes	Solve algebra word problem: linear equation.	44	2.1	47	2.8	42	3.6
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	76	2.5	73	3.9	80	2.8
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	26	2.5	25	2.7	26	3.5
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	25	1.6	27	2.3	23	2.3
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	26	1.8	28	2.4	24	2.5

COUNTRY ID=Australia SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	71	1.2	67	1.6	75	1.2
B07	No	Interpret line graph to find region of largest increase.	64	1.6	62	2.2	66	1.7
C02	No	Interpret pie graph to determine distribution.	77	1.3	76	1.9	78	2.1
E01	No	Interpret line graph to determine intersection point of two plots.	66	1.6	69	2.2	64	1.8
F08	No	Predict probability of occurrence for independent coin toss.	68	1.7	67	2.5	68	2.1
G01	No	Interpret frequency table to find number above a given level.	44	1.7	41	2.4	46	2.1
H07	No	Interpret bar chart histogram to find number above a given level.	73	1.5	71	2.3	74	1.9
H11	No	Predict number of total defective bulbs based on random sample.	56	1.6	58	2.6	55	2.0
I09	Yes	Predict most likely color of random card based on fraction of colors.	67	2.3	65	3.1	70	3.5
J13	Yes	Draw pictograph to represent number given in table.	91	1.4	92	2.2	91	1.6
K07	Yes	Determine the number of blue pens given probability of selection.	51	2.1	53	3.1	48	3.5
L10	Yes	Use data in a chart to identify time/day with highest temperature.	94	1.1	95	1.2	92	1.8
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	79	2.1	80	3.4	78	2.8
N18	Yes	Find probability of drawing an even number from 1 to 9.	62	2.5	59	3.7	65	3.7
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	62	2.3	67	3.7	58	3.2
O05	Yes	Calculate number of cube faces from probability of toss.	49	2.8	50	4.4	47	3.4
P17	Yes	Identify thermometer which shows temperature given in data table.	72	1.9	68	3.1	75	2.4
Q04	Yes	Interpret data in bar graph.	89	1.7	86	2.3	91	2.3
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	53	2.3	56	3.3	49	3.1
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	18	1.6	15	2.4	20	1.8

COUNTRY ID=Australia SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	59	1.7	60	2.1	58	2.0
B09	No	Identify shaded figure which shows 2/5 = 4/10.	62	1.3	57	1.5	66	1.6
B10	No	Identify smallest of decimal fractions.	47	1.7	50	2.2	44	2.1
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	49	1.5	49	2.4	49	1.5
C06	No	Determine the worst estimate of: 848 + 677.	80	1.5	79	1.9	81	1.9
D09	No	Identify smallest fraction.	74	1.5	74	2.4	74	1.8
D12	No	Estimate rational number from point on number line.	80	1.2	81	1.8	79	1.4
E03	No	Find fraction of hour between two time points.	62	1.6	63	2.9	60	2.1
E04	No	Solve multi-step word problem: 4-digit whole numbers.	66	1.9	61	2.6	72	2.2
F09	No	Identify decimal fraction between 0.07 and 0.08.	68	1.4	67	2.0	69	1.8
F12	No	Identify fraction of circle which is shaded.	65	1.6	64	2.3	66	2.1
G05	No	Identify fraction represented in word problem.	66	1.9	63	2.2	68	2.5
H08	No	Identify figure showing 2/3 shaded.	83	1.4	81	2.3	85	1.7
H09	No	Identify sum which is closest to 691 + 208.	91	1.1	90	1.6	91	1.3
I02	Yes	Solve multi-step word problem: common fractions.	60	2.4	61	3.2	59	3.3
I05	Yes	Solve subtraction word problem: rational numbers.	69	2.0	65	3.4	73	3.1
I06	Yes	Write a fraction larger than a given number.	76	2.3	77	3.2	75	3.5
I07	Yes	Recognize when estimation is appropriate.	72	2.7	66	3.7	78	3.2
J12	Yes	Divide fractions.	19	1.8	19	3.5	20	2.7
J14	Yes	Divide rational numbers, fractional divisor.	20	1.7	24	2.9	17	2.5
J17	Yes	Use map and scale to find distance between two cities.	68	2.7	73	3.8	63	3.7
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	66	2.7	67	3.9	64	3.8
K02	Yes	Find total volume of mixture using rational number addition.	65	2.6	58	4.2	71	3.0
K06	Yes	Approximate amount increased by 15%.	42	2.4	44	3.0	40	3.5
K09	Yes	Compute sum of three fractions.	30	2.2	28	3.6	31	3.1
L08	Yes	Estimate actual height from diagram of relative heights.	58	2.6	60	4.1	57	3.0
L09	Yes	Identify 504.7 from its expression in words.	82	2.3	80	3.8	83	2.7
L17	Yes	Subtract three fractions.	39	2.9	36	3.8	40	3.5
M04	Yes	Identify the largest fraction.	38	2.4	41	3.8	35	3.1
M08	Yes	Multiply two decimal fractions.	21	2.1	21	2.9	22	2.9
N11	Yes	Identify number rounded to 18200.	90	1.5	87	2.6	93	1.5
N14	Yes	Identify list of equivalent fractions.	65	2.2	66	3.5	65	3.0
N16	Yes	Solve algebra word problem with fractions.	43	2.4	41	3.8	45	3.2
N17	Yes	Solve multi-step word problem: decimal fractions.	34	2.5	33	3.7	35	2.9
N19	Yes	Shade a given fraction of the squares in a grid.	55	2.6	53	3.7	57	3.5
O02	Yes	Calculate percent increase.	21	2.0	28	2.9	15	2.4
O04	Yes	Identify number rounded to the nearest 100th.	44	2.4	48	3.1	41	3.4
O09	Yes	Solve division word problem: common fractions.	58	2.4	60	3.9	57	2.8
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	73	2.5	66	3.9	81	2.9
P13	Yes	Use heart beats/min to find beats per hour.	59	2.0	55	3.1	64	3.8
P14	Yes	Solve subtraction word problem: common fractions.	82	1.9	75	2.8	88	2.1
P16	Yes	Reduce decimal to fraction in lowest terms.	33	2.2	32	3.4	34	2.9
Q06	Yes	Approximate water use/year from use/week.	47	2.1	45	3.7	50	3.1
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	45	2.2	49	3.3	41	3.4
Q09	Yes	Perform multiple operations of common fractions.	37	2.7	35	3.7	38	3.4
R06	Yes	Subtract two decimal numbers.	66	2.2	59	3.2	72	2.8
R07	Yes	Solve division word problem involving decimals.	38	2.3	38	3.0	37	3.5
R12	Yes	Subtract 4-digit whole numbers.	82	2.4	77	3.3	87	2.5
R13	Yes	Determine how much money left after spending 7/9.	30	2.3	27	3.5	33	3.0
U01A	Yes	Estimate the time required to record 5 songs.	45	1.8	47	2.3	43	2.6
U01B	Yes	Explain method of estimation.	38	1.6	37	2.3	40	2.3
V01	Yes	Determine actual weight from rounded value.	73	1.7	73	2.2	73	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Australia SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	41	1.0	40	1.6	42	1.4
B11	No	Identify cube made by folding 2-dimensional net.	65	1.3	64	2.0	66	1.8
C03	No	Identify properties of congruent trapezoids.	58	1.4	55	2.1	62	2.0
D07	No	Identify relationship of angles in symmetric polygon.	54	1.9	54	3.0	54	2.2
E02	No	Determine angle in congruent triangles.	39	1.7	40	2.1	39	2.6
G03	No	Find sum of vertical angles from diagram of intersecting lines.	47	1.7	44	2.4	50	2.2
I08	Yes	Identify point on a line defined by two other points.	47	2.4	52	3.1	42	3.6
J11	Yes	Identify properties of a parallelogram.	44	2.5	39	3.7	47	3.5
J15	Yes	Identify similar triangles of different size.	66	1.8	61	3.1	69	2.4
J16	Yes	Identify coordinates for point on a grid.	57	3.0	51	4.7	62	3.3
K03	Yes	Identify figure from rotation of 3-dimensional object.	69	2.5	69	3.8	68	3.4
K08	Yes	Determine unknown angle in rotated congruent triangles.	29	2.2	27	3.2	31	3.4
L15	Yes	Find fourth quadrilateral angle, given the other three.	36	2.5	36	3.5	37	3.3
M02	Yes	Identify all lines of symmetry for a rectangle.	70	1.8	64	3.1	76	2.6
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	37	2.3	33	3.5	41	3.1
M07	Yes	Find angle based on supplementary pairs.	73	1.9	75	2.8	71	2.8
N12	Yes	Identify point on number line from distance of other points.	65	2.6	69	3.3	61	3.4
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	42	2.0	41	2.8	43	3.2
O08	Yes	Find center point of rotation for symmetry-related figures.	69	2.5	70	4.0	68	2.9
P08	Yes	Know relationship between side and perimeter for square.	54	3.0	51	4.0	57	4.0
P09	Yes	Find length of side for similar triangles.	32	2.6	31	3.3	32	3.9
Q10	Yes	Perform calculation involving addition/subtraction of angles.	42	2.7	36	3.6	47	3.2
R10	Yes	Determine into how many triangles a trapezoid can be divided.	51	2.4	50	3.9	52	3.1

COUNTRY ID=Australia SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	65	1.3	65	1.9	66	1.5
C01	No	Compare volumes of different stacks of blocks.	62	1.7	64	2.3	61	2.2
D11	No	Identify best unit to measure the mass of an egg.	88	1.3	91	1.5	86	1.8
E06	No	Solve word problem to find length of rectangle from width and perimeter.	42	1.7	42	2.5	42	2.2
F10	No	Determine measurement accuracy of ruler.	56	1.5	59	2.5	54	2.0
G02	No	Read meter scale to determine length of a pipe.	75	1.6	73	2.3	76	1.6
I03	Yes	Find number of 750 mL bottles filled by a large volume.	41	2.6	45	4.0	36	3.2
J10	Yes	Determine area of sheet not covered by rectangular picture.	40	2.7	41	3.3	39	4.0
K05	Yes	Calculate area of a rectangle given its length and perimeter.	35	2.6	35	4.0	34	3.3
L12	Yes	Find longest pace from chart showing number of paces to cross room.	63	2.8	67	4.6	59	3.5
M01	Yes	Read mass shown on scale.	89	1.7	86	3.0	92	1.8
N15	Yes	Identify drawing with angle closest to 30 degrees.	63	1.6	64	2.7	62	3.2
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	76	2.2	79	2.9	74	2.9
P11	Yes	Use ruler to determine approximate length of pencil.	49	2.2	51	3.5	48	2.7
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	29	1.9	32	3.5	27	2.7
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	55	2.4	48	3.3	62	3.4
S02B	Yes	Calculate length of side of square given area.	21	2.2	24	2.7	19	2.9
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	23	2.0	22	2.5	23	3.1
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	22	1.5	23	2.3	22	2.1
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	7	0.9	8	1.5	7	1.1
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	42	2.2	42	3.3	43	2.5

COUNTRY ID=Australia SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	50	1.2	57	1.6	43	1.6
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	62	1.4	63	1.9	61	1.8
D08	No	Solve ratio problem for x: $7/13 = x/52$.	71	1.7	72	2.5	71	2.1
F07	No	Solve word problem to find average speed from distance and time.	26	1.6	26	1.9	26	2.2
G04	No	Solve simple proportionality equation.	71	1.6	69	2.0	73	1.9
L14	Yes	Identify missing numbers in table of proportional x and y values.	18	2.1	24	3.8	14	2.5
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	33	2.4	32	3.4	34	3.2
Q05	Yes	Solve word problem involving ratios.	71	2.2	67	3.0	75	3.0
R14	Yes	Solve multi-step word problem involving ratios.	21	1.9	19	3.1	23	2.8
T02A	Yes	Solve algebra word problem involving ratios.	17	1.4	17	2.2	18	1.8
T02B	Yes	Solve multi-step word problem computing fractions.	6	0.8	6	1.1	6	1.0
V03	Yes	Determine ratio of red paint in a mixture.	41	1.7	39	2.8	43	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Austria SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	80	1.0	80	1.3	80	1.2
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	68	1.8	62	2.6	73	1.8
C05	No	Determine number which continues pattern based on figures.	50	1.9	47	2.3	52	2.7
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	39	1.8	39	2.7	39	2.2
E05	No	Find relationship between numbers in a set of ordered pairs.	45	2.0	39	2.5	50	3.1
F11	No	Solve multi-step problem using linear equations.	37	1.9	40	3.1	36	2.3
G06	No	Find solution to $-3X$ for given value of X .	36	1.9	33	2.6	37	2.6
H10	No	Identify equation expressing xy relationship from table of values.	33	1.7	33	2.6	33	2.0
H12	No	Select symbolic linear equation which fits word problem.	77	1.6	74	2.6	79	2.4
I01	Yes	Identify meaning of symbol in word problem equation.	24	2.8	22	3.7	24	2.9
I04	Yes	Determine next number which occurs in two number sequences.	48	2.5	41	4.0	57	3.4
J18	Yes	Identify missing number in table showing xy relationship.	34	2.9	38	4.2	29	4.3
K04	Yes	Identify expression equivalent to linear inequality.	43	3.1	40	3.7	46	4.5
L11	Yes	Solve multi-step word problem using pattern.	32	2.7	32	4.2	32	2.9
L13	Yes	Identify matching patterns of symbols.	95	1.4	93	2.3	97	1.5
L16	Yes	Simplify and solve linear equation for X .	43	3.5	36	4.4	50	4.6
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	49	2.9	42	4.5	55	4.4
O07	Yes	Solve linear equation for X .	70	2.8	70	4.2	70	3.5
P10	Yes	Identify equivalent algebraic expressions.	51	2.7	44	4.3	57	3.9
P15	Yes	Identify equivalent expression for a cubic relationship.	68	2.9	69	4.4	67	3.6
Q01	Yes	Identify linear expression based on word problem.	38	2.9	34	3.8	42	4.7
Q02	Yes	Subtract fractional expressions of X .	55	3.0	55	4.2	57	4.2
Q07	Yes	Solve $P=LW$ for W given values for P and L .	57	2.8	55	3.5	59	4.2
R09	Yes	Identify equivalent expressions from properties of real numbers.	36	3.2	38	4.5	35	4.0
R11	Yes	Solve algebra word problem: linear equation.	40	3.1	46	4.3	33	3.6
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	91	1.9	89	3.3	93	1.9
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	27	2.2	26	3.9	29	2.7
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	25	1.7	24	2.4	25	2.3
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	25	1.8	24	2.6	26	2.4

COUNTRY ID=Austria SCALE=Data Rep., Analysis & Prob.

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	79	1.2	78	1.5	80	1.4
B07	No	Interpret line graph to find region of largest increase.	68	1.7	65	2.7	71	1.9
C02	No	Interpret pie graph to determine distribution.	84	1.5	84	2.1	85	1.8
E01	No	Interpret line graph to determine intersection point of two plots.	69	1.7	70	2.3	67	2.2
F08	No	Predict probability of occurrence for independent coin toss.	57	1.8	51	2.6	61	2.3
G01	No	Interpret frequency table to find number above a given level.	57	1.8	57	2.5	56	2.4
H07	No	Interpret bar chart histogram to find number above a given level.	67	1.8	70	2.3	65	2.6
H11	No	Predict number of total defective bulbs based on random sample.	60	1.6	63	2.1	57	2.6
I09	Yes	Predict most likely color of random card based on fraction of colors.	78	2.6	77	3.4	79	2.9
J13	Yes	Draw pictograph to represent number given in table.	84	2.5	78	3.8	92	2.5
K07	Yes	Determine the number of blue pens given probability of selection.	40	2.6	36	3.9	42	3.4
L10	Yes	Use data in a chart to identify time/day with highest temperature.	90	1.5	87	2.3	93	2.0
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	77	2.6	76	3.7	79	3.6
N18	Yes	Find probability of drawing an even number from 1 to 9.	53	3.1	48	4.7	55	4.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	59	2.9	63	4.0	57	3.9
O05	Yes	Calculate number of cube faces from probability of toss.	47	2.7	47	4.3	46	3.9
P17	Yes	Identify thermometer which shows temperature given in data table.	93	1.9	91	2.7	95	1.8
Q04	Yes	Interpret data in bar graph.	85	2.4	82	3.3	89	3.0
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	48	2.8	56	4.5	42	3.5
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	17	1.6	17	2.7	18	2.3

COUNTRY ID=Austria SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	55	1.6	58	2.5	52	1.9
B09	No	Identify shaded figure which shows 2/5 = 4/10.	46	1.8	46	2.4	47	2.3
B10	No	Identify smallest of decimal fractions.	55	1.8	64	2.4	48	2.4
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	55	1.7	55	2.8	55	2.6
C06	No	Determine the worst estimate of: 848 + 677.	75	1.6	74	2.1	76	2.3
D09	No	Identify smallest fraction.	86	1.2	86	2.0	85	2.0
D12	No	Estimate rational number from point on number line.	76	1.8	78	2.2	74	2.5
E03	No	Find fraction of hour between two time points.	59	2.2	61	2.8	57	2.8
E04	No	Solve multi-step word problem: 4-digit whole numbers.	70	1.7	68	2.2	71	2.3
F09	No	Identify decimal fraction between 0.07 and 0.08.	69	1.9	70	2.8	69	2.2
F12	No	Identify fraction of circle which is shaded.	61	1.6	60	2.5	62	2.3
G05	No	Identify fraction represented in word problem.	47	2.1	44	2.7	50	2.8
H08	No	Identify figure showing 2/3 shaded.	79	1.6	80	2.4	78	2.1
H09	No	Identify sum which is closest to 691 + 208.	88	1.3	88	1.7	87	1.9
I02	Yes	Solve multi-step word problem: common fractions.	55	3.1	56	4.4	54	3.8
I05	Yes	Solve subtraction word problem: rational numbers.	76	2.9	75	5.1	77	3.4
I06	Yes	Write a fraction larger than a given number.	89	2.0	89	2.9	90	2.6
I07	Yes	Recognize when estimation is appropriate.	60	2.5	56	3.7	65	3.4
J12	Yes	Divide fractions.	53	2.7	48	3.9	57	4.0
J14	Yes	Divide rational numbers, fractional divisor.	67	3.2	67	4.4	67	4.2
J17	Yes	Use map and scale to find distance between two cities.	76	2.5	75	3.8	78	3.7
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	71	2.6	75	4.0	67	3.5
K02	Yes	Find total volume of mixture using rational number addition.	70	2.6	63	4.4	75	3.7
K06	Yes	Approximate amount increased by 15%.	51	3.6	50	5.1	51	4.2
K09	Yes	Compute sum of three fractions.	47	3.0	34	4.0	57	4.0
L08	Yes	Estimate actual height from diagram of relative heights.	56	2.8	61	4.7	52	3.8
L09	Yes	Identify 504.7 from its expression in words.	91	1.6	93	2.0	89	2.2
L17	Yes	Subtract three fractions.	53	3.1	50	4.6	54	4.5
M04	Yes	Identify the largest fraction.	35	2.7	31	4.2	37	3.8
M08	Yes	Multiply two decimal fractions.	73	2.9	70	4.4	74	3.4
N11	Yes	Identify number rounded to 18200.	88	2.1	86	3.2	88	2.5
N14	Yes	Identify list of equivalent fractions.	62	3.0	59	4.6	63	4.8
N16	Yes	Solve algebra word problem with fractions.	35	2.9	38	4.1	32	3.9
N17	Yes	Solve multi-step word problem: decimal fractions.	31	2.3	30	3.6	33	3.5
N19	Yes	Shade a given fraction of the squares in a grid.	54	2.8	55	4.1	52	3.4
O02	Yes	Calculate percent increase.	32	2.9	31	3.4	34	4.7
O04	Yes	Identify number rounded to the nearest 100th.	48	2.6	51	4.2	47	4.1
O09	Yes	Solve division word problem: common fractions.	62	2.8	64	4.2	60	3.3
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	73	2.8	73	4.1	72	4.1
P13	Yes	Use heart beats/min to find beats per hour.	71	2.7	69	4.1	75	3.4
P14	Yes	Solve subtraction word problem: common fractions.	85	2.2	85	2.9	86	3.1
P16	Yes	Reduce decimal to fraction in lowest terms.	38	2.3	35	3.4	39	3.7
Q06	Yes	Approximate water use/year from use/week.	40	3.0	36	4.0	44	4.3
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	42	2.9	55	4.1	30	3.6
Q09	Yes	Perform multiple operations of common fractions.	58	3.2	52	4.1	63	4.2
R06	Yes	Subtract two decimal numbers.	85	2.6	81	3.5	89	2.9
R07	Yes	Solve division word problem involving decimals.	56	2.5	55	4.1	56	4.0
R12	Yes	Subtract 4-digit whole numbers.	94	1.3	90	2.6	97	1.4
R13	Yes	Determine how much money left after spending 7/9.	36	2.9	39	3.9	33	3.8
U01A	Yes	Estimate the time required to record 5 songs.	38	2.5	35	3.2	41	3.8
U01B	Yes	Explain method of estimation.	36	2.2	32	3.2	41	2.9
V01	Yes	Determine actual weight from rounded value.	57	2.4	59	3.8	58	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Austria SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	49	1.5	49	2.2	50	1.9
B11	No	Identify cube made by folding 2-dimensional net.	64	1.9	64	2.8	64	2.1
C03	No	Identify properties of congruent trapezoids.	54	1.7	54	2.6	54	2.6
D07	No	Identify relationship of angles in symmetric polygon.	53	2.0	53	2.9	53	2.3
E02	No	Determine angle in congruent triangles.	35	1.9	37	3.0	33	2.3
G03	No	Find sum of vertical angles from diagram of intersecting lines.	45	1.8	44	2.7	46	2.6
I08	Yes	Identify point on a line defined by two other points.	46	2.8	49	4.0	44	4.3
J11	Yes	Identify properties of a parallelogram.	49	3.2	45	4.7	56	4.4
J15	Yes	Identify similar triangles of different size.	69	2.9	66	4.3	72	3.7
J16	Yes	Identify coordinates for point on a grid.	65	3.2	58	4.7	73	4.1
K03	Yes	Identify figure from rotation of 3-dimensional object.	70	2.6	73	4.1	67	3.7
K08	Yes	Determine unknown angle in rotated congruent triangles.	32	3.0	30	4.5	32	4.1
L15	Yes	Find fourth quadrilateral angle, given the other three.	35	3.0	38	4.7	32	3.9
M02	Yes	Identify all lines of symmetry for a rectangle.	53	2.6	56	3.3	52	4.2
M07	Yes	Find angle based on supplementary pairs.	73	3.3	68	4.5	76	3.8
N12	Yes	Identify point on number line from distance of other points.	62	2.6	65	4.0	59	3.9
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	46	2.7	46	3.8	47	3.9
O08	Yes	Find center point of rotation for symmetry-related figures.	71	2.6	71	4.0	71	3.3
P08	Yes	Know relationship between side and perimeter for square.	54	3.5	53	4.4	54	4.6
P09	Yes	Find length of side for similar triangles.	40	2.9	41	3.8	40	4.2
Q10	Yes	Perform calculation involving addition/subtraction of angles.	45	2.8	44	4.5	48	3.8
R10	Yes	Determine into how many triangles a trapezoid can be divided.	49	3.1	51	4.9	46	3.7

COUNTRY ID=Austria SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	84	0.9	82	1.4	85	1.2
C01	No	Compare volumes of different stacks of blocks.	62	1.7	62	2.5	62	2.2
D11	No	Identify best unit to measure the mass of an egg.	81	1.5	78	2.1	84	2.0
E06	No	Solve word problem to find length of rectangle from width and perimeter.	40	1.5	42	2.6	39	2.1
F10	No	Determine measurement accuracy of ruler.	66	1.4	71	2.0	62	2.2
G02	No	Read meter scale to determine length of a pipe.	81	1.2	78	1.9	84	1.8
I03	Yes	Find number of 750 mL bottles filled by a large volume.	44	3.0	44	4.2	45	4.0
J10	Yes	Determine area of sheet not covered by rectangular picture.	58	3.0	58	4.6	59	4.1
K05	Yes	Calculate area of a rectangle given its length and perimeter.	39	2.8	38	4.5	40	3.5
L12	Yes	Find longest pace from chart showing number of paces to cross room.	80	2.9	82	3.7	78	3.9
M01	Yes	Read mass shown on scale.	88	1.6	90	2.5	87	2.5
N15	Yes	Identify drawing with angle closest to 30 degrees.	80	2.6	81	3.5	79	3.3
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	84	2.7	88	3.1	82	3.6
P11	Yes	Use ruler to determine approximate length of pencil.	66	3.0	70	3.8	61	3.7
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	38	2.9	37	4.4	39	4.3
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	65	3.1	65	3.9	66	4.1
S02B	Yes	Calculate length of side of square given area.	24	2.4	28	3.6	19	2.8
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	25	2.4	32	3.8	17	2.8
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	41	2.0	38	3.1	45	2.7
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	4	1.0	5	1.2	4	1.3
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	47	2.6	51	3.5	45	3.3

COUNTRY ID=Austria SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	54	1.2	61	1.6	48	1.9
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	74	1.4	69	1.8	79	1.9
D08	No	Solve ratio problem for x: $7/13 = x/52$.	72	1.7	73	2.5	70	2.1
F07	No	Solve word problem to find average speed from distance and time.	32	1.5	33	2.2	31	2.1
G04	No	Solve simple proportionality equation.	65	2.1	63	2.6	66	2.9
L14	Yes	Identify missing numbers in table of proportional x and y values.	15	1.9	15	2.9	13	3.0
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	42	4.0	43	5.2	42	4.4
Q05	Yes	Solve word problem involving ratios.	69	2.5	70	3.9	68	4.0
R14	Yes	Solve multi-step word problem involving ratios.	56	3.2	53	3.7	59	4.6
T02A	Yes	Solve algebra word problem involving ratios.	18	1.8	18	2.6	17	2.3
T02B	Yes	Solve multi-step word problem computing fractions.	8	1.2	8	1.7	7	1.7
V03	Yes	Determine ratio of red paint in a mixture.	21	2.4	17	3.0	26	2.8

COUNTRY ID=Belgium (Fl) SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	81	0.9	82	1.1	80	1.4
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	80	1.4	78	1.9	82	2.1
C05	No	Determine number which continues pattern based on figures.	65	1.5	65	2.0	65	2.6
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	58	2.2	57	3.2	60	2.5
E05	No	Find relationship between numbers in a set of ordered pairs.	67	1.9	65	2.6	68	2.8
F11	No	Solve multi-step problem using linear equations.	67	2.1	66	2.9	68	2.7
G06	No	Find solution to $-3X$ for given value of X .	51	2.7	45	3.4	56	3.2
H10	No	Identify equation expressing xy relationship from table of values.	49	1.9	50	2.9	48	2.6
H12	No	Select symbolic linear equation which fits word problem.	86	1.1	84	1.7	88	1.5
I01	Yes	Identify meaning of symbol in word problem equation.	42	2.9	42	4.2	42	3.9
I04	Yes	Determine next number which occurs in two number sequences.	57	3.4	56	4.2	58	4.9
J18	Yes	Identify missing number in table showing xy relationship.	45	2.9	45	3.9	44	4.3
K04	Yes	Identify expression equivalent to linear inequality.	54	2.9	53	4.1	55	4.4
L11	Yes	Solve multi-step word problem using pattern.	32	2.5	30	3.5	33	3.5
L13	Yes	Identify matching patterns of symbols.	96	0.9	95	1.4	98	1.2
L16	Yes	Simplify and solve linear equation for X .	33	2.8	36	4.1	30	3.7
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	58	2.9	54	4.0	61	4.5
O07	Yes	Solve linear equation for X .	84	2.3	83	3.1	85	2.7
P10	Yes	Identify equivalent algebraic expressions.	69	2.8	64	4.3	73	3.6
P15	Yes	Identify equivalent expression for a cubic relationship.	75	2.9	70	4.5	80	3.5
Q01	Yes	Identify linear expression based on word problem.	41	3.0	39	4.2	43	4.0
Q02	Yes	Subtract fractional expressions of X .	57	2.9	56	4.4	58	3.9
Q07	Yes	Solve $P=LW$ for W given values for P and L .	58	3.1	58	4.4	59	4.2
R09	Yes	Identify equivalent expressions from properties of real numbers.	64	2.5	61	4.5	66	3.4
R11	Yes	Solve algebra word problem: linear equation.	64	2.9	61	4.4	67	3.9
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	83	2.1	81	2.9	86	2.3
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	26	2.5	24	3.7	28	3.6
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	54	2.3	51	3.0	56	3.3
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	57	2.3	55	3.2	59	3.2

COUNTRY ID=Belgium (Fl) SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	84	0.9	84	1.3	84	1.2
B07	No	Interpret line graph to find region of largest increase.	61	1.3	61	2.2	60	1.6
C02	No	Interpret pie graph to determine distribution.	87	1.2	85	1.9	89	1.5
E01	No	Interpret line graph to determine intersection point of two plots.	66	1.7	66	2.1	66	2.4
F08	No	Predict probability of occurrence for independent coin toss.	64	1.6	63	1.8	65	2.3
G01	No	Interpret frequency table to find number above a given level.	72	1.8	72	2.3	71	2.4
H07	No	Interpret bar chart histogram to find number above a given level.	81	1.3	79	1.7	84	1.9
H11	No	Predict number of total defective bulbs based on random sample.	83	1.4	85	2.0	80	2.1
I09	Yes	Predict most likely color of random card based on fraction of colors.	83	2.6	79	3.9	87	2.9
J13	Yes	Draw pictograph to represent number given in table.	93	1.2	93	1.6	93	1.7
K07	Yes	Determine the number of blue pens given probability of selection.	77	2.5	82	3.1	73	4.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	94	1.4	92	2.0	96	1.6
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	90	1.9	88	2.7	91	2.3
N18	Yes	Find probability of drawing an even number from 1 to 9.	71	2.4	68	4.2	74	2.4
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	76	2.6	83	2.7	70	4.0
O05	Yes	Calculate number of cube faces from probability of toss.	73	3.1	72	4.2	75	5.0
P17	Yes	Identify thermometer which shows temperature given in data table.	95	1.2	95	1.8	96	1.4
Q04	Yes	Interpret data in bar graph.	94	1.4	91	2.5	96	1.3
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	56	3.0	54	4.2	58	4.0
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	25	2.3	24	3.2	26	3.2

COUNTRY ID=Belgium (Fl) SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	85	1.0	86	1.2	83	1.6
B09	No	Identify shaded figure which shows 2/5 = 4/10.	75	1.3	75	1.9	75	1.6
B10	No	Identify smallest of decimal fractions.	66	1.7	69	2.3	62	2.4
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	64	1.6	63	2.5	65	2.2
C06	No	Determine the worst estimate of: 848 + 677.	77	1.6	77	2.0	77	2.1
D09	No	Identify smallest fraction.	86	1.4	88	1.6	83	2.2
D12	No	Estimate rational number from point on number line.	79	1.4	80	2.1	78	2.2
E03	No	Find fraction of hour between two time points.	71	1.8	72	2.4	70	2.6
E04	No	Solve multi-step word problem: 4-digit whole numbers.	81	1.3	81	1.8	82	2.0
F09	No	Identify decimal fraction between 0.07 and 0.08.	83	1.4	86	1.4	79	2.4
F12	No	Identify fraction of circle which is shaded.	72	1.9	71	2.7	73	2.1
G05	No	Identify fraction represented in word problem.	78	1.6	78	2.3	78	2.2
H08	No	Identify figure showing 2/3 shaded.	93	0.8	92	1.3	93	0.9
H09	No	Identify sum which is closest to 691 + 208.	95	0.7	96	0.8	94	1.1
I02	Yes	Solve multi-step word problem: common fractions.	79	2.5	80	3.2	78	3.5
I05	Yes	Solve subtraction word problem: rational numbers.	86	2.2	83	3.6	90	2.5
I06	Yes	Write a fraction larger than a given number.	82	2.6	81	3.1	83	3.3
I07	Yes	Recognize when estimation is appropriate.	68	2.5	63	4.3	71	3.4
J12	Yes	Divide fractions.	54	3.4	50	3.8	59	4.8
J14	Yes	Divide rational numbers, fractional divisor.	50	2.8	49	4.0	52	4.0
J17	Yes	Use map and scale to find distance between two cities.	84	1.8	84	2.4	83	3.0
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	84	2.1	84	2.4	83	3.3
K02	Yes	Find total volume of mixture using rational number addition.	79	2.4	72	3.4	87	3.3
K06	Yes	Approximate amount increased by 15%.	53	3.0	54	3.8	51	4.8
K09	Yes	Compute sum of three fractions.	83	2.2	75	3.2	92	2.1
L08	Yes	Estimate actual height from diagram of relative heights.	71	2.4	74	3.5	69	3.2
L09	Yes	Identify 504.7 from its expression in words.	93	1.6	92	2.3	94	2.3
L17	Yes	Subtract three fractions.	80	2.1	78	3.1	81	3.0
M04	Yes	Identify the largest fraction.	64	2.8	65	3.2	64	4.4
M08	Yes	Multiply two decimal fractions.	58	2.9	50	4.2	67	3.8
N11	Yes	Identify number rounded to 18200.	96	1.0	97	1.3	95	1.5
N14	Yes	Identify list of equivalent fractions.	92	1.7	92	2.4	92	2.0
N16	Yes	Solve algebra word problem with fractions.	42	2.7	41	4.1	42	4.0
N17	Yes	Solve multi-step word problem: decimal fractions.	37	2.9	31	4.0	43	3.9
N19	Yes	Shade a given fraction of the squares in a grid.	86	2.3	84	3.3	88	2.6
O02	Yes	Calculate percent increase.	37	2.9	44	3.8	30	4.2
O04	Yes	Identify number rounded to the nearest 100th.	52	2.4	57	3.9	47	3.9
O09	Yes	Solve division word problem: common fractions.	68	2.8	75	3.3	61	4.7
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	84	2.0	80	3.0	87	2.3
P13	Yes	Use heart beats/min to find beats per hour.	86	2.1	84	2.8	87	2.7
P14	Yes	Solve subtraction word problem: common fractions.	92	1.6	92	2.1	92	2.3
P16	Yes	Reduce decimal to fraction in lowest terms.	61	2.9	60	3.5	62	4.0
Q06	Yes	Approximate water use/year from use/week.	55	2.9	53	4.0	57	3.8
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	65	2.7	67	4.0	64	3.3
Q09	Yes	Perform multiple operations of common fractions.	77	2.9	74	3.5	80	4.0
R06	Yes	Subtract two decimal numbers.	81	2.2	79	3.1	83	3.2
R07	Yes	Solve division word problem involving decimals.	66	2.5	66	3.3	67	3.7
R12	Yes	Subtract 4-digit whole numbers.	96	1.1	93	1.8	98	1.2
R13	Yes	Determine how much money left after spending 7/9.	53	2.6	58	3.8	49	3.9
U01A	Yes	Estimate the time required to record 5 songs.	48	2.0	48	2.6	47	3.1
U01B	Yes	Explain method of estimation.	46	2.1	45	3.1	47	3.0
V01	Yes	Determine actual weight from rounded value.	65	2.7	68	3.1	60	3.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Belgium (Fl) SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	44	1.7	43	1.9	46	2.1
B11	No	Identify cube made by folding 2-dimensional net.	77	1.3	77	1.8	77	1.7
C03	No	Identify properties of congruent trapezoids.	66	1.6	64	2.6	69	2.6
D07	No	Identify relationship of angles in symmetric polygon.	68	1.8	68	2.3	69	2.7
E02	No	Determine angle in congruent triangles.	43	1.6	45	2.5	42	2.2
G03	No	Find sum of vertical angles from diagram of intersecting lines.	57	1.8	55	2.0	59	2.8
I08	Yes	Identify point on a line defined by two other points.	39	2.4	45	3.9	33	2.9
J11	Yes	Identify properties of a parallelogram.	78	2.5	77	3.6	79	3.7
J15	Yes	Identify similar triangles of different size.	57	3.0	55	3.7	60	4.6
J16	Yes	Identify coordinates for point on a grid.	46	2.5	41	3.5	51	3.3
K03	Yes	Identify figure from rotation of 3-dimensional object.	83	1.8	83	2.9	84	2.6
K08	Yes	Determine unknown angle in rotated congruent triangles.	29	2.8	26	3.5	34	4.5
L15	Yes	Find fourth quadrilateral angle, given the other three.	48	3.2	47	4.7	50	4.2
M02	Yes	Identify all lines of symmetry for a rectangle.	78	2.2	79	2.7	76	3.6
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	39	2.4	43	3.3	35	3.9
M07	Yes	Find angle based on supplementary pairs.	78	2.2	79	3.1	78	3.4
N12	Yes	Identify point on number line from distance of other points.	78	2.8	78	3.6	77	3.7
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	56	2.8	57	3.9	55	3.9
O08	Yes	Find center point of rotation for symmetry-related figures.	64	3.1	69	3.6	60	4.4
P08	Yes	Know relationship between side and perimeter for square.	71	2.7	71	3.3	71	4.2
P09	Yes	Find length of side for similar triangles.	46	3.0	44	3.8	48	4.1
Q10	Yes	Perform calculation involving addition/subtraction of angles.	39	2.8	38	4.0	40	3.8
R10	Yes	Determine into how many triangles a trapezoid can be divided.	59	3.0	59	4.0	59	4.3

COUNTRY ID=Belgium (Fl) SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	83	1.1	82	1.4	83	1.4
C01	No	Compare volumes of different stacks of blocks.	64	1.7	63	2.3	65	2.6
D11	No	Identify best unit to measure the mass of an egg.	95	0.7	95	1.0	94	1.1
E06	No	Solve word problem to find length of rectangle from width and perimeter.	60	1.8	61	2.5	60	2.5
F10	No	Determine measurement accuracy of ruler.	74	1.5	77	2.1	72	2.0
G02	No	Read meter scale to determine length of a pipe.	88	1.1	91	1.2	86	1.9
I03	Yes	Find number of 750 mL bottles filled by a large volume.	55	2.8	54	4.1	56	4.1
J10	Yes	Determine area of sheet not covered by rectangular picture.	55	3.0	60	3.8	51	4.5
K05	Yes	Calculate area of a rectangle given its length and perimeter.	51	2.9	49	4.0	53	4.1
L12	Yes	Find longest pace from chart showing number of paces to cross room.	86	2.1	87	2.5	85	3.0
M01	Yes	Read mass shown on scale.	95	1.3	93	2.0	97	1.5
N15	Yes	Identify drawing with angle closest to 30 degrees.	64	2.6	62	3.2	67	3.9
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	73	2.5	74	3.2	71	4.3
P11	Yes	Use ruler to determine approximate length of pencil.	72	2.5	73	3.4	72	3.7
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	49	2.7	50	4.3	48	3.1
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	73	2.2	72	3.3	74	2.8
S02B	Yes	Calculate length of side of square given area.	23	2.7	26	3.7	20	3.1
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	19	2.2	20	3.6	19	2.8
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	47	2.4	46	3.1	48	3.7
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	7	1.1	6	1.4	8	1.8
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	46	2.4	50	2.8	42	3.5

COUNTRY ID=Belgium (Fl) SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	76	1.2	81	1.1	72	1.9
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	79	1.1	79	1.8	79	1.5
D08	No	Solve ratio problem for x: $7/13 = x/52$.	78	1.2	79	1.7	77	2.0
F07	No	Solve word problem to find average speed from distance and time.	46	2.0	44	2.5	48	3.0
G04	No	Solve simple proportionality equation.	92	1.0	91	1.4	93	1.4
L14	Yes	Identify missing numbers in table of proportional x and y values.	27	2.5	26	3.3	29	3.8
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	37	2.6	38	3.5	35	3.3
Q05	Yes	Solve word problem involving ratios.	85	2.1	83	2.9	87	2.8
R14	Yes	Solve multi-step word problem involving ratios.	57	3.4	56	4.6	58	5.1
T02A	Yes	Solve algebra word problem involving ratios.	20	1.9	18	2.7	22	2.7
T02B	Yes	Solve multi-step word problem computing fractions.	4	0.9	5	1.3	4	1.0
V03	Yes	Determine ratio of red paint in a mixture.	47	2.4	40	2.9	54	3.5

COUNTRY ID=Belgium (Fr) SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	74	1.2	77	1.7	71	1.5
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	56	2.0	57	2.5	55	2.9
C05	No	Determine number which continues pattern based on figures.	54	2.0	53	2.8	54	2.7
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	28	1.8	29	2.6	28	2.4
E05	No	Find relationship between numbers in a set of ordered pairs.	30	1.9	32	2.3	29	2.4
F11	No	Solve multi-step problem using linear equations.	52	2.2	54	3.3	49	2.8
G06	No	Find solution to $-3X$ for given value of X .	20	2.6	18	3.1	21	3.3
H10	No	Identify equation expressing xy relationship from table of values.	28	1.9	26	2.7	29	2.9
H12	No	Select symbolic linear equation which fits word problem.	81	1.4	79	2.3	82	1.6
I01	Yes	Identify meaning of symbol in word problem equation.	21	3.0	24	4.2	17	3.4
I04	Yes	Determine next number which occurs in two number sequences.	43	3.0	43	4.8	42	4.4
J18	Yes	Identify missing number in table showing xy relationship.	28	3.3	31	4.5	24	3.9
K04	Yes	Identify expression equivalent to linear inequality.	38	3.3	40	4.4	35	4.6
L11	Yes	Solve multi-step word problem using pattern.	33	3.1	33	4.5	33	4.4
L13	Yes	Identify matching patterns of symbols.	93	1.8	95	1.9	92	2.8
L16	Yes	Simplify and solve linear equation for X .	8	2.0	8	2.1	9	2.8
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	42	3.4	41	4.6	43	4.6
O07	Yes	Solve linear equation for X .	69	3.4	67	4.8	70	4.1
P10	Yes	Identify equivalent algebraic expressions.	56	3.7	56	4.6	57	4.9
P15	Yes	Identify equivalent expression for a cubic relationship.	76	3.1	80	3.6	71	4.4
Q01	Yes	Identify linear expression based on word problem.	35	3.5	38	4.6	34	5.0
Q02	Yes	Subtract fractional expressions of X .	40	3.0	45	4.4	36	3.8
Q07	Yes	Solve $P=LW$ for W given values for P and L .	39	3.2	34	4.1	44	4.6
R09	Yes	Identify equivalent expressions from properties of real numbers.	46	3.4	42	5.5	48	4.3
R11	Yes	Solve algebra word problem: linear equation.	49	2.9	51	4.7	47	4.4
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	87	2.1	89	3.0	85	3.3
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	13	2.2	15	3.6	11	2.6
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	25	2.0	22	2.3	28	3.0
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	27	2.2	26	2.8	27	3.2

COUNTRY ID=Belgium (Fr) SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	75	1.1	76	2.0	74	1.4
B07	No	Interpret line graph to find region of largest increase.	54	2.1	56	2.8	53	2.9
C02	No	Interpret pie graph to determine distribution.	80	1.7	79	2.6	81	2.0
E01	No	Interpret line graph to determine intersection point of two plots.	75	1.7	80	2.3	71	2.3
F08	No	Predict probability of occurrence for independent coin toss.	63	2.2	64	3.1	62	3.1
G01	No	Interpret frequency table to find number above a given level.	66	1.8	65	2.3	68	2.4
H07	No	Interpret bar chart histogram to find number above a given level.	70	1.6	73	2.0	68	2.5
H11	No	Predict number of total defective bulbs based on random sample.	68	2.1	70	2.8	67	2.7
I09	Yes	Predict most likely color of random card based on fraction of colors.	59	3.3	62	5.0	56	4.2
J13	Yes	Draw pictograph to represent number given in table.	84	2.3	81	3.6	87	2.8
K07	Yes	Determine the number of blue pens given probability of selection.	59	3.6	63	5.0	55	4.9
L10	Yes	Use data in a chart to identify time/day with highest temperature.	92	1.7	92	2.1	91	3.1
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	83	2.4	87	3.2	79	3.6
N18	Yes	Find probability of drawing an even number from 1 to 9.	55	3.0	56	4.4	53	4.6
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	60	2.8	62	4.4	57	4.7
O05	Yes	Calculate number of cube faces from probability of toss.	55	3.2	61	4.4	51	4.5
P17	Yes	Identify thermometer which shows temperature given in data table.	92	1.7	92	2.6	92	2.0
Q04	Yes	Interpret data in bar graph.	90	2.0	89	2.7	91	2.9
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	54	3.0	61	4.1	48	5.0
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	14	1.5	16	2.3	13	2.3

COUNTRY ID=Belgium (Fr) SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	71	1.3	74	1.9	70	1.7
B09	No	Identify shaded figure which shows 2/5 = 4/10.	68	1.7	67	2.0	69	2.4
B10	No	Identify smallest of decimal fractions.	58	1.7	64	2.5	54	2.5
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	71	1.8	70	2.3	71	2.3
C06	No	Determine the worst estimate of: 848 + 677.	67	1.8	66	2.7	67	2.3
D09	No	Identify smallest fraction.	79	1.8	83	2.3	77	2.1
D12	No	Estimate rational number from point on number line.	73	1.8	75	2.8	72	2.3
E03	No	Find fraction of hour between two time points.	58	2.2	64	2.9	54	2.9
E04	No	Solve multi-step word problem: 4-digit whole numbers.	42	1.9	47	3.2	38	2.1
F09	No	Identify decimal fraction between 0.07 and 0.08.	68	2.0	69	2.4	66	2.6
F12	No	Identify fraction of circle which is shaded.	65	2.3	69	2.8	60	3.1
G05	No	Identify fraction represented in word problem.	64	1.8	60	2.4	68	2.5
H08	No	Identify figure showing 2/3 shaded.	90	1.2	91	1.5	90	1.6
H09	No	Identify sum which is closest to 691 + 208.	92	0.9	92	1.3	92	1.3
I02	Yes	Solve multi-step word problem: common fractions.	61	3.6	61	4.5	60	4.8
I05	Yes	Solve subtraction word problem: rational numbers.	75	3.3	73	4.6	76	4.4
I06	Yes	Write a fraction larger than a given number.	70	2.9	71	4.4	69	4.0
I07	Yes	Recognize when estimation is appropriate.	67	3.5	66	4.8	68	4.6
J12	Yes	Divide fractions.	15	3.0	13	3.7	18	4.0
J14	Yes	Divide rational numbers, fractional divisor.	41	3.0	40	4.7	42	4.8
J17	Yes	Use map and scale to find distance between two cities.	76	2.7	77	3.8	75	3.9
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	64	3.1	67	4.6	63	4.0
K02	Yes	Find total volume of mixture using rational number addition.	69	2.8	68	4.1	71	3.6
K06	Yes	Approximate amount increased by 15%.	45	2.8	47	4.4	43	4.6
K09	Yes	Compute sum of three fractions.	52	3.8	47	5.6	56	5.0
L08	Yes	Estimate actual height from diagram of relative heights.	58	3.3	67	3.8	50	4.7
L09	Yes	Identify 504.7 from its expression in words.	96	1.4	97	1.4	94	2.5
L17	Yes	Subtract three fractions.	46	3.5	45	4.9	46	4.9
M04	Yes	Identify the largest fraction.	44	3.4	48	4.4	42	4.5
M08	Yes	Multiply two decimal fractions.	42	3.3	47	3.9	38	4.5
N11	Yes	Identify number rounded to 18200.	81	2.5	81	3.1	81	3.6
N14	Yes	Identify list of equivalent fractions.	77	3.1	77	4.0	78	4.0
N16	Yes	Solve algebra word problem with fractions.	35	3.1	38	4.5	31	4.2
N17	Yes	Solve multi-step word problem: decimal fractions.	36	2.8	36	4.7	36	4.0
N19	Yes	Shade a given fraction of the squares in a grid.	68	3.1	70	4.0	66	4.5
O02	Yes	Calculate percent increase.	29	3.1	40	5.1	20	3.5
O04	Yes	Identify number rounded to the nearest 100th.	44	3.4	41	4.9	47	4.1
O09	Yes	Solve division word problem: common fractions.	61	3.7	70	4.7	54	4.7
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	67	3.2	71	4.3	65	4.7
P13	Yes	Use heart beats/min to find beats per hour.	69	3.2	66	4.1	72	4.8
P14	Yes	Solve subtraction word problem: common fractions.	86	2.0	92	2.3	80	3.9
P16	Yes	Reduce decimal to fraction in lowest terms.	34	3.4	35	4.9	32	4.5
Q06	Yes	Approximate water use/year from use/week.	52	3.5	57	4.9	49	4.4
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	52	3.4	56	5.4	48	4.0
Q09	Yes	Perform multiple operations of common fractions.	43	3.4	44	5.1	42	4.1
R06	Yes	Subtract two decimal numbers.	76	3.1	68	4.5	83	3.4
R07	Yes	Solve division word problem involving decimals.	59	3.1	64	4.3	55	4.5
R12	Yes	Subtract 4-digit whole numbers.	95	1.4	94	2.3	96	1.5
R13	Yes	Determine how much money left after spending 7/9.	38	3.2	44	5.1	33	4.7
U01A	Yes	Estimate the time required to record 5 songs.	35	2.7	35	3.3	35	3.5
U01B	Yes	Explain method of estimation.	21	2.2	22	3.2	21	2.7
V01	Yes	Determine actual weight from rounded value.	23	2.1	27	2.8	19	3.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Belgium (Fr) SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	72	1.5	69	1.9	74	1.9
B11	No	Identify cube made by folding 2-dimensional net.	74	1.6	75	2.3	73	2.0
C03	No	Identify properties of congruent trapezoids.	57	1.9	55	2.4	57	2.8
D07	No	Identify relationship of angles in symmetric polygon.	65	1.9	64	2.4	65	2.8
E02	No	Determine angle in congruent triangles.	45	2.0	51	2.6	40	3.2
G03	No	Find sum of vertical angles from diagram of intersecting lines.	52	2.0	56	2.5	49	2.6
I08	Yes	Identify point on a line defined by two other points.	24	3.0	27	4.5	21	3.7
J11	Yes	Identify properties of a parallelogram.	50	3.2	51	4.5	48	4.3
J15	Yes	Identify similar triangles of different size.	31	3.5	37	5.5	25	3.8
J16	Yes	Identify coordinates for point on a grid.	42	3.5	39	5.1	45	4.6
K03	Yes	Identify figure from rotation of 3-dimensional object.	76	2.5	76	4.2	76	3.3
K08	Yes	Determine unknown angle in rotated congruent triangles.	29	3.0	37	4.8	24	3.8
L15	Yes	Find fourth quadrilateral angle, given the other three.	47	3.1	54	4.3	40	4.3
M02	Yes	Identify all lines of symmetry for a rectangle.	71	3.0	70	4.2	70	4.1
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	43	3.3	43	5.1	43	5.2
M07	Yes	Find angle based on supplementary pairs.	75	3.3	75	4.9	76	4.5
N12	Yes	Identify point on number line from distance of other points.	68	3.1	74	4.3	62	4.6
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	51	3.3	56	4.0	47	5.2
O08	Yes	Find center point of rotation for symmetry-related figures.	70	3.5	67	4.9	73	4.6
P08	Yes	Know relationship between side and perimeter for square.	66	3.1	70	4.3	62	4.2
P09	Yes	Find length of side for similar triangles.	59	3.4	62	5.5	55	4.4
Q10	Yes	Perform calculation involving addition/subtraction of angles.	41	2.9	36	4.8	46	4.8
R10	Yes	Determine into how many triangles a trapezoid can be divided.	53	3.3	56	5.0	50	4.3

COUNTRY ID=Belgium (Fr) SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	50	1.5	48	1.7	51	2.0
C01	No	Compare volumes of different stacks of blocks.	63	2.3	69	2.8	58	2.8
D11	No	Identify best unit to measure the mass of an egg.	92	1.1	93	1.2	91	1.6
E06	No	Solve word problem to find length of rectangle from width and perimeter.	59	2.2	65	2.4	54	3.2
F10	No	Determine measurement accuracy of ruler.	70	2.4	74	2.5	67	3.2
G02	No	Read meter scale to determine length of a pipe.	81	1.4	82	2.0	81	1.9
I03	Yes	Find number of 750 mL bottles filled by a large volume.	43	3.0	55	4.3	34	4.3
J10	Yes	Determine area of sheet not covered by rectangular picture.	42	4.2	47	5.3	39	5.9
K05	Yes	Calculate area of a rectangle given its length and perimeter.	50	3.6	50	5.4	51	4.5
L12	Yes	Find longest pace from chart showing number of paces to cross room.	81	2.7	83	3.5	80	4.1
M01	Yes	Read mass shown on scale.	92	1.8	90	2.9	94	2.3
N15	Yes	Identify drawing with angle closest to 30 degrees.	73	3.0	68	4.4	76	3.5
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	88	1.8	87	2.7	91	1.9
P11	Yes	Use ruler to determine approximate length of pencil.	45	3.7	51	4.2	39	4.8
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	38	3.9	36	5.7	39	5.5
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	65	3.4	63	5.1	65	4.6
S02B	Yes	Calculate length of side of square given area.	24	3.1	26	4.5	23	4.3
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	15	2.5	16	4.0	14	3.1
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	40	2.6	41	3.4	40	3.3
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	6	1.4	7	1.5	6	1.9
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	41	2.1	45	3.5	38	3.0

COUNTRY ID=Belgium (Fr) SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	55	1.5	60	1.7	50	1.8
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	73	1.6	75	2.2	71	2.4
D08	No	Solve ratio problem for x: $7/13 = x/52$.	59	2.1	65	3.4	54	2.6
F07	No	Solve word problem to find average speed from distance and time.	37	2.3	39	3.0	35	2.5
G04	No	Solve simple proportionality equation.	80	1.9	77	2.8	82	2.3
L14	Yes	Identify missing numbers in table of proportional x and y values.	14	2.1	16	2.9	11	2.9
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	38	3.0	38	4.8	39	3.9
Q05	Yes	Solve word problem involving ratios.	74	2.6	76	3.9	72	3.9
R14	Yes	Solve multi-step word problem involving ratios.	34	3.5	28	4.3	40	5.0
T02A	Yes	Solve algebra word problem involving ratios.	14	1.9	11	1.9	14	3.0
T02B	Yes	Solve multi-step word problem computing fractions.	4	1.0	7	2.0	2	0.9
V03	Yes	Determine ratio of red paint in a mixture.	45	2.8	45	3.4	45	3.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Bulgaria SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall	Boys		Girls		
			% (se)	% (se)	% (se)	% (se)		
A02	No	Solve algebraic word problem equating masses on a scale.	80	1.4	.	.	.	.
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	75	2.5	.	.	.	.
C05	No	Determine number which continues pattern based on figures.	56	2.9	.	.	.	.
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	55	2.7	.	.	.	.
E05	No	Find relationship between numbers in a set of ordered pairs.	47	2.3	.	.	.	.
F11	No	Solve multi-step problem using linear equations.	70	2.8	.	.	.	.
G06	No	Find solution to $-3X$ for given value of X .	68	2.5	.	.	.	.
H10	No	Identify equation expressing xy relationship from table of values.	52	2.9	.	.	.	.
H12	No	Select symbolic linear equation which fits word problem.	74	2.6	.	.	.	.
I01	Yes	Identify meaning of symbol in word problem equation.	39	4.2	.	.	.	.
I04	Yes	Determine next number which occurs in two number sequences.	34	5.5	.	.	.	.
J18	Yes	Identify missing number in table showing xy relationship.	35	4.5	.	.	.	.
K04	Yes	Identify expression equivalent to linear inequality.	53	5.7	.	.	.	.
L11	Yes	Solve multi-step word problem using pattern.	30	3.5	.	.	.	.
L13	Yes	Identify matching patterns of symbols.	83	3.5	.	.	.	.
L16	Yes	Simplify and solve linear equation for X .	69	3.3	.	.	.	.
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	70	3.4	.	.	.	.
O07	Yes	Solve linear equation for X .	82	3.1	.	.	.	.
P10	Yes	Identify equivalent algebraic expressions.	69	3.5	.	.	.	.
P15	Yes	Identify equivalent expression for a cubic relationship.	74	4.0	.	.	.	.
Q01	Yes	Identify linear expression based on word problem.	64	5.1	.	.	.	.
Q02	Yes	Subtract fractional expressions of X .	75	4.5	.	.	.	.
Q07	Yes	Solve $P=LW$ for W given values for P and L .	76	5.2	.	.	.	.
R09	Yes	Identify equivalent expressions from properties of real numbers.	55	7.8	.	.	.	.
R11	Yes	Solve algebra word problem: linear equation.	53	6.9	.	.	.	.
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	69	4.5	.	.	.	.
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	18	4.3	.	.	.	.
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	31	4.6	.	.	.	.
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	36	4.7	.	.	.	.

COUNTRY ID=Bulgaria SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall	Boys		Girls		
			% (se)	% (se)	% (se)	% (se)		
A06	No	Find difference between the means of two sets of data.	85	1.1	.	.	.	.
B07	No	Interpret line graph to find region of largest increase.	57	2.4	.	.	.	.
C02	No	Interpret pie graph to determine distribution.	75	2.5	.	.	.	.
E01	No	Interpret line graph to determine intersection point of two plots.	72	3.3	.	.	.	.
F08	No	Predict probability of occurrence for independent coin toss.	70	2.4	.	.	.	.
G01	No	Interpret frequency table to find number above a given level.	38	3.7	.	.	.	.
H07	No	Interpret bar chart histogram to find number above a given level.	54	2.6	.	.	.	.
H11	No	Predict number of total defective bulbs based on random sample.	64	2.4	.	.	.	.
I09	Yes	Predict most likely color of random card based on fraction of colors.	48	3.9	.	.	.	.
J13	Yes	Draw pictograph to represent number given in table.	74	3.6	.	.	.	.
K07	Yes	Determine the number of blue pens given probability of selection.	38	3.9	.	.	.	.
L10	Yes	Use data in a chart to identify time/day with highest temperature.	82	3.5	.	.	.	.
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	77	3.6	.	.	.	.
N18	Yes	Find probability of drawing an even number from 1 to 9.	49	5.0	.	.	.	.
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	35	3.7	.	.	.	.
O05	Yes	Calculate number of cube faces from probability of toss.	38	4.0	.	.	.	.
P17	Yes	Identify thermometer which shows temperature given in data table.	89	2.7	.	.	.	.
Q04	Yes	Interpret data in bar graph.	84	3.3	.	.	.	.
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	43	3.7	.	.	.	.
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	9	1.5	.	.	.	.

COUNTRY ID=Bulgaria SCALE=Fractions and number sense

			Seventh Grade		
ITEM	REL	LABEL	Overall	Boys	Girls
			% (se)	% (se)	% (se)
A01	No	Determine shaded squares in rectangle = 4/5.	63	2.6	. . . .
B09	No	Identify shaded figure which shows 2/5 = 4/10.	53	3.0	. . . .
B10	No	Identify smallest of decimal fractions.	52	4.1	. . . .
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	61	2.6	. . . .
C06	No	Determine the worst estimate of: 848 + 677.	63	2.7	. . . .
D09	No	Identify smallest fraction.	54	2.9	. . . .
D12	No	Estimate rational number from point on number line.	58	2.6	. . . .
E03	No	Find fraction of hour between two time points.	65	3.8	. . . .
E04	No	Solve multi-step word problem: 4-digit whole numbers.	72	2.9	. . . .
F09	No	Identify decimal fraction between 0.07 and 0.08.	71	2.5	. . . .
F12	No	Identify fraction of circle which is shaded.	50	2.9	. . . .
G05	No	Identify fraction represented in word problem.	53	3.3	. . . .
H08	No	Identify figure showing 2/3 shaded.	63	3.4	. . . .
H09	No	Identify sum which is closest to 691 + 208.	82	1.7	. . . .
I02	Yes	Solve multi-step word problem: common fractions.	54	4.2	. . . .
I05	Yes	Solve subtraction word problem: rational numbers.	74	3.4	. . . .
I06	Yes	Write a fraction larger than a given number.	65	4.7	. . . .
I07	Yes	Recognize when estimation is appropriate.	55	3.5	. . . .
J12	Yes	Divide fractions.	59	4.7	. . . .
J14	Yes	Divide rational numbers, fractional divisor.	37	4.3	. . . .
J17	Yes	Use map and scale to find distance between two cities.	66	5.0	. . . .
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	68	3.6	. . . .
K02	Yes	Find total volume of mixture using rational number addition.	62	4.3	. . . .
K06	Yes	Approximate amount increased by 15%.	36	5.3	. . . .
K09	Yes	Compute sum of three fractions.	66	4.6	. . . .
L08	Yes	Estimate actual height from diagram of relative heights.	62	4.9	. . . .
L09	Yes	Identify 504.7 from its expression in words.	91	2.2	. . . .
L17	Yes	Subtract three fractions.	56	5.2	. . . .
M04	Yes	Identify the largest fraction.	36	4.7	. . . .
M08	Yes	Multiply two decimal fractions.	70	4.4	. . . .
N11	Yes	Identify number rounded to 18200.	83	2.9	. . . .
N14	Yes	Identify list of equivalent fractions.	72	3.7	. . . .
N16	Yes	Solve algebra word problem with fractions.	45	4.5	. . . .
N17	Yes	Solve multi-step word problem: decimal fractions.	41	5.2	. . . .
N19	Yes	Shade a given fraction of the squares in a grid.	48	4.4	. . . .
O02	Yes	Calculate percent increase.	24	3.3	. . . .
O04	Yes	Identify number rounded to the nearest 100th.	37	3.5	. . . .
O09	Yes	Solve division word problem: common fractions.	35	3.8	. . . .
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	59	5.4	. . . .
P13	Yes	Use heart beats/min to find beats per hour.	63	6.4	. . . .
P14	Yes	Solve subtraction word problem: common fractions.	68	4.7	. . . .
P16	Yes	Reduce decimal to fraction in lowest terms.	45	8.4	. . . .
Q06	Yes	Approximate water use/year from use/week.	54	4.6	. . . .
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	52	7.2	. . . .
Q09	Yes	Perform multiple operations of common fractions.	60	4.8	. . . .
R06	Yes	Subtract two decimal numbers.	77	3.7	. . . .
R07	Yes	Solve division word problem involving decimals.	56	5.4	. . . .
R12	Yes	Subtract 4-digit whole numbers.	84	3.3	. . . .
R13	Yes	Determine how much money left after spending 7/9.	36	8.3	. . . .
U01A	Yes	Estimate the time required to record 5 songs.	13	2.6	. . . .
U01B	Yes	Explain method of estimation.	12	2.1	. . . .
V01	Yes	Determine actual weight from rounded value.	32	3.3	. . . .

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Bulgaria SCALE=Geometry

			Seventh Grade		
ITEM	REL	LABEL	Overall	Boys	Girls
			% (se)	% (se)	% (se)
A05	No	Identify congruent triangles in a rectangle.	77	1.8	. . . .
B11	No	Identify cube made by folding 2-dimensional net.	63	2.2	. . . .
C03	No	Identify properties of congruent trapezoids.	71	2.2	. . . .
D07	No	Identify relationship of angles in symmetric polygon.	76	2.6	. . . .
E02	No	Determine angle in congruent triangles.	72	3.0	. . . .
G03	No	Find sum of vertical angles from diagram of intersecting lines.	64	2.7	. . . .
I08	Yes	Identify point on a line defined by two other points.	38	4.5	. . . .
J11	Yes	Identify properties of a parallelogram.	72	4.0	. . . .
J15	Yes	Identify similar triangles of different size.	70	3.8	. . . .
J16	Yes	Identify coordinates for point on a grid.	51	5.4	. . . .
K03	Yes	Identify figure from rotation of 3-dimensional object.	48	3.5	. . . .
K08	Yes	Determine unknown angle in rotated congruent triangles.	45	5.4	. . . .
L15	Yes	Find fourth quadrilateral angle, given the other three.	44	5.5	. . . .
M02	Yes	Identify all lines of symmetry for a rectangle.	66	4.3	. . . .
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	40	4.3	. . . .
M07	Yes	Find angle based on supplementary pairs.	66	3.6	. . . .
N12	Yes	Identify point on number line from distance of other points.	68	4.7	. . . .
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	55	3.7	. . . .
O08	Yes	Find center point of rotation for symmetry-related figures.	74	2.8	. . . .
P08	Yes	Know relationship between side and perimeter for square.	61	5.2	. . . .
P09	Yes	Find length of side for similar triangles.	49	6.1	. . . .
Q10	Yes	Perform calculation involving addition/subtraction of angles.	61	5.7	. . . .
R10	Yes	Determine into how many triangles a trapezoid can be divided.	59	5.9	. . . .

COUNTRY ID=Bulgaria SCALE=Measurement

			Seventh Grade		
ITEM	REL	LABEL	Overall	Boys	Girls
			% (se)	% (se)	% (se)
A03	No	Determine actual length of box which is rounded to 9 cm.	39	2.4	. . . .
C01	No	Compare volumes of different stacks of blocks.	66	3.2	. . . .
D11	No	Identify best unit to measure the mass of an egg.	91	1.3	. . . .
E06	No	Solve word problem to find length of rectangle from width and perimeter.	47	3.4	. . . .
F10	No	Determine measurement accuracy of ruler.	70	2.9	. . . .
G02	No	Read meter scale to determine length of a pipe.	77	2.2	. . . .
I03	Yes	Find number of 750 mL bottles filled by a large volume.	39	4.0	. . . .
J10	Yes	Determine area of sheet not covered by rectangular picture.	55	3.8	. . . .
K05	Yes	Calculate area of a rectangle given its length and perimeter.	49	5.3	. . . .
L12	Yes	Find longest pace from chart showing number of paces to cross room.	82	3.2	. . . .
M01	Yes	Read mass shown on scale.	80	2.9	. . . .
N15	Yes	Identify drawing with angle closest to 30 degrees.	62	4.0	. . . .
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	37	4.8	. . . .
P11	Yes	Use ruler to determine approximate length of pencil.	43	4.6	. . . .
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	51	5.3	. . . .
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	62	5.1	. . . .
S02B	Yes	Calculate length of side of square given area.	43	5.5	. . . .
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	30	4.5	. . . .
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	35	4.1	. . . .
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	9	2.1	. . . .
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	49	2.5	. . . .

COUNTRY ID=Bulgaria SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	55	2.1	.	.	.	.
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	73	2.5	.	.	.	.
D08	No	Solve ratio problem for x: $7/13 = x/52$.	62	2.7	.	.	.	.
F07	No	Solve word problem to find average speed from distance and time.	45	3.5	.	.	.	.
G04	No	Solve simple proportionality equation.	64	2.6	.	.	.	.
L14	Yes	Identify missing numbers in table of proportional x and y values.	22	4.9	.	.	.	.
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	46	5.5	.	.	.	.
Q05	Yes	Solve word problem involving ratios.	65	5.4	.	.	.	.
R14	Yes	Solve multi-step word problem involving ratios.	46	8.5	.	.	.	.
T02A	Yes	Solve algebra word problem involving ratios.	14	3.0	.	.	.	.
T02B	Yes	Solve multi-step word problem computing fractions.	7	1.4	.	.	.	.
V03	Yes	Determine ratio of red paint in a mixture.	28	3.2	.	.	.	.

COUNTRY ID=Canada SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	74	0.8	75	1.2	73	1.1
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	53	2.0	50	1.9	56	2.8
C05	No	Determine number which continues pattern based on figures.	57	1.3	54	1.9	60	2.3
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	40	1.2	38	1.8	42	1.7
E05	No	Find relationship between numbers in a set of ordered pairs.	60	1.2	56	1.5	64	2.2
F11	No	Solve multi-step problem using linear equations.	41	1.4	41	2.1	41	1.8
G06	No	Find solution to $-3X$ for given value of X .	16	1.3	17	1.8	16	1.7
H10	No	Identify equation expressing xy relationship from table of values.	33	1.7	31	2.3	34	2.0
H12	No	Select symbolic linear equation which fits word problem.	77	1.4	75	2.4	80	1.3
I01	Yes	Identify meaning of symbol in word problem equation.	29	1.9	28	3.1	31	2.3
I04	Yes	Determine next number which occurs in two number sequences.	47	2.3	45	3.4	48	3.2
J18	Yes	Identify missing number in table showing xy relationship.	40	2.5	39	3.3	40	3.5
K04	Yes	Identify expression equivalent to linear inequality.	37	3.3	33	4.3	40	3.6
L11	Yes	Solve multi-step word problem using pattern.	32	2.4	30	3.1	34	3.7
L13	Yes	Identify matching patterns of symbols.	91	1.7	87	2.9	96	1.2
L16	Yes	Simplify and solve linear equation for X .	8	1.2	7	1.7	9	1.8
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	31	2.8	28	3.3	35	4.1
O07	Yes	Solve linear equation for X .	55	2.6	53	4.1	57	2.6
P10	Yes	Identify equivalent algebraic expressions.	40	2.3	39	3.2	42	3.5
P15	Yes	Identify equivalent expression for a cubic relationship.	59	2.2	55	3.3	63	2.6
Q01	Yes	Identify linear expression based on word problem.	33	2.5	23	2.5	41	3.2
Q02	Yes	Subtract fractional expressions of X .	43	3.0	43	3.4	44	4.1
Q07	Yes	Solve $P=LW$ for W given values for P and L .	50	1.9	47	3.1	52	3.2
R09	Yes	Identify equivalent expressions from properties of real numbers.	30	2.4	32	3.8	29	3.0
R11	Yes	Solve algebra word problem: linear equation.	35	2.6	33	3.2	37	3.9
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	78	2.0	77	2.5	81	3.3
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	21	1.8	23	2.8	20	2.8
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	21	1.7	21	1.8	21	2.6
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	20	1.6	20	1.7	21	2.6

COUNTRY ID=Canada SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	75	0.9	73	1.1	77	1.4
B07	No	Interpret line graph to find region of largest increase.	61	1.3	59	1.9	62	1.6
C02	No	Interpret pie graph to determine distribution.	76	1.5	76	2.4	76	1.8
E01	No	Interpret line graph to determine intersection point of two plots.	69	1.6	74	2.0	64	2.0
F08	No	Predict probability of occurrence for independent coin toss.	63	2.3	60	3.0	66	2.1
G01	No	Interpret frequency table to find number above a given level.	44	1.4	44	2.1	45	1.8
H07	No	Interpret bar chart histogram to find number above a given level.	73	1.1	73	1.7	72	1.7
H11	No	Predict number of total defective bulbs based on random sample.	55	1.4	57	1.9	53	2.0
I09	Yes	Predict most likely color of random card based on fraction of colors.	69	2.8	73	3.2	64	4.5
J13	Yes	Draw pictograph to represent number given in table.	91	1.3	92	1.7	90	2.3
K07	Yes	Determine the number of blue pens given probability of selection.	58	2.4	62	3.5	55	3.4
L10	Yes	Use data in a chart to identify time/day with highest temperature.	90	1.6	88	2.9	91	1.8
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	85	1.9	85	2.5	86	2.6
N18	Yes	Find probability of drawing an even number from 1 to 9.	66	2.6	71	3.2	60	3.5
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	55	2.2	60	3.0	49	3.1
O05	Yes	Calculate number of cube faces from probability of toss.	49	2.6	51	3.9	47	3.3
P17	Yes	Identify thermometer which shows temperature given in data table.	82	2.4	82	2.6	82	3.5
Q04	Yes	Interpret data in bar graph.	87	2.0	82	3.0	91	2.0
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	48	2.2	46	3.5	50	3.5
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	16	1.5	15	1.6	17	2.0

COUNTRY ID=Canada SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	58	1.1	60	1.4	56	1.5
B09	No	Identify shaded figure which shows 2/5 = 4/10.	65	1.8	63	1.8	67	2.7
B10	No	Identify smallest of decimal fractions.	44	1.5	47	1.9	40	2.1
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	51	1.3	52	2.1	50	2.1
C06	No	Determine the worst estimate of: 848 + 677.	83	1.1	84	1.4	83	1.8
D09	No	Identify smallest fraction.	73	1.7	77	2.0	69	2.1
D12	No	Estimate rational number from point on number line.	75	1.1	78	1.9	72	2.0
E03	No	Find fraction of hour between two time points.	57	1.3	60	1.8	55	2.0
E04	No	Solve multi-step word problem: 4-digit whole numbers.	69	1.4	67	2.3	71	1.9
F09	No	Identify decimal fraction between 0.07 and 0.08.	66	1.5	67	2.1	64	1.8
F12	No	Identify fraction of circle which is shaded.	58	1.4	60	2.1	57	1.8
G05	No	Identify fraction represented in word problem.	69	1.7	68	2.4	70	2.0
H08	No	Identify figure showing 2/3 shaded.	87	1.1	85	1.4	89	1.9
H09	No	Identify sum which is closest to 691 + 208.	92	0.8	92	1.4	94	0.9
I02	Yes	Solve multi-step word problem: common fractions.	53	2.5	54	3.2	52	3.9
I05	Yes	Solve subtraction word problem: rational numbers.	74	2.2	69	3.5	80	3.0
I06	Yes	Write a fraction larger than a given number.	74	2.4	76	3.6	72	2.9
I07	Yes	Recognize when estimation is appropriate.	81	1.9	76	2.7	86	2.3
J12	Yes	Divide fractions.	24	2.4	24	3.6	24	2.8
J14	Yes	Divide rational numbers, fractional divisor.	39	2.4	38	4.2	41	3.0
J17	Yes	Use map and scale to find distance between two cities.	62	2.9	60	4.0	64	3.8
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	64	2.8	68	3.7	61	4.4
K02	Yes	Find total volume of mixture using rational number addition.	70	2.2	69	2.7	72	3.4
K06	Yes	Approximate amount increased by 15%.	33	2.5	33	3.2	33	3.9
K09	Yes	Compute sum of three fractions.	39	2.4	39	3.2	39	3.1
L08	Yes	Estimate actual height from diagram of relative heights.	55	2.5	59	3.2	50	3.1
L09	Yes	Identify 504.7 from its expression in words.	92	1.4	90	2.5	94	1.0
L17	Yes	Subtract three fractions.	43	2.5	40	3.4	47	3.7
M04	Yes	Identify the largest fraction.	48	2.4	57	3.1	40	4.0
M08	Yes	Multiply two decimal fractions.	48	2.2	44	3.4	52	2.9
N11	Yes	Identify number rounded to 18200.	90	1.7	91	1.8	89	2.5
N14	Yes	Identify list of equivalent fractions.	78	2.0	78	2.9	79	3.1
N16	Yes	Solve algebra word problem with fractions.	41	2.3	43	3.7	39	3.0
N17	Yes	Solve multi-step word problem: decimal fractions.	32	2.0	31	2.8	33	2.8
N19	Yes	Shade a given fraction of the squares in a grid.	63	2.6	65	3.4	61	3.9
O02	Yes	Calculate percent increase.	16	1.3	17	2.0	15	1.7
O04	Yes	Identify number rounded to the nearest 100th.	62	2.7	64	3.9	60	3.2
O09	Yes	Solve division word problem: common fractions.	46	2.6	53	4.1	39	2.7
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	81	1.8	78	2.9	84	2.2
P13	Yes	Use heart beats/min to find beats per hour.	64	2.7	63	3.2	65	4.4
P14	Yes	Solve subtraction word problem: common fractions.	79	2.1	75	2.9	83	2.5
P16	Yes	Reduce decimal to fraction in lowest terms.	43	3.2	38	2.9	47	4.2
Q06	Yes	Approximate water use/year from use/week.	34	1.9	37	3.7	32	3.1
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	39	2.3	43	4.0	37	3.8
Q09	Yes	Perform multiple operations of common fractions.	44	3.7	40	4.4	48	4.6
R06	Yes	Subtract two decimal numbers.	79	2.4	71	3.4	87	2.3
R07	Yes	Solve division word problem involving decimals.	39	2.8	37	3.9	42	2.9
R12	Yes	Subtract 4-digit whole numbers.	91	1.6	90	2.0	92	2.0
R13	Yes	Determine how much money left after spending 7/9.	20	1.7	20	2.7	20	2.8
U01A	Yes	Estimate the time required to record 5 songs.	43	1.5	45	2.1	41	2.0
U01B	Yes	Explain method of estimation.	41	1.9	40	2.3	43	2.7
V01	Yes	Determine actual weight from rounded value.	60	1.8	62	2.1	59	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Canada SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	55	1.3	54	1.9	56	1.5
B11	No	Identify cube made by folding 2-dimensional net.	65	1.2	63	1.7	66	1.7
C03	No	Identify properties of congruent trapezoids.	64	1.4	59	2.2	70	1.8
D07	No	Identify relationship of angles in symmetric polygon.	57	1.5	57	1.9	57	2.0
E02	No	Determine angle in congruent triangles.	36	1.3	35	1.8	37	2.0
G03	No	Find sum of vertical angles from diagram of intersecting lines.	38	1.4	38	1.9	38	1.8
I08	Yes	Identify point on a line defined by two other points.	43	2.1	47	2.9	38	3.1
J11	Yes	Identify properties of a parallelogram.	48	2.8	43	4.2	54	3.2
J15	Yes	Identify similar triangles of different size.	65	2.0	64	3.4	67	3.1
J16	Yes	Identify coordinates for point on a grid.	38	2.7	35	3.6	41	3.4
K03	Yes	Identify figure from rotation of 3-dimensional object.	68	2.2	69	2.8	67	3.5
K08	Yes	Determine unknown angle in rotated congruent triangles.	20	2.3	22	3.7	19	2.5
L15	Yes	Find fourth quadrilateral angle, given the other three.	29	2.3	28	3.2	32	2.9
M02	Yes	Identify all lines of symmetry for a rectangle.	78	1.9	81	2.6	74	3.1
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	48	2.4	51	3.4	47	2.9
M07	Yes	Find angle based on supplementary pairs.	71	2.7	73	3.8	69	3.6
N12	Yes	Identify point on number line from distance of other points.	61	2.2	64	3.1	58	3.0
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	35	2.2	36	3.7	34	3.3
O08	Yes	Find center point of rotation for symmetry-related figures.	68	2.2	68	2.9	70	3.0
P08	Yes	Know relationship between side and perimeter for square.	51	2.5	57	3.5	45	3.2
P09	Yes	Find length of side for similar triangles.	33	2.5	35	3.3	30	3.5
Q10	Yes	Perform calculation involving addition/subtraction of angles.	38	2.7	37	4.3	40	3.5
R10	Yes	Determine into how many triangles a trapezoid can be divided.	49	2.4	51	4.1	48	3.4

COUNTRY ID=Canada SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	61	1.0	61	1.6	60	1.2
C01	No	Compare volumes of different stacks of blocks.	57	1.4	59	2.1	56	2.1
D11	No	Identify best unit to measure the mass of an egg.	80	1.2	82	1.9	77	1.4
E06	No	Solve word problem to find length of rectangle from width and perimeter.	35	1.5	35	1.9	35	2.4
F10	No	Determine measurement accuracy of ruler.	40	1.8	43	2.7	37	2.1
G02	No	Read meter scale to determine length of a pipe.	75	1.3	76	2.0	75	1.7
I03	Yes	Find number of 750 mL bottles filled by a large volume.	36	2.3	37	3.9	35	3.1
J10	Yes	Determine area of sheet not covered by rectangular picture.	35	2.6	36	3.8	34	2.9
K05	Yes	Calculate area of a rectangle given its length and perimeter.	33	2.7	33	3.2	34	3.6
L12	Yes	Find longest pace from chart showing number of paces to cross room.	60	2.7	59	3.8	61	2.9
M01	Yes	Read mass shown on scale.	88	1.9	88	2.8	88	2.4
N15	Yes	Identify drawing with angle closest to 30 degrees.	62	2.7	63	3.5	60	4.2
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	67	2.6	67	3.6	67	3.5
P11	Yes	Use ruler to determine approximate length of pencil.	50	2.9	46	4.3	55	3.5
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	31	2.2	32	3.1	30	3.9
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	56	2.9	53	3.5	60	5.6
S02B	Yes	Calculate length of side of square given area.	11	1.7	12	2.4	10	2.1
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	18	1.9	21	3.1	16	2.5
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	21	1.5	23	2.3	20	1.6
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	8	0.7	9	1.4	8	1.1
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	33	2.1	37	2.9	29	1.9

COUNTRY ID=Canada SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	49	1.3	56	1.5	41	1.5
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	69	1.1	72	1.4	66	1.8
D08	No	Solve ratio problem for x: $7/13 = x/52$.	71	1.4	74	1.8	67	2.2
F07	No	Solve word problem to find average speed from distance and time.	25	1.3	26	1.8	24	1.7
G04	No	Solve simple proportionality equation.	78	1.2	80	1.7	76	1.8
L14	Yes	Identify missing numbers in table of proportional x and y values.	24	2.3	23	3.3	25	2.9
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	28	2.4	32	3.5	24	2.6
Q05	Yes	Solve word problem involving ratios.	68	2.4	67	3.0	68	3.1
R14	Yes	Solve multi-step word problem involving ratios.	22	2.1	22	2.9	22	2.6
T02A	Yes	Solve algebra word problem involving ratios.	18	1.5	17	1.8	18	2.2
T02B	Yes	Solve multi-step word problem computing fractions.	6	0.8	5	0.8	7	1.3
V03	Yes	Determine ratio of red paint in a mixture.	46	2.1	44	3.0	48	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Colombia SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	45	1.3	49	1.7	42	2.0
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	31	2.6	31	3.0	32	3.6
C05	No	Determine number which continues pattern based on figures.	36	2.3	40	4.0	32	2.2
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	28	1.8	29	2.5	28	2.7
E05	No	Find relationship between numbers in a set of ordered pairs.	28	2.4	26	2.4	30	4.0
F11	No	Solve multi-step problem using linear equations.	18	1.6	20	2.9	16	2.1
G06	No	Find solution to $-3X$ for given value of X .	18	2.1	21	2.8	15	2.4
H10	No	Identify equation expressing xy relationship from table of values.	17	1.3	19	2.5	15	1.9
H12	No	Select symbolic linear equation which fits word problem.	37	2.3	39	3.6	36	2.9
I01	Yes	Identify meaning of symbol in word problem equation.	17	4.8	13	3.1	23	9.5
I04	Yes	Determine next number which occurs in two number sequences.	24	4.7	19	4.2	29	8.7
J18	Yes	Identify missing number in table showing xy relationship.	33	2.9	32	3.5	35	3.8
K04	Yes	Identify expression equivalent to linear inequality.	30	4.5	32	5.0	27	5.9
L11	Yes	Solve multi-step word problem using pattern.	29	3.0	29	4.5	29	3.9
L13	Yes	Identify matching patterns of symbols.	44	3.6	44	4.6	43	4.7
L16	Yes	Simplify and solve linear equation for X .	3	0.8	3	1.5	2	1.1
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	9	4.2	15	6.0	4	2.9
O07	Yes	Solve linear equation for X .	30	3.3	35	3.8	25	4.3
P10	Yes	Identify equivalent algebraic expressions.	19	3.6	22	5.3	16	3.5
P15	Yes	Identify equivalent expression for a cubic relationship.	36	3.8	34	6.1	38	4.5
Q01	Yes	Identify linear expression based on word problem.	23	3.5	21	4.1	24	4.3
Q02	Yes	Subtract fractional expressions of X .	27	2.4	26	4.0	28	4.1
Q07	Yes	Solve $P=LW$ for W given values for P and L .	20	3.1	22	3.8	17	3.7
R09	Yes	Identify equivalent expressions from properties of real numbers.	14	2.2	13	3.3	16	3.6
R11	Yes	Solve algebra word problem: linear equation.	29	2.4	33	3.7	24	4.3
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	45	3.9	49	4.3	41	7.7
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	7	4.8	3	1.2	11	10.2
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	2	0.5	2	0.8	1	0.6
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	2	0.5	2	0.9	1	0.5

COUNTRY ID=Colombia SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	69	1.2	70	1.8	68	1.6
B07	No	Interpret line graph to find region of largest increase.	32	2.4	32	2.3	33	3.6
C02	No	Interpret pie graph to determine distribution.	41	2.5	43	4.2	40	2.7
E01	No	Interpret line graph to determine intersection point of two plots.	37	2.0	41	2.7	34	3.1
F08	No	Predict probability of occurrence for independent coin toss.	34	1.8	33	2.5	34	2.4
G01	No	Interpret frequency table to find number above a given level.	30	2.3	30	2.5	31	3.2
H07	No	Interpret bar chart histogram to find number above a given level.	35	2.0	36	2.7	34	3.2
H11	No	Predict number of total defective bulbs based on random sample.	30	2.0	34	2.6	26	2.8
I09	Yes	Predict most likely color of random card based on fraction of colors.	22	4.7	20	3.8	25	9.2
J13	Yes	Draw pictograph to represent number given in table.	53	3.6	57	5.6	48	4.4
K07	Yes	Determine the number of blue pens given probability of selection.	27	2.9	29	3.8	26	3.9
L10	Yes	Use data in a chart to identify time/day with highest temperature.	66	2.9	61	4.0	72	3.6
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	40	3.4	39	5.9	41	4.5
N18	Yes	Find probability of drawing an even number from 1 to 9.	20	2.5	27	4.3	14	2.8
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	16	2.2	16	3.1	14	3.1
O05	Yes	Calculate number of cube faces from probability of toss.	16	2.6	17	3.8	15	4.2
P17	Yes	Identify thermometer which shows temperature given in data table.	44	2.8	46	5.6	42	4.9
Q04	Yes	Interpret data in bar graph.	51	3.7	53	6.2	49	4.7
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	25	2.7	23	4.0	28	4.4
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	1	0.4	2	0.8	.	.

COUNTRY ID=Colombia SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	21	1.1	22	1.9	20	2.1
B09	No	Identify shaded figure which shows 2/5 = 4/10.	47	2.4	45	2.8	48	3.0
B10	No	Identify smallest of decimal fractions.	8	2.4	8	1.3	8	4.1
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	32	1.7	32	3.2	32	2.4
C06	No	Determine the worst estimate of: 848 + 677.	48	2.2	49	3.6	48	2.3
D09	No	Identify smallest fraction.	12	2.0	13	2.0	11	3.4
D12	No	Estimate rational number from point on number line.	39	2.3	39	3.0	38	3.4
E03	No	Find fraction of hour between two time points.	28	2.3	29	2.3	26	4.1
E04	No	Solve multi-step word problem: 4-digit whole numbers.	38	2.4	39	2.7	37	4.2
F09	No	Identify decimal fraction between 0.07 and 0.08.	35	1.8	33	2.4	37	2.7
F12	No	Identify fraction of circle which is shaded.	24	1.7	24	2.1	23	2.4
G05	No	Identify fraction represented in word problem.	25	2.2	25	2.8	25	2.8
H08	No	Identify figure showing 2/3 shaded.	33	2.3	33	3.2	34	3.0
H09	No	Identify sum which is closest to 691 + 208.	55	2.1	59	3.8	51	2.5
I02	Yes	Solve multi-step word problem: common fractions.	24	4.7	19	4.0	30	8.8
I05	Yes	Solve subtraction word problem: rational numbers.	42	3.3	40	4.2	44	4.8
I06	Yes	Write a fraction larger than a given number.	66	3.5	61	4.3	71	5.3
I07	Yes	Recognize when estimation is appropriate.	38	3.2	36	4.4	40	5.3
J12	Yes	Divide fractions.	17	2.7	13	3.2	22	4.3
J14	Yes	Divide rational numbers, fractional divisor.	18	3.2	20	5.4	16	4.2
J17	Yes	Use map and scale to find distance between two cities.	34	3.1	39	4.3	28	3.9
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	48	3.0	58	4.2	39	4.0
K02	Yes	Find total volume of mixture using rational number addition.	20	2.6	24	3.7	17	3.9
K06	Yes	Approximate amount increased by 15%.	15	2.2	16	2.9	14	3.0
K09	Yes	Compute sum of three fractions.	16	3.0	20	5.3	12	2.6
L08	Yes	Estimate actual height from diagram of relative heights.	37	3.5	42	4.3	31	4.8
L09	Yes	Identify 504.7 from its expression in words.	70	2.8	71	4.0	67	4.2
L17	Yes	Subtract three fractions.	15	2.3	19	4.1	11	3.0
M04	Yes	Identify the largest fraction.	6	4.9	8	6.9	4	3.3
M08	Yes	Multiply two decimal fractions.	22	4.7	24	6.6	21	4.0
N11	Yes	Identify number rounded to 18200.	45	4.1	45	5.4	46	6.0
N14	Yes	Identify list of equivalent fractions.	41	4.2	46	5.9	37	3.9
N16	Yes	Solve algebra word problem with fractions.	31	3.4	30	4.9	32	3.8
N17	Yes	Solve multi-step word problem: decimal fractions.	33	4.5	31	5.3	34	6.2
N19	Yes	Shade a given fraction of the squares in a grid.	10	4.2	15	6.2	6	2.9
O02	Yes	Calculate percent increase.	11	2.1	14	3.4	7	2.2
O04	Yes	Identify number rounded to the nearest 100th.	26	2.9	29	3.6	25	4.9
O09	Yes	Solve division word problem: common fractions.	13	2.1	17	3.0	8	3.4
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	41	3.1	39	5.0	43	4.9
P13	Yes	Use heart beats/min to find beats per hour.	36	3.9	37	5.1	35	4.7
P14	Yes	Solve subtraction word problem: common fractions.	50	4.3	49	6.1	52	4.9
P16	Yes	Reduce decimal to fraction in lowest terms.	2	1.5	0	0.5	4	3.1
Q06	Yes	Approximate water use/year from use/week.	15	2.2	15	3.1	15	3.6
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	12	3.0	13	3.3	11	3.5
Q09	Yes	Perform multiple operations of common fractions.	19	3.1	19	3.8	20	3.9
R06	Yes	Subtract two decimal numbers.	55	4.2	58	5.7	53	4.9
R07	Yes	Solve division word problem involving decimals.	25	3.0	23	3.6	27	3.8
R12	Yes	Subtract 4-digit whole numbers.	57	3.5	59	4.6	55	4.5
R13	Yes	Determine how much money left after spending 7/9.	4	1.7	2	1.0	6	3.2
U01A	Yes	Estimate the time required to record 5 songs.	3	0.6	3	1.2	3	1.0
U01B	Yes	Explain method of estimation.	2	0.5	3	1.1	2	0.9
V01	Yes	Determine actual weight from rounded value.	6	0.9	8	1.6	3	1.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Colombia SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	23	1.3	25	2.1	20	1.4
B11	No	Identify cube made by folding 2-dimensional net.	27	2.4	28	2.3	26	3.8
C03	No	Identify properties of congruent trapezoids.	32	2.7	33	4.0	31	3.3
D07	No	Identify relationship of angles in symmetric polygon.	20	1.6	21	2.6	18	2.1
E02	No	Determine angle in congruent triangles.	14	2.1	11	1.5	17	4.2
G03	No	Find sum of vertical angles from diagram of intersecting lines.	24	1.9	27	2.5	22	2.3
I08	Yes	Identify point on a line defined by two other points.	24	4.6	20	3.5	28	9.0
J11	Yes	Identify properties of a parallelogram.	32	2.9	29	3.9	35	4.5
J15	Yes	Identify similar triangles of different size.	34	3.5	38	5.4	30	4.9
J16	Yes	Identify coordinates for point on a grid.	22	2.7	22	4.6	21	3.8
K03	Yes	Identify figure from rotation of 3-dimensional object.	46	3.8	48	4.8	43	5.3
K08	Yes	Determine unknown angle in rotated congruent triangles.	8	1.5	8	2.2	7	2.0
L15	Yes	Find fourth quadrilateral angle, given the other three.	11	2.0	8	2.0	14	3.1
M02	Yes	Identify all lines of symmetry for a rectangle.	40	3.6	39	5.6	39	4.0
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	28	3.0	24	4.5	30	3.6
M07	Yes	Find angle based on supplementary pairs.	29	4.5	34	6.4	24	4.4
N12	Yes	Identify point on number line from distance of other points.	48	4.2	53	6.2	44	3.9
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	17	2.5	17	3.5	16	3.6
O08	Yes	Find center point of rotation for symmetry-related figures.	42	3.8	45	5.3	39	5.0
P08	Yes	Know relationship between side and perimeter for square.	30	4.3	30	4.6	29	5.8
P09	Yes	Find length of side for similar triangles.	21	2.9	22	4.7	20	3.3
Q10	Yes	Perform calculation involving addition/subtraction of angles.	10	2.1	13	4.3	7	2.0
R10	Yes	Determine into how many triangles a trapezoid can be divided.	18	2.8	16	3.3	20	4.9

COUNTRY ID=Colombia SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	18	1.1	21	1.9	16	1.8
C01	No	Compare volumes of different stacks of blocks.	25	1.8	29	3.6	22	1.9
D11	No	Identify best unit to measure the mass of an egg.	60	2.5	61	3.4	60	3.2
E06	No	Solve word problem to find length of rectangle from width and perimeter.	21	2.3	18	2.0	24	4.3
F10	No	Determine measurement accuracy of ruler.	28	2.1	30	2.5	25	2.9
G02	No	Read meter scale to determine length of a pipe.	49	2.0	47	2.9	50	2.5
I03	Yes	Find number of 750 mL bottles filled by a large volume.	31	4.8	25	4.2	38	8.3
J10	Yes	Determine area of sheet not covered by rectangular picture.	9	2.4	11	3.6	8	3.6
K05	Yes	Calculate area of a rectangle given its length and perimeter.	1	0.4	2	0.9	.	.
L12	Yes	Find longest pace from chart showing number of paces to cross room.	45	3.6	48	5.1	41	4.1
M01	Yes	Read mass shown on scale.	53	4.3	61	6.0	46	4.4
N15	Yes	Identify drawing with angle closest to 30 degrees.	32	3.6	37	6.0	28	3.7
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	35	3.4	36	4.5	32	5.6
P11	Yes	Use ruler to determine approximate length of pencil.	30	2.9	28	4.0	31	4.2
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	19	2.7	22	3.9	16	3.0
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	14	3.6	16	5.8	13	4.1
S02B	Yes	Calculate length of side of square given area.	3	1.3	2	1.4	5	2.4
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	3	0.8	5	1.6	1	0.8
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	9	4.7	11	4.8	7	4.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Colombia SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	36	1.2	38	1.6	33	1.8
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	59	2.3	63	2.9	54	3.1
D08	No	Solve ratio problem for x: $7/13 = x/52$.	30	1.9	32	2.2	28	3.3
F07	No	Solve word problem to find average speed from distance and time.	11	1.0	12	1.6	10	1.9
G04	No	Solve simple proportionality equation.	44	2.1	45	2.4	43	3.2
L14	Yes	Identify missing numbers in table of proportional x and y values.	10	1.9	9	2.7	10	2.6
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	11	3.4	12	6.8	10	2.7
Q05	Yes	Solve word problem involving ratios.	26	3.0	23	4.0	29	4.3
R14	Yes	Solve multi-step word problem involving ratios.	3	1.1	4	1.7	3	1.2
T02A	Yes	Solve algebra word problem involving ratios.	1	0.4	2	0.8	.	.
T02B	Yes	Solve multi-step word problem computing fractions.	2	0.4	3	0.8	1	0.7
V03	Yes	Determine ratio of red paint in a mixture.	14	2.3	14	3.4	15	2.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Cyprus SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	62	1.1	64	1.3	61	1.6
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	58	1.4	55	1.9	62	2.1
C05	No	Determine number which continues pattern based on figures.	39	1.3	38	1.6	39	2.4
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	40	1.7	37	2.1	44	2.4
E05	No	Find relationship between numbers in a set of ordered pairs.	27	1.5	28	2.1	26	2.1
F11	No	Solve multi-step problem using linear equations.	38	1.4	37	2.0	40	1.9
G06	No	Find solution to $-3X$ for given value of X .	21	1.7	22	2.1	21	2.0
H10	No	Identify equation expressing xy relationship from table of values.	26	1.3	26	1.8	26	1.9
H12	No	Select symbolic linear equation which fits word problem.	67	1.5	64	2.1	71	1.9
I01	Yes	Identify meaning of symbol in word problem equation.	24	2.1	28	2.6	20	3.0
I04	Yes	Determine next number which occurs in two number sequences.	25	2.5	21	3.2	29	3.8
J18	Yes	Identify missing number in table showing xy relationship.	27	2.1	24	3.7	30	3.6
K04	Yes	Identify expression equivalent to linear inequality.	41	2.2	46	4.0	35	3.4
L11	Yes	Solve multi-step word problem using pattern.	25	2.7	28	4.0	22	2.8
L13	Yes	Identify matching patterns of symbols.	73	2.3	71	3.2	75	3.6
L16	Yes	Simplify and solve linear equation for X .	8	1.6	9	2.4	6	1.7
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	44	2.7	39	3.8	49	3.5
O07	Yes	Solve linear equation for X .	65	3.4	61	4.1	68	4.6
P10	Yes	Identify equivalent algebraic expressions.	43	2.6	48	3.5	37	4.0
P15	Yes	Identify equivalent expression for a cubic relationship.	61	3.1	58	4.0	66	4.0
Q01	Yes	Identify linear expression based on word problem.	34	2.9	35	4.4	33	4.3
Q02	Yes	Subtract fractional expressions of X .	43	2.8	41	3.8	44	4.5
Q07	Yes	Solve $P=LW$ for W given values for P and L .	49	2.5	47	3.6	51	3.9
R09	Yes	Identify equivalent expressions from properties of real numbers.	31	2.3	29	3.1	33	3.6
R11	Yes	Solve algebra word problem: linear equation.	37	3.2	39	4.3	35	4.0
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	66	2.5	68	2.8	64	4.2
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	11	1.9	11	2.7	11	2.5
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	19	1.5	19	1.9	19	2.4
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	29	1.8	27	2.6	31	3.1

COUNTRY ID=Cyprus SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	65	1.2	65	1.4	65	2.0
B07	No	Interpret line graph to find region of largest increase.	33	1.3	33	1.9	34	2.0
C02	No	Interpret pie graph to determine distribution.	57	1.7	55	2.7	58	2.6
E01	No	Interpret line graph to determine intersection point of two plots.	52	1.9	54	2.5	49	2.7
F08	No	Predict probability of occurrence for independent coin toss.	51	1.6	49	1.9	54	2.4
G01	No	Interpret frequency table to find number above a given level.	41	1.3	42	2.0	41	2.1
H07	No	Interpret bar chart histogram to find number above a given level.	52	1.5	52	2.3	52	2.3
H11	No	Predict number of total defective bulbs based on random sample.	54	2.0	54	2.6	53	2.8
I09	Yes	Predict most likely color of random card based on fraction of colors.	68	2.8	66	3.6	71	4.3
J13	Yes	Draw pictograph to represent number given in table.	75	2.5	72	3.4	80	3.0
K07	Yes	Determine the number of blue pens given probability of selection.	53	2.6	55	3.8	50	3.8
L10	Yes	Use data in a chart to identify time/day with highest temperature.	72	2.7	68	3.6	75	3.5
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	63	2.4	64	3.8	63	3.1
N18	Yes	Find probability of drawing an even number from 1 to 9.	33	2.7	40	3.6	26	3.3
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	41	2.6	43	3.7	39	4.0
O05	Yes	Calculate number of cube faces from probability of toss.	37	2.8	38	4.7	35	3.4
P17	Yes	Identify thermometer which shows temperature given in data table.	60	2.4	58	4.4	63	4.3
Q04	Yes	Interpret data in bar graph.	68	2.6	63	3.5	74	3.1
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	35	3.5	39	4.4	31	4.4
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	5	0.7	5	1.3	4	1.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Cyprus SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	52	1.5	55	1.5	49	1.9
B09	No	Identify shaded figure which shows 2/5 = 4/10.	55	1.4	51	1.8	59	2.1
B10	No	Identify smallest of decimal fractions.	24	1.4	29	2.1	19	1.6
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	48	1.7	51	2.4	46	2.0
C06	No	Determine the worst estimate of: 848 + 677.	62	1.4	65	1.9	60	2.1
D09	No	Identify smallest fraction.	65	1.8	66	2.2	63	2.7
D12	No	Estimate rational number from point on number line.	31	1.8	33	2.4	29	2.3
E03	No	Find fraction of hour between two time points.	51	1.5	49	2.0	53	2.5
E04	No	Solve multi-step word problem: 4-digit whole numbers.	47	1.6	43	2.4	52	2.5
F09	No	Identify decimal fraction between 0.07 and 0.08.	46	1.6	43	2.4	49	2.1
F12	No	Identify fraction of circle which is shaded.	42	1.2	45	2.0	39	1.8
G05	No	Identify fraction represented in word problem.	59	1.6	57	2.1	61	2.3
H08	No	Identify figure showing 2/3 shaded.	83	1.5	81	1.5	84	2.1
H09	No	Identify sum which is closest to 691 + 208.	79	1.6	83	1.6	75	2.4
I02	Yes	Solve multi-step word problem: common fractions.	52	3.1	51	3.9	54	4.9
I05	Yes	Solve subtraction word problem: rational numbers.	59	3.0	52	3.9	65	4.4
I06	Yes	Write a fraction larger than a given number.	80	2.4	80	2.8	80	3.6
I07	Yes	Recognize when estimation is appropriate.	35	3.4	34	3.7	36	4.9
J12	Yes	Divide fractions.	62	2.9	58	3.7	66	3.9
J14	Yes	Divide rational numbers, fractional divisor.	28	3.0	28	3.5	27	3.9
J17	Yes	Use map and scale to find distance between two cities.	48	2.9	49	4.0	49	3.8
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	59	3.0	61	3.7	58	4.5
K02	Yes	Find total volume of mixture using rational number addition.	52	2.6	47	3.5	57	4.1
K06	Yes	Approximate amount increased by 15%.	25	2.4	29	4.3	21	3.2
K09	Yes	Compute sum of three fractions.	61	2.8	57	4.0	65	3.7
L08	Yes	Estimate actual height from diagram of relative heights.	39	2.6	45	3.6	32	4.4
L09	Yes	Identify 504.7 from its expression in words.	48	2.8	50	3.7	46	3.8
L17	Yes	Subtract three fractions.	43	2.7	40	3.3	47	4.1
M04	Yes	Identify the largest fraction.	37	2.6	39	3.2	35	3.5
M08	Yes	Multiply two decimal fractions.	35	2.9	29	3.4	40	4.0
N11	Yes	Identify number rounded to 18200.	62	2.5	65	3.5	59	4.1
N14	Yes	Identify list of equivalent fractions.	70	2.4	68	3.3	71	3.4
N16	Yes	Solve algebra word problem with fractions.	38	2.8	42	3.5	35	4.1
N17	Yes	Solve multi-step word problem: decimal fractions.	29	2.8	31	3.8	26	3.6
N19	Yes	Shade a given fraction of the squares in a grid.	49	2.9	50	3.8	48	4.0
O02	Yes	Calculate percent increase.	19	2.4	22	3.4	15	3.1
O04	Yes	Identify number rounded to the nearest 100th.	32	3.5	29	4.2	35	4.3
O09	Yes	Solve division word problem: common fractions.	30	2.9	33	4.2	27	3.6
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	57	2.7	59	4.0	54	4.3
P13	Yes	Use heart beats/min to find beats per hour.	53	2.7	53	3.8	53	5.0
P14	Yes	Solve subtraction word problem: common fractions.	67	2.9	67	3.5	67	4.1
P16	Yes	Reduce decimal to fraction in lowest terms.	24	2.8	26	3.5	22	4.5
Q06	Yes	Approximate water use/year from use/week.	23	2.3	28	3.6	17	2.4
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	24	2.9	30	4.1	18	3.5
Q09	Yes	Perform multiple operations of common fractions.	61	2.6	61	3.5	61	3.7
R06	Yes	Subtract two decimal numbers.	68	2.6	64	3.9	72	3.6
R07	Yes	Solve division word problem involving decimals.	22	2.3	22	3.3	21	3.5
R12	Yes	Subtract 4-digit whole numbers.	81	1.9	78	3.1	83	2.9
R13	Yes	Determine how much money left after spending 7/9.	36	2.8	37	3.7	34	3.7
U01A	Yes	Estimate the time required to record 5 songs.	11	1.3	14	2.0	9	1.6
U01B	Yes	Explain method of estimation.	16	1.4	17	2.3	14	1.5
V01	Yes	Determine actual weight from rounded value.	12	1.2	14	1.9	11	1.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Cyprus SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	66	1.1	65	1.6	67	1.5
B11	No	Identify cube made by folding 2-dimensional net.	37	1.4	38	1.9	36	2.0
C03	No	Identify properties of congruent trapezoids.	52	1.7	47	2.3	57	2.3
D07	No	Identify relationship of angles in symmetric polygon.	57	1.7	55	2.3	60	2.1
E02	No	Determine angle in congruent triangles.	47	1.6	47	2.3	47	2.5
G03	No	Find sum of vertical angles from diagram of intersecting lines.	42	1.7	44	2.4	41	2.6
I08	Yes	Identify point on a line defined by two other points.	29	2.6	33	3.7	25	4.1
J11	Yes	Identify properties of a parallelogram.	37	2.7	41	4.2	33	4.2
J15	Yes	Identify similar triangles of different size.	45	2.5	44	3.6	45	3.9
J16	Yes	Identify coordinates for point on a grid.	16	2.1	14	2.5	19	3.3
K03	Yes	Identify figure from rotation of 3-dimensional object.	49	3.1	49	3.7	49	4.0
K08	Yes	Determine unknown angle in rotated congruent triangles.	33	2.6	33	3.9	32	3.5
L15	Yes	Find fourth quadrilateral angle, given the other three.	39	3.0	37	4.0	40	4.3
M02	Yes	Identify all lines of symmetry for a rectangle.	56	2.7	56	3.7	56	3.5
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	23	2.7	24	3.4	22	3.8
M07	Yes	Find angle based on supplementary pairs.	64	2.5	72	3.6	55	4.0
N12	Yes	Identify point on number line from distance of other points.	62	2.9	62	3.8	61	3.7
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	45	4.0	41	4.7	48	4.6
O08	Yes	Find center point of rotation for symmetry-related figures.	49	3.2	42	4.9	57	3.8
P08	Yes	Know relationship between side and perimeter for square.	35	2.7	36	3.9	34	3.9
P09	Yes	Find length of side for similar triangles.	29	2.8	30	3.7	27	4.3
Q10	Yes	Perform calculation involving addition/subtraction of angles.	39	2.7	39	3.7	39	4.3
R10	Yes	Determine into how many triangles a trapezoid can be divided.	37	3.2	41	3.9	34	4.5

COUNTRY ID=Cyprus SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	27	1.3	30	1.8	24	1.5
C01	No	Compare volumes of different stacks of blocks.	32	1.4	33	2.2	30	1.9
D11	No	Identify best unit to measure the mass of an egg.	74	1.7	73	2.4	74	2.2
E06	No	Solve word problem to find length of rectangle from width and perimeter.	28	1.6	31	2.4	24	1.9
F10	No	Determine measurement accuracy of ruler.	14	1.3	16	1.8	11	1.5
G02	No	Read meter scale to determine length of a pipe.	54	1.8	55	2.2	54	2.5
I03	Yes	Find number of 750 mL bottles filled by a large volume.	25	2.9	30	3.9	20	3.3
J10	Yes	Determine area of sheet not covered by rectangular picture.	31	2.9	30	3.8	32	4.3
K05	Yes	Calculate area of a rectangle given its length and perimeter.	27	2.6	28	3.6	26	3.6
L12	Yes	Find longest pace from chart showing number of paces to cross room.	54	3.1	56	4.0	51	4.5
M01	Yes	Read mass shown on scale.	67	2.4	68	3.0	65	3.8
N15	Yes	Identify drawing with angle closest to 30 degrees.	60	2.7	63	3.7	57	3.5
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	75	2.9	75	4.1	74	3.3
P11	Yes	Use ruler to determine approximate length of pencil.	35	2.9	38	3.9	31	4.0
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	16	2.0	21	3.4	10	2.4
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	38	3.0	35	2.9	41	4.5
S02B	Yes	Calculate length of side of square given area.	14	2.4	14	3.4	14	3.1
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	6	1.4	7	2.3	4	1.5
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	27	2.0	29	2.7	26	2.6
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	11	1.5	12	2.2	9	1.9
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	31	2.2	33	3.0	30	3.2

COUNTRY ID=Cyprus SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	45	1.2	52	1.6	39	1.5
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	67	1.4	64	1.7	70	2.0
D08	No	Solve ratio problem for x: $7/13 = x/52$.	62	1.4	60	2.3	64	2.4
F07	No	Solve word problem to find average speed from distance and time.	18	1.3	19	1.7	18	2.0
G04	No	Solve simple proportionality equation.	69	1.5	72	2.2	67	1.9
L14	Yes	Identify missing numbers in table of proportional x and y values.	18	2.3	18	2.9	19	3.2
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	18	2.4	24	3.5	12	2.4
Q05	Yes	Solve word problem involving ratios.	59	2.9	57	3.8	62	4.5
R14	Yes	Solve multi-step word problem involving ratios.	21	2.6	23	3.5	19	2.9
T02A	Yes	Solve algebra word problem involving ratios.	10	1.2	9	1.7	11	1.9
T02B	Yes	Solve multi-step word problem computing fractions.	6	1.2	5	1.9	6	1.4
V03	Yes	Determine ratio of red paint in a mixture.	35	2.0	34	2.9	36	2.5

COUNTRY ID=Czech Republic SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	81	1.0	83	1.1	79	1.5
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	73	1.6	73	1.9	73	2.3
C05	No	Determine number which continues pattern based on figures.	56	2.2	57	2.7	54	3.0
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	51	1.9	52	2.5	49	2.3
E05	No	Find relationship between numbers in a set of ordered pairs.	59	1.7	56	2.4	63	2.2
F11	No	Solve multi-step problem using linear equations.	40	2.9	40	2.8	41	4.0
G06	No	Find solution to $-3X$ for given value of X .	48	2.6	43	2.7	53	3.5
H10	No	Identify equation expressing xy relationship from table of values.	43	2.6	40	2.8	45	3.4
H12	No	Select symbolic linear equation which fits word problem.	80	1.6	79	1.8	80	2.7
I01	Yes	Identify meaning of symbol in word problem equation.	39	3.2	44	5.1	35	3.3
I04	Yes	Determine next number which occurs in two number sequences.	45	2.5	43	3.9	46	3.7
J18	Yes	Identify missing number in table showing xy relationship.	36	3.0	34	3.6	38	5.1
K04	Yes	Identify expression equivalent to linear inequality.	37	2.5	34	4.1	40	3.0
L11	Yes	Solve multi-step word problem using pattern.	36	2.6	36	3.9	37	4.0
L13	Yes	Identify matching patterns of symbols.	96	0.9	94	1.3	98	1.0
L16	Yes	Simplify and solve linear equation for X .	75	2.2	67	3.4	82	3.3
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	49	4.2	43	3.9	55	6.6
O07	Yes	Solve linear equation for X .	81	2.6	80	3.7	82	3.1
P10	Yes	Identify equivalent algebraic expressions.	69	3.2	65	3.6	72	4.1
P15	Yes	Identify equivalent expression for a cubic relationship.	73	3.3	68	4.0	78	3.9
Q01	Yes	Identify linear expression based on word problem.	56	3.1	51	4.1	62	4.2
Q02	Yes	Subtract fractional expressions of X .	43	2.8	43	4.3	43	4.3
Q07	Yes	Solve $P=LW$ for W given values for P and L .	65	2.6	64	3.9	66	3.9
R09	Yes	Identify equivalent expressions from properties of real numbers.	52	3.2	45	3.6	59	4.1
R11	Yes	Solve algebra word problem: linear equation.	49	2.9	47	4.5	50	4.2
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	75	2.8	78	3.3	72	3.4
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	19	2.3	20	3.0	19	3.2
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	39	2.6	40	3.2	37	3.2
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	43	2.7	44	3.4	42	3.2

COUNTRY ID=Czech Republic SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	83	1.2	82	1.4	84	1.4
B07	No	Interpret line graph to find region of largest increase.	54	1.7	56	2.6	51	2.0
C02	No	Interpret pie graph to determine distribution.	77	1.5	79	1.8	75	2.6
E01	No	Interpret line graph to determine intersection point of two plots.	77	1.6	82	1.7	73	2.3
F08	No	Predict probability of occurrence for independent coin toss.	68	1.8	66	2.6	70	2.3
G01	No	Interpret frequency table to find number above a given level.	61	1.7	58	2.5	64	1.9
H07	No	Interpret bar chart histogram to find number above a given level.	65	1.7	67	2.3	63	2.3
H11	No	Predict number of total defective bulbs based on random sample.	66	2.4	71	2.4	60	3.2
I09	Yes	Predict most likely color of random card based on fraction of colors.	61	3.1	65	3.9	57	3.9
J13	Yes	Draw pictograph to represent number given in table.	76	2.4	76	3.2	75	3.2
K07	Yes	Determine the number of blue pens given probability of selection.	48	3.6	49	4.6	47	4.5
L10	Yes	Use data in a chart to identify time/day with highest temperature.	97	1.0	96	1.5	97	1.1
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	66	2.6	72	3.1	60	4.1
N18	Yes	Find probability of drawing an even number from 1 to 9.	44	4.0	47	4.7	40	5.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	57	3.1	60	4.0	54	4.2
O05	Yes	Calculate number of cube faces from probability of toss.	39	3.2	43	4.7	34	4.0
P17	Yes	Identify thermometer which shows temperature given in data table.	96	0.9	96	1.3	96	1.4
Q04	Yes	Interpret data in bar graph.	84	2.2	82	3.0	87	2.8
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	44	2.9	47	3.7	41	4.9
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	18	1.8	19	1.9	17	2.7

COUNTRY ID=Czech Republic SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	50	2.5	53	2.3	47	3.2
B09	No	Identify shaded figure which shows 2/5 = 4/10.	50	1.8	46	2.0	55	2.3
B10	No	Identify smallest of decimal fractions.	51	2.1	55	2.4	47	2.5
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	59	2.0	62	3.0	56	2.8
C06	No	Determine the worst estimate of: 848 + 677.	80	1.3	81	1.8	79	2.0
D09	No	Identify smallest fraction.	61	2.4	68	2.6	55	3.0
D12	No	Estimate rational number from point on number line.	74	1.7	76	2.4	73	2.0
E03	No	Find fraction of hour between two time points.	49	2.4	55	2.6	44	2.7
E04	No	Solve multi-step word problem: 4-digit whole numbers.	59	2.0	57	2.8	61	2.4
F09	No	Identify decimal fraction between 0.07 and 0.08.	64	2.2	64	2.4	65	3.0
F12	No	Identify fraction of circle which is shaded.	47	1.8	50	2.6	44	3.0
G05	No	Identify fraction represented in word problem.	52	2.5	51	2.8	53	3.5
H08	No	Identify figure showing 2/3 shaded.	64	2.1	66	2.5	62	2.5
H09	No	Identify sum which is closest to 691 + 208.	91	1.2	91	1.5	91	1.6
I02	Yes	Solve multi-step word problem: common fractions.	56	2.4	63	3.2	50	3.6
I05	Yes	Solve subtraction word problem: rational numbers.	76	2.6	73	4.3	79	3.1
I06	Yes	Write a fraction larger than a given number.	81	2.2	81	3.0	81	2.9
I07	Yes	Recognize when estimation is appropriate.	69	3.0	72	4.0	66	3.4
J12	Yes	Divide fractions.	58	3.5	55	4.9	61	4.8
J14	Yes	Divide rational numbers, fractional divisor.	65	3.1	61	4.3	68	3.5
J17	Yes	Use map and scale to find distance between two cities.	76	2.3	77	3.6	75	2.7
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	77	2.8	84	2.5	71	3.9
K02	Yes	Find total volume of mixture using rational number addition.	58	3.8	62	4.8	55	4.2
K06	Yes	Approximate amount increased by 15%.	45	3.4	53	4.3	37	4.0
K09	Yes	Compute sum of three fractions.	70	2.5	66	3.6	75	3.4
L08	Yes	Estimate actual height from diagram of relative heights.	72	2.9	76	4.2	69	3.4
L09	Yes	Identify 504.7 from its expression in words.	97	0.9	97	1.1	96	1.4
L17	Yes	Subtract three fractions.	58	3.3	49	5.0	67	4.0
M04	Yes	Identify the largest fraction.	31	2.9	30	3.4	32	4.3
M08	Yes	Multiply two decimal fractions.	75	2.7	74	4.4	76	3.1
N11	Yes	Identify number rounded to 18200.	93	1.6	93	2.1	92	2.3
N14	Yes	Identify list of equivalent fractions.	71	3.4	69	4.4	74	3.7
N16	Yes	Solve algebra word problem with fractions.	40	2.7	38	3.0	42	4.5
N17	Yes	Solve multi-step word problem: decimal fractions.	43	3.3	42	3.9	44	4.7
N19	Yes	Shade a given fraction of the squares in a grid.	39	4.1	40	4.1	39	5.4
O02	Yes	Calculate percent increase.	29	2.9	32	4.3	25	3.2
O04	Yes	Identify number rounded to the nearest 100th.	63	3.1	63	4.1	62	4.1
O09	Yes	Solve division word problem: common fractions.	48	3.3	57	4.2	40	4.4
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	83	2.0	83	2.7	83	3.7
P13	Yes	Use heart beats/min to find beats per hour.	80	2.7	81	3.1	79	3.4
P14	Yes	Solve subtraction word problem: common fractions.	82	2.2	81	3.5	82	2.8
P16	Yes	Reduce decimal to fraction in lowest terms.	29	3.3	27	3.9	32	4.4
Q06	Yes	Approximate water use/year from use/week.	39	3.1	42	3.5	36	5.0
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	40	3.3	43	4.4	37	4.7
Q09	Yes	Perform multiple operations of common fractions.	59	3.1	55	4.2	62	3.9
R06	Yes	Subtract two decimal numbers.	85	2.4	79	3.0	91	2.6
R07	Yes	Solve division word problem involving decimals.	49	3.3	49	3.9	49	5.6
R12	Yes	Subtract 4-digit whole numbers.	97	1.1	95	2.1	98	0.8
R13	Yes	Determine how much money left after spending 7/9.	20	2.5	26	3.3	15	2.9
U01A	Yes	Estimate the time required to record 5 songs.	46	2.8	49	3.4	43	3.5
U01B	Yes	Explain method of estimation.	46	2.5	50	3.2	42	2.9
V01	Yes	Determine actual weight from rounded value.	69	2.3	74	2.3	63	3.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Czech Republic SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	75	1.3	74	1.6	76	1.6
B11	No	Identify cube made by folding 2-dimensional net.	72	1.7	73	2.5	71	1.6
C03	No	Identify properties of congruent trapezoids.	72	1.6	70	2.4	73	2.3
D07	No	Identify relationship of angles in symmetric polygon.	77	1.8	80	2.2	74	2.5
E02	No	Determine angle in congruent triangles.	54	2.0	56	2.7	51	2.1
G03	No	Find sum of vertical angles from diagram of intersecting lines.	49	2.0	51	2.3	47	2.6
I08	Yes	Identify point on a line defined by two other points.	30	2.9	35	4.0	26	3.8
J11	Yes	Identify properties of a parallelogram.	47	3.0	45	4.3	48	3.6
J15	Yes	Identify similar triangles of different size.	61	3.1	59	4.4	62	4.6
J16	Yes	Identify coordinates for point on a grid.	57	2.7	54	4.2	59	3.6
K03	Yes	Identify figure from rotation of 3-dimensional object.	78	1.9	78	3.1	78	3.6
K08	Yes	Determine unknown angle in rotated congruent triangles.	43	3.7	48	4.0	38	4.8
L15	Yes	Find fourth quadrilateral angle, given the other three.	38	3.1	32	4.4	43	3.6
M02	Yes	Identify all lines of symmetry for a rectangle.	69	2.8	69	4.1	69	3.4
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	63	2.3	69	4.0	57	3.9
M07	Yes	Find angle based on supplementary pairs.	78	2.3	77	3.4	79	3.5
N12	Yes	Identify point on number line from distance of other points.	65	3.0	66	3.5	65	5.1
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	51	3.6	54	5.7	49	5.3
O08	Yes	Find center point of rotation for symmetry-related figures.	74	3.0	78	3.3	69	4.9
P08	Yes	Know relationship between side and perimeter for square.	53	2.6	54	3.4	53	3.9
P09	Yes	Find length of side for similar triangles.	32	2.8	31	3.5	33	4.5
Q10	Yes	Perform calculation involving addition/subtraction of angles.	55	3.2	52	4.4	58	5.2
R10	Yes	Determine into how many triangles a trapezoid can be divided.	51	3.2	52	4.4	51	4.5

COUNTRY ID=Czech Republic SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	90	0.8	90	1.0	91	0.9
C01	No	Compare volumes of different stacks of blocks.	69	2.0	70	2.3	68	2.4
D11	No	Identify best unit to measure the mass of an egg.	93	0.9	94	1.1	93	1.2
E06	No	Solve word problem to find length of rectangle from width and perimeter.	42	2.0	42	2.4	42	2.6
F10	No	Determine measurement accuracy of ruler.	72	1.6	77	2.2	68	2.2
G02	No	Read meter scale to determine length of a pipe.	87	1.4	90	1.3	85	2.0
I03	Yes	Find number of 750 mL bottles filled by a large volume.	41	3.1	49	4.0	35	3.4
J10	Yes	Determine area of sheet not covered by rectangular picture.	48	3.7	44	4.7	52	4.2
K05	Yes	Calculate area of a rectangle given its length and perimeter.	42	3.9	45	5.7	40	4.0
L12	Yes	Find longest pace from chart showing number of paces to cross room.	81	2.1	81	3.4	82	3.5
M01	Yes	Read mass shown on scale.	89	1.8	93	2.6	85	2.6
N15	Yes	Identify drawing with angle closest to 30 degrees.	76	2.9	73	3.6	79	4.4
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	85	2.4	87	2.6	82	3.4
P11	Yes	Use ruler to determine approximate length of pencil.	63	2.6	67	3.6	60	4.3
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	32	2.9	38	3.4	28	4.4
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	61	3.2	62	3.6	60	5.0
S02B	Yes	Calculate length of side of square given area.	27	3.5	29	4.8	24	4.0
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	22	2.7	30	4.7	14	2.6
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	27	1.8	32	2.8	23	2.5
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	5	1.0	6	1.3	4	1.3
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	39	2.4	42	3.7	36	3.4

COUNTRY ID=Czech Republic SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	52	1.8	60	1.9	44	2.0
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	71	1.8	73	1.9	69	2.6
D08	No	Solve ratio problem for x: $7/13 = x/52$.	68	2.3	70	2.6	66	2.8
F07	No	Solve word problem to find average speed from distance and time.	31	2.4	30	2.3	32	3.3
G04	No	Solve simple proportionality equation.	61	2.0	60	3.2	63	2.5
L14	Yes	Identify missing numbers in table of proportional x and y values.	21	3.1	21	3.1	22	4.2
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	47	3.3	45	4.1	49	4.4
Q05	Yes	Solve word problem involving ratios.	60	3.5	62	4.2	58	4.7
R14	Yes	Solve multi-step word problem involving ratios.	47	3.3	48	3.6	46	5.0
T02A	Yes	Solve algebra word problem involving ratios.	10	1.9	9	2.4	10	2.1
T02B	Yes	Solve multi-step word problem computing fractions.	6	0.7	6	1.5	5	1.2
V03	Yes	Determine ratio of red paint in a mixture.	19	1.9	17	1.9	21	2.8

COUNTRY ID=Slovak Republic SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	84	0.8	86	1.1	83	1.0
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	72	1.4	69	2.0	74	1.6
C05	No	Determine number which continues pattern based on figures.	55	2.0	53	2.4	57	2.7
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	34	1.6	33	2.1	35	2.1
E05	No	Find relationship between numbers in a set of ordered pairs.	51	2.0	50	2.7	52	2.4
F11	No	Solve multi-step problem using linear equations.	36	1.9	36	2.4	36	2.1
G06	No	Find solution to $-3X$ for given value of X .	45	1.9	40	2.4	50	2.3
H10	No	Identify equation expressing xy relationship from table of values.	46	1.9	46	2.6	46	2.5
H12	No	Select symbolic linear equation which fits word problem.	70	1.4	69	2.0	70	1.7
I01	Yes	Identify meaning of symbol in word problem equation.	32	2.4	30	2.6	34	3.4
I04	Yes	Determine next number which occurs in two number sequences.	37	2.4	34	2.9	39	3.5
J18	Yes	Identify missing number in table showing xy relationship.	36	2.5	41	3.4	32	3.0
K04	Yes	Identify expression equivalent to linear inequality.	37	2.3	38	3.4	36	3.2
L11	Yes	Solve multi-step word problem using pattern.	33	2.9	31	3.7	35	3.8
L13	Yes	Identify matching patterns of symbols.	90	1.7	88	2.5	92	1.8
L16	Yes	Simplify and solve linear equation for X .	70	2.3	70	3.5	69	3.3
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	57	2.2	51	3.4	61	3.3
O07	Yes	Solve linear equation for X .	83	1.8	80	2.6	85	2.4
P10	Yes	Identify equivalent algebraic expressions.	63	3.1	64	3.7	61	4.3
P15	Yes	Identify equivalent expression for a cubic relationship.	71	2.6	68	4.0	74	3.3
Q01	Yes	Identify linear expression based on word problem.	54	2.8	50	4.1	58	3.5
Q02	Yes	Subtract fractional expressions of X .	49	2.5	45	4.1	53	3.5
Q07	Yes	Solve $P=LW$ for W given values for P and L .	52	2.5	50	3.7	54	3.5
R09	Yes	Identify equivalent expressions from properties of real numbers.	42	2.8	40	4.1	45	3.6
R11	Yes	Solve algebra word problem: linear equation.	36	2.3	37	3.3	35	3.5
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	67	2.5	65	3.1	68	3.8
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	15	1.9	16	2.8	14	2.3
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	29	2.0	25	2.4	32	2.6
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	34	2.1	29	2.4	38	2.6

COUNTRY ID=Slovak Republic SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	86	0.9	85	1.1	88	1.1
B07	No	Interpret line graph to find region of largest increase.	58	1.5	61	1.9	55	1.9
C02	No	Interpret pie graph to determine distribution.	81	1.1	80	1.7	83	1.5
E01	No	Interpret line graph to determine intersection point of two plots.	71	1.6	74	2.1	69	2.2
F08	No	Predict probability of occurrence for independent coin toss.	58	1.8	60	2.1	57	2.5
G01	No	Interpret frequency table to find number above a given level.	41	1.9	38	2.3	43	2.4
H07	No	Interpret bar chart histogram to find number above a given level.	59	1.8	57	2.4	60	2.4
H11	No	Predict number of total defective bulbs based on random sample.	62	1.8	66	2.1	58	2.6
I09	Yes	Predict most likely color of random card based on fraction of colors.	56	2.5	58	4.0	54	3.4
J13	Yes	Draw pictograph to represent number given in table.	79	2.0	79	2.8	79	3.0
K07	Yes	Determine the number of blue pens given probability of selection.	36	2.7	39	3.9	33	3.1
L10	Yes	Use data in a chart to identify time/day with highest temperature.	90	1.5	89	2.2	91	2.3
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	70	2.4	73	3.0	66	3.8
N18	Yes	Find probability of drawing an even number from 1 to 9.	37	2.6	43	3.6	33	3.1
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	42	2.5	45	3.6	39	3.4
O05	Yes	Calculate number of cube faces from probability of toss.	37	2.4	45	3.2	29	3.3
P17	Yes	Identify thermometer which shows temperature given in data table.	93	1.4	94	1.6	91	2.2
Q04	Yes	Interpret data in bar graph.	81	2.3	78	3.2	84	2.8
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	35	2.4	38	3.7	32	3.6
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	10	1.3	10	1.5	10	1.6

COUNTRY ID=Slovak Republic SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	56	1.7	57	2.0	54	1.8
B09	No	Identify shaded figure which shows 2/5 = 4/10.	46	1.8	42	2.0	50	2.4
B10	No	Identify smallest of decimal fractions.	50	2.1	53	2.2	48	2.5
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	56	1.5	58	2.1	54	2.0
C06	No	Determine the worst estimate of: 848 + 677.	77	1.2	77	1.8	77	1.6
D09	No	Identify smallest fraction.	58	2.0	63	2.4	54	2.4
D12	No	Estimate rational number from point on number line.	67	1.9	69	2.3	65	2.2
E03	No	Find fraction of hour between two time points.	56	1.7	58	2.5	54	2.0
E04	No	Solve multi-step word problem: 4-digit whole numbers.	69	1.4	65	2.2	73	2.0
F09	No	Identify decimal fraction between 0.07 and 0.08.	64	1.7	67	2.6	60	2.4
F12	No	Identify fraction of circle which is shaded.	51	1.7	54	2.3	47	2.2
G05	No	Identify fraction represented in word problem.	45	2.0	43	2.6	47	2.2
H08	No	Identify figure showing 2/3 shaded.	61	2.0	65	2.5	57	2.4
H09	No	Identify sum which is closest to 691 + 208.	82	1.4	82	1.7	83	1.8
I02	Yes	Solve multi-step word problem: common fractions.	50	2.5	54	3.8	45	3.3
I05	Yes	Solve subtraction word problem: rational numbers.	68	2.1	61	3.8	76	3.2
I06	Yes	Write a fraction larger than a given number.	80	1.9	82	2.5	78	2.8
I07	Yes	Recognize when estimation is appropriate.	72	2.4	67	3.4	77	3.0
J12	Yes	Divide fractions.	62	2.5	59	4.0	64	2.9
J14	Yes	Divide rational numbers, fractional divisor.	63	2.3	59	3.6	65	3.0
J17	Yes	Use map and scale to find distance between two cities.	70	2.3	76	2.6	64	3.7
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	72	2.2	71	3.2	72	3.3
K02	Yes	Find total volume of mixture using rational number addition.	67	2.3	61	3.2	72	3.4
K06	Yes	Approximate amount increased by 15%.	41	2.5	45	3.7	37	3.0
K09	Yes	Compute sum of three fractions.	68	2.6	60	3.9	75	3.1
L08	Yes	Estimate actual height from diagram of relative heights.	63	2.5	69	3.0	58	3.8
L09	Yes	Identify 504.7 from its expression in words.	97	0.8	95	1.3	99	0.9
L17	Yes	Subtract three fractions.	60	2.6	55	4.2	65	3.5
M04	Yes	Identify the largest fraction.	36	2.3	35	3.3	38	3.3
M08	Yes	Multiply two decimal fractions.	64	2.8	59	3.6	70	3.7
N11	Yes	Identify number rounded to 18200.	90	1.5	91	1.9	89	2.2
N14	Yes	Identify list of equivalent fractions.	65	2.6	64	3.3	66	3.6
N16	Yes	Solve algebra word problem with fractions.	42	2.6	44	4.0	40	3.3
N17	Yes	Solve multi-step word problem: decimal fractions.	33	2.3	34	3.4	32	3.0
N19	Yes	Shade a given fraction of the squares in a grid.	39	2.7	43	3.7	36	3.5
O02	Yes	Calculate percent increase.	20	2.3	24	3.7	17	2.5
O04	Yes	Identify number rounded to the nearest 100th.	58	2.3	61	3.1	55	3.4
O09	Yes	Solve division word problem: common fractions.	41	3.3	43	4.2	39	3.9
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	74	2.2	77	3.2	70	3.4
P13	Yes	Use heart beats/min to find beats per hour.	72	2.5	71	3.0	73	3.5
P14	Yes	Solve subtraction word problem: common fractions.	78	2.2	79	3.1	77	3.0
P16	Yes	Reduce decimal to fraction in lowest terms.	30	2.9	28	3.8	31	3.5
Q06	Yes	Approximate water use/year from use/week.	39	2.6	40	3.6	38	3.7
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	40	3.0	44	3.7	36	3.9
Q09	Yes	Perform multiple operations of common fractions.	58	2.8	53	4.3	63	3.3
R06	Yes	Subtract two decimal numbers.	84	1.8	81	2.8	88	2.3
R07	Yes	Solve division word problem involving decimals.	51	2.6	49	3.3	52	3.9
R12	Yes	Subtract 4-digit whole numbers.	94	1.0	92	1.5	96	1.5
R13	Yes	Determine how much money left after spending 7/9.	23	2.3	30	3.5	15	3.0
U01A	Yes	Estimate the time required to record 5 songs.	39	1.7	43	2.0	35	2.4
U01B	Yes	Explain method of estimation.	42	2.2	44	2.4	40	2.9
V01	Yes	Determine actual weight from rounded value.	41	2.0	43	2.7	39	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Slovak Republic SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	69	1.5	67	1.9	71	1.5
B11	No	Identify cube made by folding 2-dimensional net.	64	1.4	66	2.0	63	2.0
C03	No	Identify properties of congruent trapezoids.	63	1.5	61	2.1	64	2.0
D07	No	Identify relationship of angles in symmetric polygon.	75	1.3	77	2.0	74	1.8
E02	No	Determine angle in congruent triangles.	59	1.8	61	2.5	56	2.3
G03	No	Find sum of vertical angles from diagram of intersecting lines.	51	1.8	51	2.5	50	2.4
I08	Yes	Identify point on a line defined by two other points.	33	2.5	42	3.3	23	3.1
J11	Yes	Identify properties of a parallelogram.	43	2.6	36	3.1	49	3.8
J15	Yes	Identify similar triangles of different size.	55	2.3	54	3.6	56	3.1
J16	Yes	Identify coordinates for point on a grid.	52	2.2	51	3.7	53	3.0
K03	Yes	Identify figure from rotation of 3-dimensional object.	71	2.3	75	3.2	66	3.4
K08	Yes	Determine unknown angle in rotated congruent triangles.	35	2.0	37	3.3	34	3.0
L15	Yes	Find fourth quadrilateral angle, given the other three.	34	2.8	42	3.5	27	3.3
M02	Yes	Identify all lines of symmetry for a rectangle.	70	2.7	68	3.7	74	3.7
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	62	3.2	65	3.9	60	3.9
M07	Yes	Find angle based on supplementary pairs.	80	2.2	80	2.8	82	3.1
N12	Yes	Identify point on number line from distance of other points.	65	2.6	68	3.1	62	3.6
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	51	2.6	51	3.5	50	3.8
O08	Yes	Find center point of rotation for symmetry-related figures.	72	3.1	71	4.4	73	3.3
P08	Yes	Know relationship between side and perimeter for square.	59	2.3	62	3.4	56	3.6
P09	Yes	Find length of side for similar triangles.	35	2.5	38	3.9	31	4.0
Q10	Yes	Perform calculation involving addition/subtraction of angles.	49	2.8	51	3.7	47	3.6
R10	Yes	Determine into how many triangles a trapezoid can be divided.	52	2.6	55	3.8	50	3.7

COUNTRY ID=Slovak Republic SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	84	1.0	84	1.1	84	1.2
C01	No	Compare volumes of different stacks of blocks.	59	1.7	62	2.3	57	2.1
D11	No	Identify best unit to measure the mass of an egg.	91	0.9	92	1.1	91	1.3
E06	No	Solve word problem to find length of rectangle from width and perimeter.	38	1.5	43	2.2	34	2.3
F10	No	Determine measurement accuracy of ruler.	64	1.8	74	1.9	54	2.3
G02	No	Read meter scale to determine length of a pipe.	81	1.1	80	1.6	81	1.5
I03	Yes	Find number of 750 mL bottles filled by a large volume.	43	2.6	47	3.7	39	3.6
J10	Yes	Determine area of sheet not covered by rectangular picture.	46	2.4	46	3.5	47	3.1
K05	Yes	Calculate area of a rectangle given its length and perimeter.	40	2.7	39	3.9	41	3.2
L12	Yes	Find longest pace from chart showing number of paces to cross room.	82	1.8	82	2.5	82	2.6
M01	Yes	Read mass shown on scale.	88	1.7	89	2.2	87	2.5
N15	Yes	Identify drawing with angle closest to 30 degrees.	79	1.9	79	2.6	80	2.6
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	82	2.0	84	2.6	81	2.9
P11	Yes	Use ruler to determine approximate length of pencil.	55	2.7	60	3.3	50	4.0
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	29	2.4	36	3.9	23	2.9
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	55	2.8	52	3.3	57	4.0
S02B	Yes	Calculate length of side of square given area.	22	2.1	23	2.9	21	3.2
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	19	2.5	21	3.5	16	2.8
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	29	1.8	32	2.6	26	2.3
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	10	1.3	10	1.6	10	1.7
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	43	2.7	44	3.2	42	3.5

COUNTRY ID=Slovak Republic SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	55	1.2	60	1.7	51	1.4
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	73	1.3	71	1.7	75	1.8
D08	No	Solve ratio problem for x: $7/13 = x/52$.	60	2.0	64	2.3	57	2.5
F07	No	Solve word problem to find average speed from distance and time.	34	1.7	33	2.1	35	2.2
G04	No	Solve simple proportionality equation.	61	1.6	60	2.1	63	1.9
L14	Yes	Identify missing numbers in table of proportional x and y values.	27	2.5	31	3.4	22	3.3
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	46	3.1	43	4.2	49	4.3
Q05	Yes	Solve word problem involving ratios.	57	2.6	59	3.3	56	3.9
R14	Yes	Solve multi-step word problem involving ratios.	38	3.1	40	4.0	36	4.0
T02A	Yes	Solve algebra word problem involving ratios.	12	1.5	13	2.0	11	1.7
T02B	Yes	Solve multi-step word problem computing fractions.	3	0.8	4	1.2	2	0.7
V03	Yes	Determine ratio of red paint in a mixture.	24	2.0	26	2.9	22	2.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Denmark SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	79	1.2	81	1.3	77	1.8
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	46	2.0	47	2.6	46	2.8
C05	No	Determine number which continues pattern based on figures.	51	2.0	51	3.0	52	2.3
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	25	1.7	24	2.5	26	2.4
E05	No	Find relationship between numbers in a set of ordered pairs.	40	2.2	35	2.8	44	3.1
F11	No	Solve multi-step problem using linear equations.	41	2.1	41	3.1	42	2.6
G06	No	Find solution to $-3X$ for given value of X .	21	2.4	23	3.3	20	2.6
H10	No	Identify equation expressing xy relationship from table of values.	29	2.0	29	2.6	29	2.9
H12	No	Select symbolic linear equation which fits word problem.	57	2.4	60	3.0	55	2.9
I01	Yes	Identify meaning of symbol in word problem equation.	17	2.6	22	4.2	14	3.0
I04	Yes	Determine next number which occurs in two number sequences.	39	3.5	34	5.0	42	4.9
J18	Yes	Identify missing number in table showing xy relationship.	35	3.3	41	4.7	28	4.3
K04	Yes	Identify expression equivalent to linear inequality.	24	2.8	27	4.6	21	3.2
L11	Yes	Solve multi-step word problem using pattern.	34	3.4	36	4.6	30	4.7
L13	Yes	Identify matching patterns of symbols.	91	1.6	89	2.5	94	2.3
L16	Yes	Simplify and solve linear equation for X .	8	2.0	10	2.9	6	2.4
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	32	3.4	37	4.8	28	3.9
O07	Yes	Solve linear equation for X .	53	3.9	53	6.9	54	6.2
P10	Yes	Identify equivalent algebraic expressions.	31	2.7	32	3.9	32	4.4
P15	Yes	Identify equivalent expression for a cubic relationship.	60	3.2	61	4.6	59	4.6
Q01	Yes	Identify linear expression based on word problem.	16	2.3	17	3.4	15	3.5
Q02	Yes	Subtract fractional expressions of X .	26	2.6	23	3.5	30	4.5
Q07	Yes	Solve $P=LW$ for W given values for P and L .	29	2.8	28	3.7	29	4.5
R09	Yes	Identify equivalent expressions from properties of real numbers.	23	2.9	25	3.9	20	3.9
R11	Yes	Solve algebra word problem: linear equation.	39	3.4	41	4.7	36	4.5
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	68	2.7	66	4.5	71	3.8
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	13	2.0	14	3.7	13	2.4
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	16	2.1	17	2.7	14	2.5
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	15	2.1	17	2.7	13	2.4

COUNTRY ID=Denmark SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	67	1.3	65	1.7	69	1.7
B07	No	Interpret line graph to find region of largest increase.	59	1.5	61	2.3	59	2.5
C02	No	Interpret pie graph to determine distribution.	69	1.8	72	2.9	68	2.3
E01	No	Interpret line graph to determine intersection point of two plots.	84	1.5	84	2.1	84	2.0
F08	No	Predict probability of occurrence for independent coin toss.	74	2.0	73	2.6	75	2.8
G01	No	Interpret frequency table to find number above a given level.	50	2.0	48	3.2	51	2.6
H07	No	Interpret bar chart histogram to find number above a given level.	67	2.1	69	2.9	65	2.9
H11	No	Predict number of total defective bulbs based on random sample.	47	2.1	53	2.8	41	3.0
I09	Yes	Predict most likely color of random card based on fraction of colors.	53	3.0	53	4.6	51	4.5
J13	Yes	Draw pictograph to represent number given in table.	84	2.7	86	3.4	83	3.8
K07	Yes	Determine the number of blue pens given probability of selection.	37	3.3	39	5.2	36	3.9
L10	Yes	Use data in a chart to identify time/day with highest temperature.	93	1.8	93	2.3	94	2.6
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	76	2.5	77	4.1	76	3.4
N18	Yes	Find probability of drawing an even number from 1 to 9.	53	3.1	61	4.4	46	4.4
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	60	4.0	69	5.4	51	6.8
O05	Yes	Calculate number of cube faces from probability of toss.	36	3.9	50	6.2	22	5.3
P17	Yes	Identify thermometer which shows temperature given in data table.	89	2.0	91	2.3	88	2.9
Q04	Yes	Interpret data in bar graph.	85	2.3	84	3.1	89	2.7
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	41	3.5	40	4.4	38	4.3
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	12	2.0	15	3.0	9	2.2

COUNTRY ID=Denmark SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	56	1.7	57	2.2	56	2.1
B09	No	Identify shaded figure which shows 2/5 = 4/10.	54	2.1	52	2.6	56	3.0
B10	No	Identify smallest of decimal fractions.	37	2.1	46	2.8	28	2.8
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	43	2.0	44	2.9	43	2.6
C06	No	Determine the worst estimate of: 848 + 677.	61	2.2	62	3.0	61	3.1
D09	No	Identify smallest fraction.	55	2.3	57	3.2	54	3.3
D12	No	Estimate rational number from point on number line.	68	2.1	72	2.7	65	3.2
E03	No	Find fraction of hour between two time points.	51	1.9	53	2.5	49	2.9
E04	No	Solve multi-step word problem: 4-digit whole numbers.	37	1.8	37	2.8	39	2.7
F09	No	Identify decimal fraction between 0.07 and 0.08.	54	2.1	60	2.7	48	3.4
F12	No	Identify fraction of circle which is shaded.	54	1.8	56	2.7	52	2.8
G05	No	Identify fraction represented in word problem.	57	1.7	56	2.9	60	2.6
H08	No	Identify figure showing 2/3 shaded.	69	1.9	72	2.9	66	2.8
H09	No	Identify sum which is closest to 691 + 208.	84	1.5	87	2.2	82	2.0
I02	Yes	Solve multi-step word problem: common fractions.	45	3.5	47	4.7	43	4.6
I05	Yes	Solve subtraction word problem: rational numbers.	58	2.9	61	5.0	53	5.0
I06	Yes	Write a fraction larger than a given number.	64	3.2	60	4.4	69	4.3
I07	Yes	Recognize when estimation is appropriate.	48	3.1	48	5.2	49	4.6
J12	Yes	Divide fractions.	2	0.8	2	1.4	1	1.0
J14	Yes	Divide rational numbers, fractional divisor.	8	1.7	11	3.1	6	1.8
J17	Yes	Use map and scale to find distance between two cities.	73	2.9	77	3.9	69	4.1
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	62	3.3	66	4.6	58	4.4
K02	Yes	Find total volume of mixture using rational number addition.	40	3.7	37	5.1	43	4.3
K06	Yes	Approximate amount increased by 15%.	34	2.9	39	4.9	28	4.2
K09	Yes	Compute sum of three fractions.	25	2.8	19	4.3	31	4.0
L08	Yes	Estimate actual height from diagram of relative heights.	59	3.1	57	4.6	59	4.2
L09	Yes	Identify 504.7 from its expression in words.	63	3.3	62	3.9	63	5.0
L17	Yes	Subtract three fractions.	28	3.2	30	4.6	24	4.1
M04	Yes	Identify the largest fraction.	27	2.6	26	3.8	29	3.9
M08	Yes	Multiply two decimal fractions.	17	2.4	14	3.2	21	3.8
N11	Yes	Identify number rounded to 18200.	83	2.5	87	3.5	80	3.6
N14	Yes	Identify list of equivalent fractions.	50	2.9	50	5.0	50	3.7
N17	Yes	Solve multi-step word problem: decimal fractions.	30	2.7	27	4.5	32	3.7
N19	Yes	Shade a given fraction of the squares in a grid.	53	3.1	53	4.4	53	4.7
O02	Yes	Calculate percent increase.	17	3.2	26	6.4	7	2.9
O04	Yes	Identify number rounded to the nearest 100th.	29	4.4	30	6.2	29	5.5
O09	Yes	Solve division word problem: common fractions.	38	4.1	43	6.4	33	5.7
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	59	3.4	62	4.7	57	4.7
P13	Yes	Use heart beats/min to find beats per hour.	59	3.3	61	4.5	58	4.6
P14	Yes	Solve subtraction word problem: common fractions.	75	3.0	75	4.3	76	3.8
P16	Yes	Reduce decimal to fraction in lowest terms.	7	2.0	7	1.9	7	2.7
Q06	Yes	Approximate water use/year from use/week.	35	3.1	39	4.7	30	4.4
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	29	2.8	33	4.6	26	4.1
Q09	Yes	Perform multiple operations of common fractions.	21	2.6	17	3.2	24	4.5
R06	Yes	Subtract two decimal numbers.	72	3.3	68	4.4	78	4.0
R07	Yes	Solve division word problem involving decimals.	31	3.3	31	4.4	30	4.8
R12	Yes	Subtract 4-digit whole numbers.	86	2.5	84	2.5	89	3.6
R13	Yes	Determine how much money left after spending 7/9.	18	2.7	23	3.8	13	3.6
U01A	Yes	Estimate the time required to record 5 songs.	10	1.6	8	2.1	11	2.0
U01B	Yes	Explain method of estimation.	13	1.5	13	2.5	12	2.1
V01	Yes	Determine actual weight from rounded value.	59	2.7	62	3.6	56	3.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Denmark SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	48	1.4	48	1.9	47	1.7
B11	No	Identify cube made by folding 2-dimensional net.	58	1.8	56	2.3	61	2.6
C03	No	Identify properties of congruent trapezoids.	41	2.0	42	2.7	41	2.7
D07	No	Identify relationship of angles in symmetric polygon.	52	2.2	52	3.2	52	3.0
E02	No	Determine angle in congruent triangles.	33	1.9	32	2.5	34	2.9
G03	No	Find sum of vertical angles from diagram of intersecting lines.	30	1.7	32	2.4	28	2.4
I08	Yes	Identify point on a line defined by two other points.	45	3.0	48	4.5	44	4.2
J11	Yes	Identify properties of a parallelogram.	41	3.4	42	4.5	40	4.5
J15	Yes	Identify similar triangles of different size.	73	2.9	75	4.1	71	4.1
J16	Yes	Identify coordinates for point on a grid.	58	3.3	61	4.7	55	4.8
K03	Yes	Identify figure from rotation of 3-dimensional object.	68	3.4	71	4.7	66	4.7
K08	Yes	Determine unknown angle in rotated congruent triangles.	19	2.7	20	4.2	17	3.4
L15	Yes	Find fourth quadrilateral angle, given the other three.	24	2.8	26	3.9	23	4.5
M02	Yes	Identify all lines of symmetry for a rectangle.	51	3.2	57	5.6	47	4.4
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	59	3.2	56	5.1	61	4.7
M07	Yes	Find angle based on supplementary pairs.	67	2.8	64	4.4	69	4.0
N12	Yes	Identify point on number line from distance of other points.	54	2.8	62	4.0	46	3.9
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	32	4.6	30	6.6	34	6.2
O08	Yes	Find center point of rotation for symmetry-related figures.	67	3.7	70	5.8	64	5.4
P08	Yes	Know relationship between side and perimeter for square.	31	3.5	34	4.9	29	4.7
P09	Yes	Find length of side for similar triangles.	28	3.3	27	4.2	28	4.6
Q10	Yes	Perform calculation involving addition/subtraction of angles.	35	2.9	31	4.2	43	4.4
R10	Yes	Determine into how many triangles a trapezoid can be divided.	54	3.5	54	4.5	56	4.7

COUNTRY ID=Denmark SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	67	1.3	71	1.7	63	1.9
C01	No	Compare volumes of different stacks of blocks.	42	2.0	46	2.9	38	2.8
D11	No	Identify best unit to measure the mass of an egg.	87	1.5	88	2.0	85	1.9
E06	No	Solve word problem to find length of rectangle from width and perimeter.	31	2.0	35	2.6	27	3.1
F10	No	Determine measurement accuracy of ruler.	53	1.9	58	2.8	48	2.8
G02	No	Read meter scale to determine length of a pipe.	58	1.9	61	2.9	56	2.6
I03	Yes	Find number of 750 mL bottles filled by a large volume.	39	3.0	46	4.9	31	4.4
J10	Yes	Determine area of sheet not covered by rectangular picture.	29	3.1	27	4.4	31	4.3
K05	Yes	Calculate area of a rectangle given its length and perimeter.	27	3.6	27	4.9	27	4.5
L12	Yes	Find longest pace from chart showing number of paces to cross room.	75	2.7	80	3.4	70	4.7
M01	Yes	Read mass shown on scale.	88	2.3	86	3.1	91	3.1
N15	Yes	Identify drawing with angle closest to 30 degrees.	61	2.8	56	3.7	64	4.0
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	75	3.9	76	4.2	74	6.4
P11	Yes	Use ruler to determine approximate length of pencil.	49	3.6	50	4.5	48	5.7
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	25	2.9	29	4.0	21	4.5
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	31	2.9	28	4.3	32	3.9
S02B	Yes	Calculate length of side of square given area.	8	1.8	9	2.5	6	2.3
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	11	1.8	10	2.6	12	2.9
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	16	1.8	15	2.6	17	2.5
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	3	0.8	2	0.8	4	1.4
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	31	2.4	33	3.9	30	3.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Denmark SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	65	1.2	73	1.8	59	1.5
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	61	1.8	63	2.3	60	2.4
D08	No	Solve ratio problem for x: $7/13 = x/52$.	53	1.9	58	3.1	48	2.7
F07	No	Solve word problem to find average speed from distance and time.	19	1.6	20	2.2	18	2.2
G04	No	Solve simple proportionality equation.	58	2.0	61	3.2	55	2.8
L14	Yes	Identify missing numbers in table of proportional x and y values.	10	1.9	13	2.8	8	2.5
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	25	3.1	29	4.2	20	3.8
Q05	Yes	Solve word problem involving ratios.	54	3.3	60	4.3	49	5.1
R14	Yes	Solve multi-step word problem involving ratios.	16	2.2	17	3.0	14	3.2
T02A	Yes	Solve algebra word problem involving ratios.	11	1.5	13	2.3	10	1.8
T02B	Yes	Solve multi-step word problem computing fractions.	6	1.0	8	1.7	5	1.3
V03	Yes	Determine ratio of red paint in a mixture.	30	2.4	33	3.4	29	3.2

COUNTRY ID=France SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	76	1.0	78	1.3	74	1.4
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	61	1.8	59	2.3	64	2.1
C05	No	Determine number which continues pattern based on figures.	47	1.6	48	2.2	47	2.4
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	31	1.6	31	2.1	33	2.6
E05	No	Find relationship between numbers in a set of ordered pairs.	53	1.7	52	2.6	54	2.4
F11	No	Solve multi-step problem using linear equations.	34	1.8	35	2.0	32	2.6
G06	No	Find solution to $-3X$ for given value of X .	6	0.9	5	1.1	6	1.3
H10	No	Identify equation expressing xy relationship from table of values.	32	1.6	33	2.5	31	2.1
H12	No	Select symbolic linear equation which fits word problem.	79	1.6	78	2.1	80	1.6
I01	Yes	Identify meaning of symbol in word problem equation.	30	2.5	33	4.1	27	3.3
I04	Yes	Determine next number which occurs in two number sequences.	42	2.8	36	3.6	47	3.9
J18	Yes	Identify missing number in table showing xy relationship.	34	2.3	37	3.5	31	3.8
K04	Yes	Identify expression equivalent to linear inequality.	33	2.3	31	3.8	35	3.6
L11	Yes	Solve multi-step word problem using pattern.	30	2.5	27	3.6	32	3.7
L13	Yes	Identify matching patterns of symbols.	93	1.6	92	2.3	95	1.7
L16	Yes	Simplify and solve linear equation for X .	8	1.5	12	2.6	4	1.2
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	36	3.0	33	3.4	39	4.4
O07	Yes	Solve linear equation for X .	62	2.6	63	4.0	61	3.9
P10	Yes	Identify equivalent algebraic expressions.	53	2.8	57	3.4	49	4.6
P15	Yes	Identify equivalent expression for a cubic relationship.	17	2.0	20	3.2	15	2.7
Q01	Yes	Identify linear expression based on word problem.	39	2.7	36	3.7	42	3.6
Q02	Yes	Subtract fractional expressions of X .	32	2.9	31	3.7	34	3.9
Q07	Yes	Solve $P=LW$ for W given values for P and L .	34	3.0	33	4.0	34	3.7
R09	Yes	Identify equivalent expressions from properties of real numbers.	34	3.2	31	3.3	39	4.5
R11	Yes	Solve algebra word problem: linear equation.	36	2.8	33	3.5	38	4.5
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	80	2.1	78	3.3	82	3.1
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	12	1.8	14	2.9	11	2.2
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	14	1.3	16	2.0	12	1.8
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	14	1.3	16	2.0	13	1.7

COUNTRY ID=France SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	78	1.1	76	1.3	79	1.5
B07	No	Interpret line graph to find region of largest increase.	65	1.8	65	2.2	65	2.0
C02	No	Interpret pie graph to determine distribution.	59	1.7	62	2.1	56	2.3
E01	No	Interpret line graph to determine intersection point of two plots.	77	1.4	80	1.9	74	1.9
F08	No	Predict probability of occurrence for independent coin toss.	56	1.5	56	2.1	57	2.2
G01	No	Interpret frequency table to find number above a given level.	57	1.6	58	2.1	55	2.3
H07	No	Interpret bar chart histogram to find number above a given level.	70	1.7	72	1.9	68	2.4
H11	No	Predict number of total defective bulbs based on random sample.	58	1.7	64	2.2	52	2.0
I09	Yes	Predict most likely color of random card based on fraction of colors.	61	2.5	61	3.8	62	3.7
J13	Yes	Draw pictograph to represent number given in table.	85	1.9	84	2.9	88	2.5
K07	Yes	Determine the number of blue pens given probability of selection.	46	3.4	46	4.4	48	5.1
L10	Yes	Use data in a chart to identify time/day with highest temperature.	89	1.7	90	2.5	88	2.5
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	82	2.4	85	2.8	81	3.4
N18	Yes	Find probability of drawing an even number from 1 to 9.	55	2.8	59	3.7	51	4.2
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	75	2.1	79	2.7	71	3.5
O05	Yes	Calculate number of cube faces from probability of toss.	43	3.0	48	4.4	38	3.8
P17	Yes	Identify thermometer which shows temperature given in data table.	96	1.2	93	2.0	99	0.9
Q04	Yes	Interpret data in bar graph.	88	2.2	88	2.5	88	2.8
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	64	2.7	68	3.7	60	4.3
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	16	1.5	18	2.0	14	2.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=France SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	55	1.4	58	1.8	52	1.9
B09	No	Identify shaded figure which shows 2/5 = 4/10.	58	1.3	57	1.5	60	2.1
B10	No	Identify smallest of decimal fractions.	73	1.5	72	2.0	75	1.7
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	52	1.5	54	2.4	51	2.2
C06	No	Determine the worst estimate of: 848 + 677.	63	1.4	63	2.4	64	2.0
D09	No	Identify smallest fraction.	63	2.0	68	2.6	58	2.7
D12	No	Estimate rational number from point on number line.	65	2.0	67	2.4	64	2.5
E03	No	Find fraction of hour between two time points.	41	1.6	42	2.3	39	2.3
E04	No	Solve multi-step word problem: 4-digit whole numbers.	59	1.9	56	2.7	61	2.5
F09	No	Identify decimal fraction between 0.07 and 0.08.	83	1.6	83	1.8	82	2.0
F12	No	Identify fraction of circle which is shaded.	61	1.8	58	2.7	63	2.2
G05	No	Identify fraction represented in word problem.	66	1.7	67	2.1	67	2.1
H08	No	Identify figure showing 2/3 shaded.	78	1.8	79	2.3	76	2.3
H09	No	Identify sum which is closest to 691 + 208.	86	1.0	88	1.2	85	1.7
I02	Yes	Solve multi-step word problem: common fractions.	45	2.7	48	4.0	43	3.7
I05	Yes	Solve subtraction word problem: rational numbers.	73	2.8	72	3.7	73	3.7
I06	Yes	Write a fraction larger than a given number.	66	1.8	65	3.9	67	2.9
I07	Yes	Recognize when estimation is appropriate.	56	2.3	57	3.4	58	3.4
J12	Yes	Divide fractions.	15	2.5	16	3.0	14	3.4
J14	Yes	Divide rational numbers, fractional divisor.	51	3.3	55	3.9	48	4.8
J17	Yes	Use map and scale to find distance between two cities.	72	2.6	76	3.3	68	3.7
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	62	2.2	64	3.2	61	3.5
K02	Yes	Find total volume of mixture using rational number addition.	65	2.4	58	3.7	71	3.6
K06	Yes	Approximate amount increased by 15%.	38	2.8	35	3.6	39	4.2
K09	Yes	Compute sum of three fractions.	23	2.5	18	2.9	28	4.0
L08	Yes	Estimate actual height from diagram of relative heights.	57	2.5	65	3.7	49	3.5
L09	Yes	Identify 504.7 from its expression in words.	83	2.1	80	3.6	86	2.5
L17	Yes	Subtract three fractions.	37	2.8	38	4.1	37	3.4
M04	Yes	Identify the largest fraction.	37	2.7	39	3.5	37	4.2
M08	Yes	Multiply two decimal fractions.	59	3.2	58	4.1	60	4.1
N11	Yes	Identify number rounded to 18200.	78	2.0	80	3.0	76	3.3
N14	Yes	Identify list of equivalent fractions.	68	2.7	72	3.5	66	4.2
N16	Yes	Solve algebra word problem with fractions.	39	2.8	43	3.5	34	4.2
N17	Yes	Solve multi-step word problem: decimal fractions.	27	2.4	27	3.4	25	3.3
N19	Yes	Shade a given fraction of the squares in a grid.	50	2.8	57	3.8	42	3.8
O02	Yes	Calculate percent increase.	17	2.3	22	3.2	12	2.8
O04	Yes	Identify number rounded to the nearest 100th.	39	2.9	41	3.6	37	4.0
O09	Yes	Solve division word problem: common fractions.	34	2.5	43	3.5	25	3.2
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	65	2.9	65	3.8	66	4.1
P13	Yes	Use heart beats/min to find beats per hour.	69	2.4	69	3.4	69	3.6
P14	Yes	Solve subtraction word problem: common fractions.	68	2.5	68	3.7	69	3.1
P16	Yes	Reduce decimal to fraction in lowest terms.	10	1.7	10	2.4	10	2.4
Q06	Yes	Approximate water use/year from use/week.	37	2.5	43	4.2	32	3.7
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	58	2.8	58	3.8	59	4.3
Q09	Yes	Perform multiple operations of common fractions.	39	2.7	37	3.7	42	3.9
R06	Yes	Subtract two decimal numbers.	82	2.1	78	3.2	87	2.8
R07	Yes	Solve division word problem involving decimals.	49	2.9	47	4.4	54	3.4
R12	Yes	Subtract 4-digit whole numbers.	92	1.5	89	1.9	95	2.1
R13	Yes	Determine how much money left after spending 7/9.	21	2.0	22	2.8	21	3.4
U01A	Yes	Estimate the time required to record 5 songs.	15	1.5	15	2.0	16	2.0
U01B	Yes	Explain method of estimation.	11	1.2	11	1.8	10	1.7

COUNTRY ID=France SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	70	1.4	68	1.8	72	1.5
B11	No	Identify cube made by folding 2-dimensional net.	69	1.5	72	1.7	68	1.9
C03	No	Identify properties of congruent trapezoids.	72	1.4	71	2.1	74	1.8
D07	No	Identify relationship of angles in symmetric polygon.	79	1.6	80	2.1	78	2.2
E02	No	Determine angle in congruent triangles.	57	1.9	57	2.4	56	2.5
G03	No	Find sum of vertical angles from diagram of intersecting lines.	51	2.0	51	2.4	50	2.8
I08	Yes	Identify point on a line defined by two other points.	24	2.2	26	3.6	23	3.1
J11	Yes	Identify properties of a parallelogram.	48	2.8	46	3.8	51	4.3
J15	Yes	Identify similar triangles of different size.	75	2.6	79	3.2	71	3.8
J16	Yes	Identify coordinates for point on a grid.	47	2.8	46	4.0	50	4.0
K03	Yes	Identify figure from rotation of 3-dimensional object.	71	2.4	67	3.4	75	3.5
K08	Yes	Determine unknown angle in rotated congruent triangles.	38	3.2	35	4.1	41	4.4
L15	Yes	Find fourth quadrilateral angle, given the other three.	33	2.9	38	3.8	29	3.6
M02	Yes	Identify all lines of symmetry for a rectangle.	79	2.1	80	3.0	79	3.1
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	61	3.1	68	3.8	55	4.2
M07	Yes	Find angle based on supplementary pairs.	77	2.6	80	3.1	74	4.0
N12	Yes	Identify point on number line from distance of other points.	66	2.4	69	2.6	62	4.0
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	39	3.0	42	3.6	35	4.0
O08	Yes	Find center point of rotation for symmetry-related figures.	77	2.3	80	3.0	75	3.2
P08	Yes	Know relationship between side and perimeter for square.	58	3.3	67	4.4	52	3.7
P09	Yes	Find length of side for similar triangles.	58	2.6	59	3.9	58	4.0
Q10	Yes	Perform calculation involving addition/subtraction of angles.	42	2.6	40	3.7	45	3.8
R10	Yes	Determine into how many triangles a trapezoid can be divided.	48	2.9	46	3.7	50	4.2

COUNTRY ID=France SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	47	1.2	46	1.6	48	1.5
C01	No	Compare volumes of different stacks of blocks.	52	1.9	57	2.6	47	2.8
D11	No	Identify best unit to measure the mass of an egg.	84	1.2	84	1.8	83	1.4
E06	No	Solve word problem to find length of rectangle from width and perimeter.	46	1.8	46	2.5	46	2.6
F10	No	Determine measurement accuracy of ruler.	65	1.6	68	2.4	62	2.0
G02	No	Read meter scale to determine length of a pipe.	88	1.2	90	1.5	85	1.8
I03	Yes	Find number of 750 mL bottles filled by a large volume.	37	2.6	43	3.9	33	3.4
J10	Yes	Determine area of sheet not covered by rectangular picture.	38	3.3	38	3.8	36	4.6
K05	Yes	Calculate area of a rectangle given its length and perimeter.	36	3.0	30	4.0	42	3.9
L12	Yes	Find longest pace from chart showing number of paces to cross room.	79	2.0	82	3.4	76	2.7
M01	Yes	Read mass shown on scale.	93	1.8	93	2.2	95	1.8
N15	Yes	Identify drawing with angle closest to 30 degrees.	64	2.6	68	3.6	58	3.7
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	83	2.1	87	2.7	77	3.0
P11	Yes	Use ruler to determine approximate length of pencil.	55	2.9	57	4.0	56	3.9
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	33	3.3	39	4.5	26	4.0
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	62	3.1	59	4.4	64	4.0
S02B	Yes	Calculate length of side of square given area.	13	2.1	13	2.7	11	2.6
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	11	1.9	12	2.6	10	2.5
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	34	2.3	32	2.8	36	3.0
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	2	0.5	2	0.8	2	0.6
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	36	2.3	42	2.8	30	2.4

COUNTRY ID=France SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	44	1.2	50	1.6	38	1.6
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	65	1.4	67	2.1	63	1.9
D08	No	Solve ratio problem for x: $7/13 = x/52$.	60	1.7	60	2.1	59	2.6
F07	No	Solve word problem to find average speed from distance and time.	28	1.7	28	1.8	28	2.6
G04	No	Solve simple proportionality equation.	73	1.7	75	2.5	71	2.5
L14	Yes	Identify missing numbers in table of proportional x and y values.	30	2.3	31	3.2	28	3.4
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	29	2.8	28	3.3	31	3.9
Q05	Yes	Solve word problem involving ratios.	66	2.7	70	3.5	62	4.6
R14	Yes	Solve multi-step word problem involving ratios.	38	2.6	36	3.7	41	3.9
T02A	Yes	Solve algebra word problem involving ratios.	9	1.3	9	2.0	8	1.7
T02B	Yes	Solve multi-step word problem computing fractions.	3	0.7	3	0.9	3	1.1
V03	Yes	Determine ratio of red paint in a mixture.	48	2.0	48	3.2	48	2.5

COUNTRY ID=Germany SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	79	1.1	80	1.5	79	1.5
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	52	2.0	51	2.4	54	2.7
C05	No	Determine number which continues pattern based on figures.	47	1.8	48	2.3	45	2.6
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	34	1.4	31	2.2	37	2.5
E05	No	Find relationship between numbers in a set of ordered pairs.	44	2.3	43	3.0	47	2.5
F11	No	Solve multi-step problem using linear equations.	30	2.0	30	2.5	29	2.4
G06	No	Find solution to $-3X$ for given value of X .	26	2.2	26	3.0	27	2.5
H10	No	Identify equation expressing xy relationship from table of values.	26	2.1	25	2.6	26	2.6
H12	No	Select symbolic linear equation which fits word problem.	65	2.1	63	2.6	68	2.6
I01	Yes	Identify meaning of symbol in word problem equation.	21	1.9	22	2.9	19	3.2
I04	Yes	Determine next number which occurs in two number sequences.	42	3.1	39	4.3	44	4.3
J18	Yes	Identify missing number in table showing xy relationship.	33	2.8	36	3.9	30	4.2
K04	Yes	Identify expression equivalent to linear inequality.	25	2.6	28	3.7	22	3.0
L11	Yes	Solve multi-step word problem using pattern.	26	2.5	27	4.0	25	3.4
L13	Yes	Identify matching patterns of symbols.	86	2.1	91	2.0	83	3.3
L16	Yes	Simplify and solve linear equation for X .	16	2.7	14	3.6	19	3.6
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	30	3.4	29	4.4	30	4.1
O07	Yes	Solve linear equation for X .	62	3.6	66	4.4	60	4.1
P10	Yes	Identify equivalent algebraic expressions.	43	3.4	45	4.4	40	3.9
P15	Yes	Identify equivalent expression for a cubic relationship.	60	3.3	61	4.5	58	4.7
Q01	Yes	Identify linear expression based on word problem.	27	2.5	28	3.8	27	3.8
Q02	Yes	Subtract fractional expressions of X .	33	2.7	36	3.8	30	3.7
Q07	Yes	Solve $P=LW$ for W given values for P and L .	40	3.4	41	4.2	39	4.4
R09	Yes	Identify equivalent expressions from properties of real numbers.	30	3.0	30	4.2	30	4.0
R11	Yes	Solve algebra word problem: linear equation.	37	2.8	37	4.1	39	4.2
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	79	2.9	78	3.4	79	3.9
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	16	2.4	14	3.6	18	3.1
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	16	1.5	19	2.7	13	1.5
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	17	1.8	18	2.6	16	2.5

COUNTRY ID=Germany SCALE=Data Rep., Analysis & Prob.

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	74	1.2	73	1.6	76	1.5
B07	No	Interpret line graph to find region of largest increase.	67	1.6	69	1.9	65	2.3
C02	No	Interpret pie graph to determine distribution.	78	1.4	77	2.1	78	1.8
E01	No	Interpret line graph to determine intersection point of two plots.	70	1.6	71	2.4	69	2.3
F08	No	Predict probability of occurrence for independent coin toss.	61	1.8	62	2.3	60	2.7
G01	No	Interpret frequency table to find number above a given level.	57	1.8	54	2.7	59	2.5
H07	No	Interpret bar chart histogram to find number above a given level.	67	1.6	68	2.1	67	2.4
H11	No	Predict number of total defective bulbs based on random sample.	64	1.9	67	2.0	61	2.7
I09	Yes	Predict most likely color of random card based on fraction of colors.	58	2.8	65	4.0	51	4.0
J13	Yes	Draw pictograph to represent number given in table.	83	2.0	79	3.2	86	2.4
K07	Yes	Determine the number of blue pens given probability of selection.	31	2.6	30	3.8	31	3.9
L10	Yes	Use data in a chart to identify time/day with highest temperature.	89	2.1	85	3.0	94	2.0
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	78	2.1	80	2.9	77	3.5
N18	Yes	Find probability of drawing an even number from 1 to 9.	50	2.9	48	4.3	51	4.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	68	2.8	70	3.9	65	4.0
O05	Yes	Calculate number of cube faces from probability of toss.	50	3.8	55	4.6	45	4.9
P17	Yes	Identify thermometer which shows temperature given in data table.	93	1.6	92	1.9	95	1.6
Q04	Yes	Interpret data in bar graph.	83	2.2	84	3.2	83	3.1
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	54	3.1	58	4.4	49	4.2
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	14	1.9	14	2.2	15	2.6

COUNTRY ID=Germany SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	51	1.8	54	2.1	48	2.2
B09	No	Identify shaded figure which shows 2/5 = 4/10.	48	1.6	44	2.2	52	2.2
B10	No	Identify smallest of decimal fractions.	63	2.1	66	2.4	60	3.0
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	47	2.4	46	3.0	49	2.9
C06	No	Determine the worst estimate of: 848 + 677.	70	2.1	66	2.9	74	2.2
D09	No	Identify smallest fraction.	68	1.9	72	2.6	64	2.5
D12	No	Estimate rational number from point on number line.	83	1.3	85	1.7	81	1.8
E03	No	Find fraction of hour between two time points.	52	2.0	55	2.9	49	2.5
E04	No	Solve multi-step word problem: 4-digit whole numbers.	60	2.1	56	3.2	65	2.6
F09	No	Identify decimal fraction between 0.07 and 0.08.	66	1.6	68	2.4	65	2.1
F12	No	Identify fraction of circle which is shaded.	58	1.9	59	2.6	58	2.4
G05	No	Identify fraction represented in word problem.	56	2.3	55	3.0	57	2.6
H08	No	Identify figure showing 2/3 shaded.	67	1.9	69	2.7	66	2.2
H09	No	Identify sum which is closest to 691 + 208.	84	1.3	84	1.8	82	1.7
I02	Yes	Solve multi-step word problem: common fractions.	45	3.1	44	4.2	45	4.2
I05	Yes	Solve subtraction word problem: rational numbers.	70	2.9	68	3.7	72	4.0
I06	Yes	Write a fraction larger than a given number.	80	2.2	82	3.0	77	3.1
I07	Yes	Recognize when estimation is appropriate.	65	2.4	68	3.4	61	3.6
J12	Yes	Divide fractions.	46	3.8	38	4.6	53	4.7
J14	Yes	Divide rational numbers, fractional divisor.	38	3.1	31	3.8	44	4.4
J17	Yes	Use map and scale to find distance between two cities.	68	2.9	67	4.0	70	4.2
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	65	2.3	63	3.7	69	3.7
K02	Yes	Find total volume of mixture using rational number addition.	56	2.9	51	4.0	62	4.0
K06	Yes	Approximate amount increased by 15%.	43	3.0	43	4.5	43	4.4
K09	Yes	Compute sum of three fractions.	45	3.7	39	4.8	51	4.2
L08	Yes	Estimate actual height from diagram of relative heights.	58	3.1	57	4.2	61	3.9
L09	Yes	Identify 504.7 from its expression in words.	81	2.6	82	3.1	81	4.0
L17	Yes	Subtract three fractions.	44	3.0	40	4.3	48	4.0
M04	Yes	Identify the largest fraction.	32	2.7	28	3.6	36	4.0
M08	Yes	Multiply two decimal fractions.	49	2.9	48	4.2	52	3.8
N11	Yes	Identify number rounded to 18200.	86	1.7	86	2.5	86	2.5
N14	Yes	Identify list of equivalent fractions.	67	3.0	64	4.2	69	3.7
N16	Yes	Solve algebra word problem with fractions.	37	2.5	38	3.5	36	3.6
N17	Yes	Solve multi-step word problem: decimal fractions.	37	3.1	38	4.6	35	3.6
N19	Yes	Shade a given fraction of the squares in a grid.	45	2.7	44	4.0	47	3.5
O02	Yes	Calculate percent increase.	27	2.8	29	3.5	26	4.3
O04	Yes	Identify number rounded to the nearest 100th.	40	2.7	41	4.0	37	4.1
O09	Yes	Solve division word problem: common fractions.	51	3.3	55	3.9	46	5.3
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	64	3.2	72	4.2	57	4.4
P13	Yes	Use heart beats/min to find beats per hour.	63	3.2	66	4.5	60	4.4
P14	Yes	Solve subtraction word problem: common fractions.	83	2.0	80	3.3	86	2.5
P16	Yes	Reduce decimal to fraction in lowest terms.	37	2.9	36	3.8	39	4.3
Q06	Yes	Approximate water use/year from use/week.	33	2.9	37	4.5	30	3.6
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	49	2.9	54	4.9	45	3.6
Q09	Yes	Perform multiple operations of common fractions.	47	3.4	48	5.1	47	4.8
R06	Yes	Subtract two decimal numbers.	71	2.7	72	4.0	72	3.4
R07	Yes	Solve division word problem involving decimals.	43	3.0	44	4.0	43	4.4
R12	Yes	Subtract 4-digit whole numbers.	93	1.4	95	1.9	92	2.1
R13	Yes	Determine how much money left after spending 7/9.	22	2.6	28	3.6	17	3.5
U01A	Yes	Estimate the time required to record 5 songs.	38	2.1	40	3.0	38	3.1
U01B	Yes	Explain method of estimation.	29	2.4	30	3.2	30	3.1
V01	Yes	Determine actual weight from rounded value.	48	2.5	49	3.3	45	3.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Germany SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	41	1.9	38	2.1	44	2.2
B11	No	Identify cube made by folding 2-dimensional net.	63	1.7	66	2.0	61	2.3
C03	No	Identify properties of congruent trapezoids.	48	2.0	47	2.6	49	3.0
D07	No	Identify relationship of angles in symmetric polygon.	54	2.3	52	2.9	55	2.9
E02	No	Determine angle in congruent triangles.	37	2.3	35	2.9	39	2.9
G03	No	Find sum of vertical angles from diagram of intersecting lines.	37	1.8	36	2.4	39	2.6
I08	Yes	Identify point on a line defined by two other points.	32	2.9	29	3.5	35	4.3
J11	Yes	Identify properties of a parallelogram.	42	3.1	39	4.1	46	4.7
J15	Yes	Identify similar triangles of different size.	59	2.9	57	4.2	62	4.1
J16	Yes	Identify coordinates for point on a grid.	52	3.2	46	4.3	58	3.8
K03	Yes	Identify figure from rotation of 3-dimensional object.	72	2.2	73	3.6	73	3.3
K08	Yes	Determine unknown angle in rotated congruent triangles.	28	2.7	24	3.5	31	4.2
L15	Yes	Find fourth quadrilateral angle, given the other three.	36	2.5	38	4.1	35	4.1
M02	Yes	Identify all lines of symmetry for a rectangle.	58	3.1	57	3.7	58	4.8
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	38	3.0	37	3.8	39	3.6
M07	Yes	Find angle based on supplementary pairs.	58	2.9	58	4.6	58	4.1
N12	Yes	Identify point on number line from distance of other points.	57	2.5	58	3.7	56	3.6
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	42	2.7	39	4.1	44	3.9
O08	Yes	Find center point of rotation for symmetry-related figures.	65	2.8	68	3.5	63	4.5
P08	Yes	Know relationship between side and perimeter for square.	36	3.2	38	4.6	36	4.1
P09	Yes	Find length of side for similar triangles.	35	3.2	33	4.3	37	4.0
Q10	Yes	Perform calculation involving addition/subtraction of angles.	33	2.8	31	4.0	36	3.4
R10	Yes	Determine into how many triangles a trapezoid can be divided.	40	2.6	40	4.2	40	3.8

COUNTRY ID=Germany SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	81	0.9	81	1.3	83	1.3
C01	No	Compare volumes of different stacks of blocks.	55	1.8	59	2.0	51	2.8
D11	No	Identify best unit to measure the mass of an egg.	83	1.5	84	1.9	82	2.3
E06	No	Solve word problem to find length of rectangle from width and perimeter.	33	1.6	36	2.1	29	2.2
F10	No	Determine measurement accuracy of ruler.	56	2.2	61	2.6	51	3.0
G02	No	Read meter scale to determine length of a pipe.	81	1.5	80	2.1	82	1.9
I03	Yes	Find number of 750 mL bottles filled by a large volume.	39	3.0	48	4.1	29	3.2
J10	Yes	Determine area of sheet not covered by rectangular picture.	32	3.0	35	3.8	28	4.2
K05	Yes	Calculate area of a rectangle given its length and perimeter.	17	2.3	19	3.2	16	3.6
L12	Yes	Find longest pace from chart showing number of paces to cross room.	79	2.3	81	3.0	78	3.7
M01	Yes	Read mass shown on scale.	93	1.6	95	1.5	90	2.4
N15	Yes	Identify drawing with angle closest to 30 degrees.	65	2.6	69	3.4	63	3.8
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	85	1.8	84	2.5	86	2.7
P11	Yes	Use ruler to determine approximate length of pencil.	70	2.2	72	3.6	69	3.5
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	26	2.9	31	4.0	20	3.6
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	49	3.4	45	4.0	52	4.8
S02B	Yes	Calculate length of side of square given area.	9	1.9	10	2.8	8	2.2
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	8	1.2	8	2.3	8	2.2
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	28	2.2	28	3.1	27	2.8
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	2	0.5	2	0.9	1	0.6
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	32	2.4	34	3.1	30	3.0

COUNTRY ID=Germany SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	57	1.4	66	1.5	48	1.9
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	64	1.5	64	1.8	64	2.4
D08	No	Solve ratio problem for x: $7/13 = x/52$.	59	2.0	60	2.7	57	3.0
F07	No	Solve word problem to find average speed from distance and time.	21	1.6	21	2.1	21	2.2
G04	No	Solve simple proportionality equation.	68	2.0	68	2.6	68	2.4
L14	Yes	Identify missing numbers in table of proportional x and y values.	11	1.7	11	2.6	12	2.8
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	19	2.6	24	3.7	15	3.2
Q05	Yes	Solve word problem involving ratios.	70	2.7	72	4.1	70	3.0
R14	Yes	Solve multi-step word problem involving ratios.	29	2.9	32	3.9	27	3.5
T02A	Yes	Solve algebra word problem involving ratios.	15	1.8	14	2.7	17	2.1
T02B	Yes	Solve multi-step word problem computing fractions.	5	1.1	4	1.2	7	1.8
V03	Yes	Determine ratio of red paint in a mixture.	26	2.0	27	2.8	24	3.1

COUNTRY ID=Greece SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	57	1.4	59	1.7	55	1.6
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	57	1.5	51	2.2	64	1.8
C05	No	Determine number which continues pattern based on figures.	35	1.6	32	2.3	38	2.0
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	40	1.4	38	2.0	43	2.4
E05	No	Find relationship between numbers in a set of ordered pairs.	34	1.4	34	2.0	35	2.0
F11	No	Solve multi-step problem using linear equations.	25	1.5	25	2.1	26	2.0
G06	No	Find solution to $-3X$ for given value of X .	10	0.8	8	1.0	12	1.2
H10	No	Identify equation expressing xy relationship from table of values.	23	1.4	21	1.8	24	1.9
H12	No	Select symbolic linear equation which fits word problem.	55	1.5	50	1.9	61	2.0
I01	Yes	Identify meaning of symbol in word problem equation.	20	1.7	18	2.6	21	2.6
I04	Yes	Determine next number which occurs in two number sequences.	32	2.5	29	3.4	35	3.3
J18	Yes	Identify missing number in table showing xy relationship.	30	2.4	32	3.9	27	2.8
K04	Yes	Identify expression equivalent to linear inequality.	29	2.2	29	2.9	29	3.3
L11	Yes	Solve multi-step word problem using pattern.	27	2.0	22	2.8	31	3.3
L13	Yes	Identify matching patterns of symbols.	77	2.2	76	2.8	79	2.9
L16	Yes	Simplify and solve linear equation for X .	6	1.5	7	2.1	5	1.7
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	23	2.1	15	2.2	31	2.9
O07	Yes	Solve linear equation for X .	62	2.2	61	3.4	62	3.5
P10	Yes	Identify equivalent algebraic expressions.	40	2.7	41	3.2	39	3.7
P15	Yes	Identify equivalent expression for a cubic relationship.	48	2.5	43	3.2	54	3.4
Q01	Yes	Identify linear expression based on word problem.	29	2.1	28	2.4	31	3.2
Q02	Yes	Subtract fractional expressions of X .	34	2.5	37	3.5	31	3.3
Q07	Yes	Solve $P=LW$ for W given values for P and L .	31	1.9	30	2.9	31	2.6
R09	Yes	Identify equivalent expressions from properties of real numbers.	23	1.8	23	2.7	24	2.7
R11	Yes	Solve algebra word problem: linear equation.	30	1.9	34	2.6	26	2.9
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	69	2.1	71	2.7	67	3.0
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	4	1.0	4	1.1	5	1.4
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	13	1.3	12	1.7	14	1.8
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	14	1.3	13	1.8	15	1.7

COUNTRY ID=Greece SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	68	1.0	68	1.4	69	1.3
B07	No	Interpret line graph to find region of largest increase.	48	1.5	47	2.0	49	1.9
C02	No	Interpret pie graph to determine distribution.	61	1.4	61	1.9	62	1.8
E01	No	Interpret line graph to determine intersection point of two plots.	46	1.6	47	2.1	45	2.2
F08	No	Predict probability of occurrence for independent coin toss.	48	1.5	47	2.1	50	2.4
G01	No	Interpret frequency table to find number above a given level.	49	1.6	49	2.0	48	2.3
H07	No	Interpret bar chart histogram to find number above a given level.	38	1.6	37	1.9	38	2.3
H11	No	Predict number of total defective bulbs based on random sample.	48	1.7	49	2.3	46	2.3
I09	Yes	Predict most likely color of random card based on fraction of colors.	51	2.1	53	3.5	50	2.8
J13	Yes	Draw pictograph to represent number given in table.	63	2.7	62	4.1	64	3.2
K07	Yes	Determine the number of blue pens given probability of selection.	41	2.3	41	3.4	41	3.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	78	2.2	77	3.1	79	2.9
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	61	2.2	62	3.3	59	3.1
N18	Yes	Find probability of drawing an even number from 1 to 9.	31	2.2	31	2.8	30	3.4
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	29	2.1	31	2.9	25	3.1
O05	Yes	Calculate number of cube faces from probability of toss.	34	2.1	35	2.9	32	2.9
P17	Yes	Identify thermometer which shows temperature given in data table.	66	2.1	68	3.0	65	3.4
Q04	Yes	Interpret data in bar graph.	68	2.3	65	2.8	72	3.0
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	41	2.5	40	3.0	42	3.4
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	9	1.2	7	1.3	10	1.8

COUNTRY ID=Greece SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	46	1.2	49	1.3	44	1.5
B09	No	Identify shaded figure which shows 2/5 = 4/10.	45	1.4	40	1.8	50	1.8
B10	No	Identify smallest of decimal fractions.	35	1.5	37	2.0	33	1.8
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	45	1.6	44	1.9	46	2.2
C06	No	Determine the worst estimate of: 848 + 677.	58	1.4	57	1.9	58	2.0
D09	No	Identify smallest fraction.	51	1.7	53	2.1	49	2.3
D12	No	Estimate rational number from point on number line.	69	1.4	71	1.7	65	2.1
E03	No	Find fraction of hour between two time points.	44	1.5	47	2.0	41	2.4
E04	No	Solve multi-step word problem: 4-digit whole numbers.	60	1.4	58	2.0	62	1.9
F09	No	Identify decimal fraction between 0.07 and 0.08.	53	1.6	56	2.2	49	2.1
F12	No	Identify fraction of circle which is shaded.	41	1.8	45	2.3	37	2.3
G05	No	Identify fraction represented in word problem.	56	1.8	55	2.2	57	2.1
H08	No	Identify figure showing 2/3 shaded.	70	1.1	68	1.9	72	1.8
H09	No	Identify sum which is closest to 691 + 208.	74	1.4	76	1.7	72	2.1
I02	Yes	Solve multi-step word problem: common fractions.	44	2.6	45	3.4	44	3.6
I05	Yes	Solve subtraction word problem: rational numbers.	63	2.5	58	3.0	69	4.0
I06	Yes	Write a fraction larger than a given number.	82	1.6	81	2.2	83	2.4
I07	Yes	Recognize when estimation is appropriate.	53	2.5	48	3.8	57	3.4
J12	Yes	Divide fractions.	41	2.7	37	3.9	46	3.1
J14	Yes	Divide rational numbers, fractional divisor.	38	2.5	31	3.3	46	2.9
J17	Yes	Use map and scale to find distance between two cities.	42	2.6	43	3.8	40	2.8
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	58	2.2	59	3.1	57	3.5
K02	Yes	Find total volume of mixture using rational number addition.	47	2.3	41	3.1	52	3.2
K06	Yes	Approximate amount increased by 15%.	34	2.6	38	3.3	30	3.1
K09	Yes	Compute sum of three fractions.	35	2.3	29	3.4	42	3.5
L08	Yes	Estimate actual height from diagram of relative heights.	50	2.3	53	3.6	47	3.4
L09	Yes	Identify 504.7 from its expression in words.	90	1.5	89	2.3	92	2.0
L17	Yes	Subtract three fractions.	26	2.5	28	3.4	24	3.2
M04	Yes	Identify the largest fraction.	25	2.3	28	2.9	21	3.1
M08	Yes	Multiply two decimal fractions.	44	2.4	42	3.2	46	3.6
N11	Yes	Identify number rounded to 18200.	73	3.0	72	3.7	74	3.4
N14	Yes	Identify list of equivalent fractions.	62	2.8	64	3.6	61	3.6
N16	Yes	Solve algebra word problem with fractions.	49	3.0	49	3.6	50	3.8
N17	Yes	Solve multi-step word problem: decimal fractions.	29	2.1	28	2.7	29	3.4
N19	Yes	Shade a given fraction of the squares in a grid.	28	2.1	28	3.3	28	3.1
O02	Yes	Calculate percent increase.	20	2.0	24	2.8	16	2.7
O04	Yes	Identify number rounded to the nearest 100th.	31	2.3	31	2.9	31	3.1
O09	Yes	Solve division word problem: common fractions.	22	1.9	26	2.6	16	2.5
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	59	2.3	58	3.0	60	3.5
P13	Yes	Use heart beats/min to find beats per hour.	57	2.4	56	3.3	59	3.2
P14	Yes	Solve subtraction word problem: common fractions.	61	2.5	60	3.6	62	3.2
P16	Yes	Reduce decimal to fraction in lowest terms.	16	1.9	14	2.5	18	2.7
Q06	Yes	Approximate water use/year from use/week.	29	2.3	32	3.3	26	2.9
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	26	2.1	31	3.0	20	2.6
Q09	Yes	Perform multiple operations of common fractions.	41	2.5	35	3.3	47	3.4
R06	Yes	Subtract two decimal numbers.	73	2.3	67	3.1	81	2.8
R07	Yes	Solve division word problem involving decimals.	37	2.4	39	3.2	35	3.7
R12	Yes	Subtract 4-digit whole numbers.	87	1.5	83	2.3	92	1.9
R13	Yes	Determine how much money left after spending 7/9.	21	2.1	19	2.6	23	2.9
U01A	Yes	Estimate the time required to record 5 songs.	19	1.8	24	2.3	14	2.1
U01B	Yes	Explain method of estimation.	21	1.7	24	2.0	19	2.2
V01	Yes	Determine actual weight from rounded value.	49	2.0	49	2.6	50	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Greece SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	53	1.1	50	1.5	57	1.4
B11	No	Identify cube made by folding 2-dimensional net.	40	1.5	40	1.8	40	2.1
C03	No	Identify properties of congruent trapezoids.	54	1.3	50	1.8	59	1.9
D07	No	Identify relationship of angles in symmetric polygon.	58	1.6	56	2.2	62	2.2
E02	No	Determine angle in congruent triangles.	29	1.5	28	2.0	30	2.0
G03	No	Find sum of vertical angles from diagram of intersecting lines.	33	1.4	34	2.0	32	1.9
I08	Yes	Identify point on a line defined by two other points.	32	2.2	33	3.5	32	3.3
J11	Yes	Identify properties of a parallelogram.	48	2.7	42	3.4	54	3.7
J15	Yes	Identify similar triangles of different size.	39	2.2	38	2.7	40	3.3
J16	Yes	Identify coordinates for point on a grid.	27	2.4	24	3.4	30	2.9
K03	Yes	Identify figure from rotation of 3-dimensional object.	55	2.1	55	3.1	54	2.8
K08	Yes	Determine unknown angle in rotated congruent triangles.	19	2.2	21	2.8	16	2.8
L15	Yes	Find fourth quadrilateral angle, given the other three.	27	2.3	30	3.0	25	3.2
M02	Yes	Identify all lines of symmetry for a rectangle.	50	2.4	50	2.9	51	3.5
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	27	2.2	30	3.1	24	3.1
M07	Yes	Find angle based on supplementary pairs.	56	2.7	58	3.7	54	3.3
N12	Yes	Identify point on number line from distance of other points.	53	2.7	52	3.4	53	3.6
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	27	2.1	31	2.9	23	3.0
O08	Yes	Find center point of rotation for symmetry-related figures.	43	2.7	42	3.5	44	3.9
P08	Yes	Know relationship between side and perimeter for square.	49	2.3	50	3.4	47	3.7
P09	Yes	Find length of side for similar triangles.	25	2.4	27	3.1	23	2.6
Q10	Yes	Perform calculation involving addition/subtraction of angles.	35	2.2	33	2.8	37	3.3
R10	Yes	Determine into how many triangles a trapezoid can be divided.	22	2.2	26	3.0	18	2.7

COUNTRY ID=Greece SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	52	1.4	50	1.6	55	1.6
C01	No	Compare volumes of different stacks of blocks.	39	1.6	39	2.1	41	2.1
D11	No	Identify best unit to measure the mass of an egg.	80	1.3	80	1.6	81	1.8
E06	No	Solve word problem to find length of rectangle from width and perimeter.	24	1.3	25	2.0	22	1.5
F10	No	Determine measurement accuracy of ruler.	29	1.4	32	1.8	26	1.8
G02	No	Read meter scale to determine length of a pipe.	66	1.4	66	1.8	66	2.0
I03	Yes	Find number of 750 mL bottles filled by a large volume.	25	2.4	29	3.1	21	3.2
J10	Yes	Determine area of sheet not covered by rectangular picture.	32	2.7	29	3.3	34	3.8
K05	Yes	Calculate area of a rectangle given its length and perimeter.	15	1.6	15	2.2	16	2.7
L12	Yes	Find longest pace from chart showing number of paces to cross room.	61	2.1	66	3.0	57	3.7
M01	Yes	Read mass shown on scale.	79	1.8	81	2.2	76	3.0
N15	Yes	Identify drawing with angle closest to 30 degrees.	56	2.5	56	3.2	54	3.9
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	67	2.1	70	2.9	63	2.8
P11	Yes	Use ruler to determine approximate length of pencil.	28	2.4	29	3.0	27	3.5
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	21	1.9	23	2.6	19	3.1
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	41	2.3	41	3.1	42	3.7
S02B	Yes	Calculate length of side of square given area.	5	1.3	4	1.6	7	1.9
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	7	1.3	7	2.1	6	1.6
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	15	1.4	17	1.8	12	1.6
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	4	0.7	4	0.9	4	0.9
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	25	1.8	26	2.2	24	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Greece SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	31	1.1	35	1.4	26	1.3
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	65	1.0	64	1.3	67	1.4
D08	No	Solve ratio problem for x: $7/13 = x/52$.	61	1.4	59	2.1	63	2.1
F07	No	Solve word problem to find average speed from distance and time.	20	1.2	20	1.5	20	1.6
G04	No	Solve simple proportionality equation.	52	1.7	53	1.8	52	2.6
L14	Yes	Identify missing numbers in table of proportional x and y values.	26	2.6	29	3.4	22	3.7
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	10	1.5	11	2.0	8	2.0
Q05	Yes	Solve word problem involving ratios.	55	2.4	55	3.1	54	3.4
R14	Yes	Solve multi-step word problem involving ratios.	33	2.4	28	2.9	39	3.3
T02A	Yes	Solve algebra word problem involving ratios.	10	1.3	10	1.6	9	1.8
T02B	Yes	Solve multi-step word problem computing fractions.	5	1.0	6	1.3	4	1.2
V03	Yes	Determine ratio of red paint in a mixture.	41	1.9	39	2.6	44	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hong Kong SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	76	1.4	78	1.8	73	1.6
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	88	2.1	89	2.2	86	2.8
C05	No	Determine number which continues pattern based on figures.	67	2.0	67	2.3	67	3.0
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	67	2.3	66	2.9	68	2.8
E05	No	Find relationship between numbers in a set of ordered pairs.	62	2.4	60	3.2	65	2.8
F11	No	Solve multi-step problem using linear equations.	81	2.8	80	3.8	82	3.4
G06	No	Find solution to $-3X$ for given value of X .	66	3.3	66	3.8	65	4.0
H10	No	Identify equation expressing xy relationship from table of values.	56	2.5	56	3.4	57	2.9
H12	No	Select symbolic linear equation which fits word problem.	86	1.8	84	2.4	88	2.2
I01	Yes	Identify meaning of symbol in word problem equation.	55	3.5	58	4.4	53	3.9
I04	Yes	Determine next number which occurs in two number sequences.	37	2.8	35	4.1	40	3.9
J18	Yes	Identify missing number in table showing xy relationship.	48	3.3	48	3.4	48	4.6
K04	Yes	Identify expression equivalent to linear inequality.	53	2.5	57	3.7	50	3.3
L11	Yes	Solve multi-step word problem using pattern.	34	2.8	36	3.1	31	4.1
L13	Yes	Identify matching patterns of symbols.	91	1.8	91	2.0	90	2.5
L16	Yes	Simplify and solve linear equation for X .	66	3.8	69	4.3	63	5.4
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	63	3.4	63	4.9	63	4.6
O07	Yes	Solve linear equation for X .	87	2.4	87	3.4	87	2.5
P10	Yes	Identify equivalent algebraic expressions.	72	3.3	74	4.3	71	4.6
P15	Yes	Identify equivalent expression for a cubic relationship.	79	3.0	77	3.7	83	4.2
Q01	Yes	Identify linear expression based on word problem.	64	3.4	63	4.6	66	4.4
Q02	Yes	Subtract fractional expressions of X .	76	3.1	78	3.9	74	4.3
Q07	Yes	Solve $P=LW$ for W given values for P and L .	90	2.3	89	3.2	92	2.8
R09	Yes	Identify equivalent expressions from properties of real numbers.	60	3.4	59	3.9	61	4.7
R11	Yes	Solve algebra word problem: linear equation.	70	2.9	72	3.7	67	4.0
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	83	2.7	84	3.4	83	3.8
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	43	2.8	44	3.8	42	4.0
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	44	3.2	46	4.1	41	3.7
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	51	3.5	51	4.3	50	4.2

COUNTRY ID=Hong Kong SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	83	1.2	82	1.5	83	1.4
B07	No	Interpret line graph to find region of largest increase.	79	1.7	79	2.4	79	1.9
C02	No	Interpret pie graph to determine distribution.	81	1.8	80	2.4	82	2.3
E01	No	Interpret line graph to determine intersection point of two plots.	84	1.5	85	2.0	82	2.2
F08	No	Predict probability of occurrence for independent coin toss.	54	1.7	56	2.4	51	2.4
G01	No	Interpret frequency table to find number above a given level.	44	1.8	46	2.2	41	2.6
H07	No	Interpret bar chart histogram to find number above a given level.	84	1.8	85	2.3	83	1.9
H11	No	Predict number of total defective bulbs based on random sample.	67	2.0	69	2.5	63	2.2
I09	Yes	Predict most likely color of random card based on fraction of colors.	86	2.6	87	3.0	85	3.2
J13	Yes	Draw pictograph to represent number given in table.	86	2.0	85	2.8	87	2.4
K07	Yes	Determine the number of blue pens given probability of selection.	73	3.1	69	4.0	77	4.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	85	1.9	84	2.9	87	2.7
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	85	2.5	83	3.3	87	3.2
N18	Yes	Find probability of drawing an even number from 1 to 9.	53	2.9	52	3.5	55	4.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	65	2.9	73	3.5	55	3.5
O05	Yes	Calculate number of cube faces from probability of toss.	70	3.2	75	4.1	63	3.9
P17	Yes	Identify thermometer which shows temperature given in data table.	72	2.8	69	3.9	76	3.5
Q04	Yes	Interpret data in bar graph.	89	2.0	87	3.0	91	2.1
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	59	2.5	65	3.4	51	3.3
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	25	2.3	26	2.9	23	2.7

COUNTRY ID=Hong Kong SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	80	2.1	81	2.4	78	2.4
B09	No	Identify shaded figure which shows 2/5 = 4/10.	75	2.2	74	2.6	76	2.3
B10	No	Identify smallest of decimal fractions.	69	2.6	74	2.6	62	3.8
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	56	1.5	56	2.1	55	2.1
C06	No	Determine the worst estimate of: 848 + 677.	59	2.3	61	2.7	57	3.3
D09	No	Identify smallest fraction.	87	1.8	87	2.6	87	1.9
D12	No	Estimate rational number from point on number line.	86	1.5	85	2.0	86	1.9
E03	No	Find fraction of hour between two time points.	75	2.5	77	2.8	73	3.2
E04	No	Solve multi-step word problem: 4-digit whole numbers.	82	1.8	80	2.3	84	2.2
F09	No	Identify decimal fraction between 0.07 and 0.08.	77	1.6	78	2.2	75	2.4
F12	No	Identify fraction of circle which is shaded.	68	1.7	69	2.2	65	2.2
G05	No	Identify fraction represented in word problem.	79	2.1	78	2.3	80	3.0
H08	No	Identify figure showing 2/3 shaded.	88	1.6	87	2.3	89	1.9
H09	No	Identify sum which is closest to 691 + 208.	88	1.4	88	1.8	88	1.9
I02	Yes	Solve multi-step word problem: common fractions.	76	2.7	76	3.7	75	3.5
I05	Yes	Solve subtraction word problem: rational numbers.	75	2.7	74	3.5	76	3.3
I06	Yes	Write a fraction larger than a given number.	86	2.2	90	2.3	82	3.0
I07	Yes	Recognize when estimation is appropriate.	63	3.4	59	4.5	68	3.9
J12	Yes	Divide fractions.	70	3.1	69	4.7	70	3.8
J14	Yes	Divide rational numbers, fractional divisor.	56	3.3	57	4.2	55	4.3
J17	Yes	Use map and scale to find distance between two cities.	59	2.4	58	3.4	61	3.2
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	72	2.6	71	3.6	74	3.2
K02	Yes	Find total volume of mixture using rational number addition.	66	2.8	58	3.8	75	3.2
K06	Yes	Approximate amount increased by 15%.	48	3.1	53	3.7	43	4.1
K09	Yes	Compute sum of three fractions.	72	3.6	70	5.1	75	4.1
L08	Yes	Estimate actual height from diagram of relative heights.	63	2.6	63	3.2	62	4.6
L09	Yes	Identify 504.7 from its expression in words.	91	1.8	92	2.4	89	2.5
L17	Yes	Subtract three fractions.	78	2.7	77	3.7	79	3.2
M04	Yes	Identify the largest fraction.	54	3.4	58	3.5	49	5.1
M08	Yes	Multiply two decimal fractions.	48	3.1	46	3.8	51	4.1
N11	Yes	Identify number rounded to 18200.	82	2.3	80	2.9	85	3.0
N14	Yes	Identify list of equivalent fractions.	74	2.7	76	3.2	71	4.1
N16	Yes	Solve algebra word problem with fractions.	51	3.0	49	3.7	54	4.2
N17	Yes	Solve multi-step word problem: decimal fractions.	44	2.8	44	3.6	43	4.5
N19	Yes	Shade a given fraction of the squares in a grid.	81	2.6	82	3.7	81	4.2
O02	Yes	Calculate percent increase.	47	2.9	53	3.4	38	4.7
O04	Yes	Identify number rounded to the nearest 100th.	35	2.4	41	3.4	28	3.3
O09	Yes	Solve division word problem: common fractions.	64	3.2	68	4.3	57	4.2
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	81	2.6	80	3.8	81	3.0
P13	Yes	Use heart beats/min to find beats per hour.	70	2.9	71	3.9	69	4.0
P14	Yes	Solve subtraction word problem: common fractions.	82	2.7	83	3.4	80	3.8
P16	Yes	Reduce decimal to fraction in lowest terms.	68	3.3	69	4.0	66	4.1
Q06	Yes	Approximate water use/year from use/week.	40	3.0	40	3.9	41	4.0
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	60	3.3	65	3.8	53	4.4
Q09	Yes	Perform multiple operations of common fractions.	76	2.8	74	4.3	78	2.9
R06	Yes	Subtract two decimal numbers.	72	2.5	74	3.7	69	3.8
R07	Yes	Solve division word problem involving decimals.	60	2.8	59	3.7	61	3.8
R12	Yes	Subtract 4-digit whole numbers.	90	1.4	88	2.1	92	2.0
R13	Yes	Determine how much money left after spending 7/9.	51	3.1	54	3.8	47	4.7
U01A	Yes	Estimate the time required to record 5 songs.	40	2.8	39	3.5	42	3.6
U01B	Yes	Explain method of estimation.	24	2.1	22	2.6	27	3.1
V01	Yes	Determine actual weight from rounded value.	47	3.4	48	3.9	44	4.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Hong Kong SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	70	1.9	72	2.3	69	2.3
B11	No	Identify cube made by folding 2-dimensional net.	82	1.5	85	1.8	79	2.3
C03	No	Identify properties of congruent trapezoids.	71	2.4	72	3.1	71	2.8
D07	No	Identify relationship of angles in symmetric polygon.	73	2.1	77	2.7	68	2.7
E02	No	Determine angle in congruent triangles.	69	3.1	72	3.6	66	3.8
G03	No	Find sum of vertical angles from diagram of intersecting lines.	73	2.1	73	2.8	73	2.6
I08	Yes	Identify point on a line defined by two other points.	51	2.5	52	3.4	50	3.9
J11	Yes	Identify properties of a parallelogram.	58	3.4	60	4.3	55	4.9
J15	Yes	Identify similar triangles of different size.	76	2.7	76	3.9	75	4.0
J16	Yes	Identify coordinates for point on a grid.	74	3.0	75	4.2	72	3.8
K03	Yes	Identify figure from rotation of 3-dimensional object.	72	3.0	68	3.5	76	3.9
K08	Yes	Determine unknown angle in rotated congruent triangles.	55	3.0	55	3.7	55	4.6
L15	Yes	Find fourth quadrilateral angle, given the other three.	48	3.2	49	4.4	47	4.4
M02	Yes	Identify all lines of symmetry for a rectangle.	78	2.6	80	3.3	76	3.8
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	66	2.7	67	3.7	65	4.4
M07	Yes	Find angle based on supplementary pairs.	79	2.4	79	3.1	80	3.8
N12	Yes	Identify point on number line from distance of other points.	68	3.0	69	4.2	68	3.8
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	62	3.4	64	4.5	58	4.3
O08	Yes	Find center point of rotation for symmetry-related figures.	82	3.0	84	3.9	79	3.6
P08	Yes	Know relationship between side and perimeter for square.	63	3.6	64	4.0	63	4.6
P09	Yes	Find length of side for similar triangles.	43	2.7	49	3.7	35	2.7
Q10	Yes	Perform calculation involving addition/subtraction of angles.	68	3.1	67	3.5	69	4.1
R10	Yes	Determine into how many triangles a trapezoid can be divided.	73	2.4	70	3.4	77	2.9

COUNTRY ID=Hong Kong SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	78	1.9	78	2.4	78	1.9
C01	No	Compare volumes of different stacks of blocks.	83	1.6	83	1.8	82	2.1
D11	No	Identify best unit to measure the mass of an egg.	77	2.2	78	2.7	77	2.8
E06	No	Solve word problem to find length of rectangle from width and perimeter.	54	2.7	57	3.3	51	3.2
F10	No	Determine measurement accuracy of ruler.	53	2.6	55	3.4	51	3.1
G02	No	Read meter scale to determine length of a pipe.	87	1.3	86	1.6	89	1.5
I03	Yes	Find number of 750 mL bottles filled by a large volume.	41	2.7	41	3.4	40	3.8
J10	Yes	Determine area of sheet not covered by rectangular picture.	73	3.8	73	4.9	74	4.8
K05	Yes	Calculate area of a rectangle given its length and perimeter.	63	3.3	62	4.3	63	4.8
L12	Yes	Find longest pace from chart showing number of paces to cross room.	70	2.9	70	3.8	70	3.4
M01	Yes	Read mass shown on scale.	92	1.5	91	2.2	92	2.3
N15	Yes	Identify drawing with angle closest to 30 degrees.	69	2.6	67	3.7	71	3.3
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	56	3.9	64	4.8	46	4.3
P11	Yes	Use ruler to determine approximate length of pencil.	59	2.8	59	3.7	59	4.0
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	42	2.4	45	2.9	38	3.7
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	82	2.6	84	3.4	80	3.7
S02B	Yes	Calculate length of side of square given area.	67	4.1	68	5.1	65	4.8
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	55	3.4	56	4.5	54	4.1
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	39	2.8	38	3.4	39	3.2
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	17	1.7	18	2.3	17	2.1
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	68	3.0	72	3.2	62	4.1

COUNTRY ID=Hong Kong SCALE=Proportionality

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	63	1.7	67	2.0	57	1.9
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	81	1.9	80	2.4	82	2.0
D08	No	Solve ratio problem for x: $7/13 = x/52$.	79	1.7	80	2.1	77	1.9
F07	No	Solve word problem to find average speed from distance and time.	46	2.4	49	2.8	42	2.8
G04	No	Solve simple proportionality equation.	82	2.1	82	2.8	82	2.7
L14	Yes	Identify missing numbers in table of proportional x and y values.	32	2.3	33	3.4	31	3.1
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	47	3.3	49	3.8	43	4.2
Q05	Yes	Solve word problem involving ratios.	79	2.1	84	2.6	74	3.2
R14	Yes	Solve multi-step word problem involving ratios.	52	3.3	53	4.0	50	4.2
T02A	Yes	Solve algebra word problem involving ratios.	25	2.2	23	2.8	26	3.0
T02B	Yes	Solve multi-step word problem computing fractions.	13	1.4	12	1.9	14	2.0
V03	Yes	Determine ratio of red paint in a mixture.	67	2.8	68	3.6	67	3.6

COUNTRY ID=Hungary SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	77	0.9	78	1.2	76	1.4
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	72	1.7	68	1.9	75	2.2
C05	No	Determine number which continues pattern based on figures.	52	1.7	54	2.0	51	2.3
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	40	1.5	36	2.2	45	2.0
E05	No	Find relationship between numbers in a set of ordered pairs.	61	1.5	58	2.2	64	1.9
F11	No	Solve multi-step problem using linear equations.	54	2.0	54	2.6	54	2.5
G06	No	Find solution to $-3X$ for given value of X .	53	2.1	48	2.6	57	2.7
H10	No	Identify equation expressing xy relationship from table of values.	70	1.8	66	2.3	74	2.2
H12	No	Select symbolic linear equation which fits word problem.	66	1.7	64	2.1	68	2.3
I01	Yes	Identify meaning of symbol in word problem equation.	34	2.7	37	3.9	32	3.6
I04	Yes	Determine next number which occurs in two number sequences.	42	2.6	35	3.7	49	4.0
J18	Yes	Identify missing number in table showing xy relationship.	44	2.7	40	3.8	48	3.4
K04	Yes	Identify expression equivalent to linear inequality.	42	2.8	35	3.8	48	3.8
L11	Yes	Solve multi-step word problem using pattern.	26	2.5	23	3.3	30	3.4
L13	Yes	Identify matching patterns of symbols.	93	1.6	91	2.6	94	2.3
L16	Yes	Simplify and solve linear equation for X .	51	3.2	49	4.2	53	4.8
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	59	3.1	55	4.0	63	4.2
O07	Yes	Solve linear equation for X .	79	2.1	78	3.1	80	3.3
P10	Yes	Identify equivalent algebraic expressions.	61	2.7	64	3.7	58	4.3
P15	Yes	Identify equivalent expression for a cubic relationship.	58	2.8	61	3.5	54	4.0
Q01	Yes	Identify linear expression based on word problem.	40	3.2	39	4.2	42	4.1
Q02	Yes	Subtract fractional expressions of X .	56	2.6	53	3.7	60	3.7
Q07	Yes	Solve $P=LW$ for W given values for P and L .	55	2.9	54	4.0	55	3.9
R09	Yes	Identify equivalent expressions from properties of real numbers.	44	3.1	43	3.8	46	4.0
R11	Yes	Solve algebra word problem: linear equation.	37	3.0	38	3.5	37	4.1
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	84	1.9	83	2.6	85	2.8
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	20	2.9	18	3.6	22	3.2
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	29	2.0	26	2.6	31	2.6
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	33	2.3	28	2.6	38	3.3

COUNTRY ID=Hungary SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	77	0.9	76	1.2	78	1.2
B07	No	Interpret line graph to find region of largest increase.	59	1.6	57	1.9	61	2.2
C02	No	Interpret pie graph to determine distribution.	81	1.3	83	1.8	80	2.0
E01	No	Interpret line graph to determine intersection point of two plots.	68	1.8	71	2.5	65	2.6
F08	No	Predict probability of occurrence for independent coin toss.	73	1.5	71	2.4	76	1.9
G01	No	Interpret frequency table to find number above a given level.	50	1.9	47	2.5	52	2.5
H07	No	Interpret bar chart histogram to find number above a given level.	55	1.7	58	2.3	51	2.4
H11	No	Predict number of total defective bulbs based on random sample.	62	1.6	63	2.4	61	2.1
I09	Yes	Predict most likely color of random card based on fraction of colors.	70	2.3	70	3.0	69	3.5
J13	Yes	Draw pictograph to represent number given in table.	83	2.0	82	3.3	84	2.7
K07	Yes	Determine the number of blue pens given probability of selection.	45	2.9	48	4.2	42	3.8
L10	Yes	Use data in a chart to identify time/day with highest temperature.	92	1.5	90	2.2	93	1.8
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	77	2.3	80	3.0	74	3.7
N18	Yes	Find probability of drawing an even number from 1 to 9.	36	2.5	33	3.6	40	3.3
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	57	3.0	59	3.6	55	3.7
O05	Yes	Calculate number of cube faces from probability of toss.	43	2.7	44	3.9	42	4.1
P17	Yes	Identify thermometer which shows temperature given in data table.	87	1.8	88	2.6	86	2.7
Q04	Yes	Interpret data in bar graph.	83	2.0	83	2.6	84	2.9
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	56	3.1	58	3.7	53	4.3
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	11	1.2	11	1.5	11	1.9

COUNTRY ID=Hungary SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	64	1.7	63	1.8	64	2.1
B09	No	Identify shaded figure which shows 2/5 = 4/10.	52	1.5	51	2.1	53	1.8
B10	No	Identify smallest of decimal fractions.	38	1.8	43	2.0	34	2.4
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	47	1.8	49	2.7	45	2.1
C06	No	Determine the worst estimate of: 848 + 677.	75	1.6	75	2.3	75	1.9
D09	No	Identify smallest fraction.	63	1.8	67	2.3	58	2.5
D12	No	Estimate rational number from point on number line.	70	1.6	69	2.6	71	2.0
E03	No	Find fraction of hour between two time points.	54	1.9	55	2.4	53	2.4
E04	No	Solve multi-step word problem: 4-digit whole numbers.	57	1.8	55	2.6	58	2.1
F09	No	Identify decimal fraction between 0.07 and 0.08.	56	1.5	56	2.2	55	2.4
F12	No	Identify fraction of circle which is shaded.	47	1.8	45	2.3	49	2.8
G05	No	Identify fraction represented in word problem.	42	1.9	40	2.3	44	2.5
H08	No	Identify figure showing 2/3 shaded.	71	1.7	70	2.3	71	2.0
H09	No	Identify sum which is closest to 691 + 208.	89	1.0	88	1.5	90	1.2
I02	Yes	Solve multi-step word problem: common fractions.	53	2.9	57	3.3	50	4.7
I05	Yes	Solve subtraction word problem: rational numbers.	73	2.5	68	3.8	79	2.9
I06	Yes	Write a fraction larger than a given number.	85	2.0	86	2.5	84	2.9
I07	Yes	Recognize when estimation is appropriate.	80	2.2	78	3.1	81	3.1
J12	Yes	Divide fractions.	63	2.7	59	4.2	67	3.9
J14	Yes	Divide rational numbers, fractional divisor.	57	3.2	51	4.4	63	4.0
J17	Yes	Use map and scale to find distance between two cities.	73	2.4	72	3.5	75	3.2
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	71	2.7	70	4.0	72	3.2
K02	Yes	Find total volume of mixture using rational number addition.	77	2.3	71	4.0	82	2.4
K06	Yes	Approximate amount increased by 15%.	44	2.9	45	3.8	44	3.8
K09	Yes	Compute sum of three fractions.	73	2.6	62	4.3	83	2.8
L08	Yes	Estimate actual height from diagram of relative heights.	61	2.8	59	4.1	62	3.8
L09	Yes	Identify 504.7 from its expression in words.	94	1.3	93	2.1	96	1.5
M04	Yes	Identify the largest fraction.	34	2.5	34	3.5	35	3.8
M08	Yes	Multiply two decimal fractions.	66	2.9	59	3.9	72	3.6
N11	Yes	Identify number rounded to 18200.	89	1.5	91	2.4	87	2.1
N14	Yes	Identify list of equivalent fractions.	63	2.7	59	3.5	67	4.0
N16	Yes	Solve algebra word problem with fractions.	51	2.9	49	4.4	53	4.2
N17	Yes	Solve multi-step word problem: decimal fractions.	40	2.3	42	3.0	38	3.9
N19	Yes	Shade a given fraction of the squares in a grid.	53	2.8	50	4.2	56	3.5
O02	Yes	Calculate percent increase.	36	2.3	40	3.9	32	3.0
O04	Yes	Identify number rounded to the nearest 100th.	44	2.7	48	4.1	40	3.3
O09	Yes	Solve division word problem: common fractions.	44	2.7	45	3.4	43	4.2
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	72	2.3	72	3.7	71	3.4
P13	Yes	Use heart beats/min to find beats per hour.	69	2.2	70	3.5	69	3.7
P14	Yes	Solve subtraction word problem: common fractions.	67	2.6	66	3.7	68	3.9
P16	Yes	Reduce decimal to fraction in lowest terms.	35	2.8	34	3.5	36	4.1
Q06	Yes	Approximate water use/year from use/week.	38	2.2	37	3.5	39	4.0
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	33	2.5	35	3.2	30	3.6
R06	Yes	Subtract two decimal numbers.	89	1.6	87	2.5	90	2.1
R07	Yes	Solve division word problem involving decimals.	51	3.0	52	3.7	50	4.2
R12	Yes	Subtract 4-digit whole numbers.	95	1.3	94	2.0	97	1.3
R13	Yes	Determine how much money left after spending 7/9.	34	3.0	34	3.9	35	3.9
U01A	Yes	Estimate the time required to record 5 songs.	29	1.8	29	2.6	29	2.4
U01B	Yes	Explain method of estimation.	23	1.8	22	2.3	25	2.4
V01	Yes	Determine actual weight from rounded value.	60	2.0	59	2.7	61	2.8

COUNTRY ID=Hungary SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	39	1.4	38	1.6	39	1.6
B11	No	Identify cube made by folding 2-dimensional net.	59	1.6	61	2.0	58	1.9
C03	No	Identify properties of congruent trapezoids.	66	1.8	64	2.4	68	2.4
D07	No	Identify relationship of angles in symmetric polygon.	50	1.8	53	2.5	48	2.5
E02	No	Determine angle in congruent triangles.	33	1.9	32	2.3	33	2.5
G03	No	Find sum of vertical angles from diagram of intersecting lines.	48	1.7	47	2.5	48	2.5
I08	Yes	Identify point on a line defined by two other points.	47	3.2	48	3.6	46	4.2
J11	Yes	Identify properties of a parallelogram.	42	2.7	36	3.6	49	4.2
J15	Yes	Identify similar triangles of different size.	61	2.6	61	4.0	61	3.5
J16	Yes	Identify coordinates for point on a grid.	65	3.1	63	4.0	68	4.3
K03	Yes	Identify figure from rotation of 3-dimensional object.	61	2.6	65	3.7	58	3.3
K08	Yes	Determine unknown angle in rotated congruent triangles.	28	2.4	33	4.5	25	2.9
L15	Yes	Find fourth quadrilateral angle, given the other three.	27	2.6	28	3.5	26	3.5
M02	Yes	Identify all lines of symmetry for a rectangle.	80	2.2	81	2.8	80	3.3
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	56	2.7	62	3.6	49	3.8
M07	Yes	Find angle based on supplementary pairs.	80	2.0	80	3.3	80	3.0
N12	Yes	Identify point on number line from distance of other points.	58	3.2	59	3.9	58	4.1
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	43	2.7	44	3.7	43	3.8
O08	Yes	Find center point of rotation for symmetry-related figures.	79	2.3	78	3.3	79	3.1
P08	Yes	Know relationship between side and perimeter for square.	43	3.1	44	3.9	42	3.7
P09	Yes	Find length of side for similar triangles.	39	2.5	43	3.4	34	3.8
Q10	Yes	Perform calculation involving addition/subtraction of angles.	36	2.8	35	3.6	38	4.0
R10	Yes	Determine into how many triangles a trapezoid can be divided.	53	2.5	58	3.8	48	3.8

COUNTRY ID=Hungary SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	88	0.8	89	0.9	87	1.0
C01	No	Compare volumes of different stacks of blocks.	61	1.9	63	2.3	59	2.7
D11	No	Identify best unit to measure the mass of an egg.	89	1.1	87	1.7	91	1.3
E06	No	Solve word problem to find length of rectangle from width and perimeter.	25	1.5	28	2.0	23	2.0
F10	No	Determine measurement accuracy of ruler.	61	1.7	68	2.3	54	2.4
G02	No	Read meter scale to determine length of a pipe.	76	1.5	77	2.1	74	2.2
I03	Yes	Find number of 750 mL bottles filled by a large volume.	36	3.2	36	3.9	35	4.1
J10	Yes	Determine area of sheet not covered by rectangular picture.	36	2.6	41	3.7	30	3.5
K05	Yes	Calculate area of a rectangle given its length and perimeter.	32	2.9	32	4.4	32	3.6
L12	Yes	Find longest pace from chart showing number of paces to cross room.	62	2.6	56	4.1	68	3.1
M01	Yes	Read mass shown on scale.	92	1.4	91	2.3	93	1.9
N15	Yes	Identify drawing with angle closest to 30 degrees.	71	2.3	67	3.3	76	3.3
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	84	2.2	83	2.9	85	3.0
P11	Yes	Use ruler to determine approximate length of pencil.	56	2.9	60	3.5	51	4.2
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	40	2.8	40	3.6	39	3.8
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	56	2.8	56	3.8	55	4.5
S02B	Yes	Calculate length of side of square given area.	16	2.1	18	3.1	14	2.9
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	17	2.1	19	3.2	15	2.6
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	37	1.9	38	2.5	36	2.9
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	3	0.6	5	1.1	2	0.6
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	31	2.0	32	2.5	31	2.8

COUNTRY ID=Hungary SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	43	1.5	50	1.7	36	1.7
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	65	1.7	67	2.0	64	2.4
D08	No	Solve ratio problem for x: $7/13 = x/52$.	64	1.8	66	2.4	62	2.5
F07	No	Solve word problem to find average speed from distance and time.	26	1.6	28	2.4	24	2.1
G04	No	Solve simple proportionality equation.	71	1.6	70	2.1	72	2.3
L14	Yes	Identify missing numbers in table of proportional x and y values.	19	2.1	17	2.7	21	3.5
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	37	2.7	33	2.9	40	4.0
Q05	Yes	Solve word problem involving ratios.	60	2.8	64	3.7	56	3.9
R14	Yes	Solve multi-step word problem involving ratios.	30	2.4	29	3.3	30	3.2
T02A	Yes	Solve algebra word problem involving ratios.	13	1.6	13	1.9	13	2.0
T02B	Yes	Solve multi-step word problem computing fractions.	6	0.8	6	1.3	5	1.2
V03	Yes	Determine ratio of red paint in a mixture.	29	1.9	26	2.3	32	2.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iceland SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	71	1.1	72	1.5	70	1.4
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	36	1.6	35	2.6	38	2.4
C05	No	Determine number which continues pattern based on figures.	44	2.2	40	3.2	48	2.3
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	31	2.0	31	2.7	31	2.9
E05	No	Find relationship between numbers in a set of ordered pairs.	35	2.2	33	1.9	37	4.3
F11	No	Solve multi-step problem using linear equations.	38	2.3	36	2.7	40	2.8
G06	No	Find solution to $-3X$ for given value of X .	3	0.7	3	0.9	3	1.2
H10	No	Identify equation expressing xy relationship from table of values.	15	1.4	14	2.5	16	1.2
H12	No	Select symbolic linear equation which fits word problem.	63	2.1	59	3.1	67	2.4
I01	Yes	Identify meaning of symbol in word problem equation.	30	3.8	32	5.1	29	4.7
I04	Yes	Determine next number which occurs in two number sequences.	27	3.5	24	5.1	30	4.7
J18	Yes	Identify missing number in table showing xy relationship.	41	3.4	42	4.5	40	5.1
K04	Yes	Identify expression equivalent to linear inequality.	28	2.5	28	4.4	27	5.2
L11	Yes	Solve multi-step word problem using pattern.	23	3.4	23	3.5	24	6.5
L13	Yes	Identify matching patterns of symbols.	83	2.5	79	4.3	87	2.9
L16	Yes	Simplify and solve linear equation for X .	5	1.6	6	2.6	4	1.8
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	9	1.7	10	2.8	9	3.2
O07	Yes	Solve linear equation for X .	45	3.7	48	5.0	43	4.2
P10	Yes	Identify equivalent algebraic expressions.	35	3.0	35	4.8	35	3.5
P15	Yes	Identify equivalent expression for a cubic relationship.	18	2.1	15	3.7	20	3.5
Q01	Yes	Identify linear expression based on word problem.	11	2.2	7	2.4	14	3.1
Q02	Yes	Subtract fractional expressions of X .	24	3.3	26	4.1	23	4.9
Q07	Yes	Solve $P=LW$ for W given values for P and L .	29	3.5	28	5.1	30	4.0
R09	Yes	Identify equivalent expressions from properties of real numbers.	19	2.3	15	2.9	22	3.7
R11	Yes	Solve algebra word problem: linear equation.	40	4.0	40	5.5	41	5.4
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	74	3.5	75	5.1	73	4.8
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	6	1.7	4	2.0	9	2.9
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	13	1.7	12	1.9	13	3.0
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	11	1.3	9	1.7	12	2.6

COUNTRY ID=Iceland SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	66	1.4	63	1.8	70	1.9
B07	No	Interpret line graph to find region of largest increase.	73	1.9	72	2.4	74	2.9
C02	No	Interpret pie graph to determine distribution.	75	1.7	75	2.6	75	2.5
E01	No	Interpret line graph to determine intersection point of two plots.	58	2.1	60	2.8	54	2.9
F08	No	Predict probability of occurrence for independent coin toss.	54	2.8	59	3.2	49	3.4
G01	No	Interpret frequency table to find number above a given level.	64	1.7	62	2.7	67	3.0
H07	No	Interpret bar chart histogram to find number above a given level.	71	2.2	72	2.3	70	3.3
H11	No	Predict number of total defective bulbs based on random sample.	49	1.9	53	2.1	45	3.2
I09	Yes	Predict most likely color of random card based on fraction of colors.	74	3.1	72	4.5	77	4.1
J13	Yes	Draw pictograph to represent number given in table.	87	2.8	84	3.5	90	3.3
K07	Yes	Determine the number of blue pens given probability of selection.	31	2.9	32	4.3	30	3.7
L10	Yes	Use data in a chart to identify time/day with highest temperature.	88	2.0	91	2.8	85	3.8
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	76	3.0	79	3.3	73	5.5
N18	Yes	Find probability of drawing an even number from 1 to 9.	52	3.3	58	4.8	45	5.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	37	3.6	39	5.5	36	4.8
O05	Yes	Calculate number of cube faces from probability of toss.	36	2.9	40	5.2	31	3.7
P17	Yes	Identify thermometer which shows temperature given in data table.	69	3.3	67	6.2	70	4.6
Q04	Yes	Interpret data in bar graph.	87	2.3	83	3.8	90	2.9
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	37	3.2	37	4.7	37	3.8
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	6	1.3	5	1.0	7	2.1

COUNTRY ID=Iceland SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	42	1.5	45	1.7	39	2.3
B09	No	Identify shaded figure which shows 2/5 = 4/10.	48	1.8	45	2.3	51	2.4
B10	No	Identify smallest of decimal fractions.	59	1.7	64	2.5	54	2.7
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	47	2.1	47	2.9	46	3.0
C06	No	Determine the worst estimate of: 848 + 677.	67	2.3	66	2.7	67	2.9
D09	No	Identify smallest fraction.	84	1.5	82	1.9	86	2.4
D12	No	Estimate rational number from point on number line.	77	1.8	78	2.1	77	3.4
E03	No	Find fraction of hour between two time points.	59	2.5	62	3.0	56	3.3
E04	No	Solve multi-step word problem: 4-digit whole numbers.	61	2.2	53	3.4	69	2.5
F09	No	Identify decimal fraction between 0.07 and 0.08.	71	2.0	70	3.1	73	2.6
F12	No	Identify fraction of circle which is shaded.	55	2.2	58	2.8	53	2.6
G05	No	Identify fraction represented in word problem.	51	2.2	50	2.9	52	3.6
H08	No	Identify figure showing 2/3 shaded.	76	1.8	76	2.5	76	2.2
H09	No	Identify sum which is closest to 691 + 208.	87	1.2	87	2.0	88	1.8
I02	Yes	Solve multi-step word problem: common fractions.	50	3.4	55	5.6	45	3.4
I05	Yes	Solve subtraction word problem: rational numbers.	64	3.6	60	5.1	69	4.5
I06	Yes	Write a fraction larger than a given number.	82	3.4	77	5.7	87	3.3
I07	Yes	Recognize when estimation is appropriate.	65	2.9	65	5.1	65	4.4
J12	Yes	Divide fractions.	0	0.4	1	0.8	.	.
J14	Yes	Divide rational numbers, fractional divisor.	8	2.1	14	3.7	3	1.6
J17	Yes	Use map and scale to find distance between two cities.	69	3.2	64	4.1	73	4.2
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	74	3.5	79	4.7	67	5.0
K02	Yes	Find total volume of mixture using rational number addition.	55	4.2	49	5.3	63	4.7
K06	Yes	Approximate amount increased by 15%.	39	3.8	48	5.0	27	4.7
K09	Yes	Compute sum of three fractions.	2	0.9	1	0.9	3	1.8
L08	Yes	Estimate actual height from diagram of relative heights.	56	3.7	58	5.8	55	5.4
L09	Yes	Identify 504.7 from its expression in words.	66	3.8	67	5.1	65	4.9
L17	Yes	Subtract three fractions.	19	2.8	22	3.9	15	4.0
M04	Yes	Identify the largest fraction.	34	4.3	41	5.3	26	5.0
M08	Yes	Multiply two decimal fractions.	24	3.1	20	4.5	28	6.0
N11	Yes	Identify number rounded to 18200.	86	2.4	87	3.0	84	3.6
N14	Yes	Identify list of equivalent fractions.	40	3.6	42	4.6	38	4.9
N16	Yes	Solve algebra word problem with fractions.	47	4.2	49	5.0	45	6.2
N17	Yes	Solve multi-step word problem: decimal fractions.	39	4.0	40	4.3	37	5.6
N19	Yes	Shade a given fraction of the squares in a grid.	38	3.7	42	6.2	33	3.7
O02	Yes	Calculate percent increase.	9	1.9	12	3.2	6	1.8
O09	Yes	Solve division word problem: common fractions.	36	3.0	44	4.0	27	4.6
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	70	3.7	64	5.9	75	3.9
P13	Yes	Use heart beats/min to find beats per hour.	50	3.0	46	5.2	53	4.8
P14	Yes	Solve subtraction word problem: common fractions.	81	3.1	76	4.3	84	4.0
P16	Yes	Reduce decimal to fraction in lowest terms.	1	0.6	1	1.5	.	.
Q06	Yes	Approximate water use/year from use/week.	35	3.0	34	5.8	36	3.8
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	42	3.1	45	6.0	39	4.3
Q09	Yes	Perform multiple operations of common fractions.	12	2.0	15	4.1	9	2.5
R06	Yes	Subtract two decimal numbers.	76	4.0	69	6.1	80	4.5
R07	Yes	Solve division word problem involving decimals.	30	3.6	30	5.3	31	5.0
R12	Yes	Subtract 4-digit whole numbers.	91	2.0	90	3.2	92	2.6
R13	Yes	Determine how much money left after spending 7/9.	20	3.8	22	4.6	19	4.5
U01A	Yes	Estimate the time required to record 5 songs.	30	2.7	35	3.7	22	3.5
U01B	Yes	Explain method of estimation.	18	1.8	20	2.6	16	2.6
V01	Yes	Determine actual weight from rounded value.	51	2.6	52	3.8	50	3.3

COUNTRY ID=Iceland SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	47	1.3	46	1.6	49	1.8
B11	No	Identify cube made by folding 2-dimensional net.	68	1.6	67	2.3	69	2.6
C03	No	Identify properties of congruent trapezoids.	51	1.9	45	2.5	56	3.2
D07	No	Identify relationship of angles in symmetric polygon.	38	1.7	39	2.9	37	2.1
E02	No	Determine angle in congruent triangles.	29	1.6	32	2.3	27	2.6
G03	No	Find sum of vertical angles from diagram of intersecting lines.	32	2.1	32	2.9	31	2.9
I08	Yes	Identify point on a line defined by two other points.	39	4.2	45	5.0	33	5.8
J11	Yes	Identify properties of a parallelogram.	41	4.7	41	6.2	41	5.3
J15	Yes	Identify similar triangles of different size.	61	3.2	54	4.8	67	4.9
J16	Yes	Identify coordinates for point on a grid.	52	4.0	45	4.9	58	5.6
K03	Yes	Identify figure from rotation of 3-dimensional object.	71	3.1	75	3.8	65	4.4
K08	Yes	Determine unknown angle in rotated congruent triangles.	24	3.2	26	3.6	22	4.8
L15	Yes	Find fourth quadrilateral angle, given the other three.	29	3.1	33	3.9	25	4.8
M02	Yes	Identify all lines of symmetry for a rectangle.	76	2.4	69	3.5	83	3.2
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	59	3.7	59	4.6	60	5.5
M07	Yes	Find angle based on supplementary pairs.	78	3.8	79	4.2	77	5.4
N12	Yes	Identify point on number line from distance of other points.	65	2.9	61	4.6	69	4.1
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	31	3.6	27	4.9	34	4.5
O08	Yes	Find center point of rotation for symmetry-related figures.	39	2.8	36	5.4	42	6.4
P08	Yes	Know relationship between side and perimeter for square.	28	2.7	29	4.6	27	4.1
P09	Yes	Find length of side for similar triangles.	32	3.5	35	5.2	29	4.4
Q10	Yes	Perform calculation involving addition/subtraction of angles.	28	2.7	27	4.5	29	3.9
R10	Yes	Determine into how many triangles a trapezoid can be divided.	58	3.4	51	5.8	63	4.6

COUNTRY ID=Iceland SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	50	1.7	50	1.5	50	2.9
C01	No	Compare volumes of different stacks of blocks.	59	2.4	60	3.0	57	2.9
D11	No	Identify best unit to measure the mass of an egg.	79	1.5	79	1.9	79	2.2
E06	No	Solve word problem to find length of rectangle from width and perimeter.	21	2.0	22	2.9	20	2.2
F10	No	Determine measurement accuracy of ruler.	43	2.5	46	2.7	41	3.5
G02	No	Read meter scale to determine length of a pipe.	78	1.6	79	2.3	77	2.4
I03	Yes	Find number of 750 mL bottles filled by a large volume.	32	3.2	32	4.5	31	4.8
J10	Yes	Determine area of sheet not covered by rectangular picture.	21	3.5	20	4.4	22	5.0
K05	Yes	Calculate area of a rectangle given its length and perimeter.	20	3.0	19	3.4	21	4.5
L12	Yes	Find longest pace from chart showing number of paces to cross room.	71	3.6	74	5.1	67	5.1
M01	Yes	Read mass shown on scale.	86	2.2	85	3.7	87	2.9
N15	Yes	Identify drawing with angle closest to 30 degrees.	76	2.6	77	3.6	75	3.9
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	60	3.4	62	5.8	57	4.9
P11	Yes	Use ruler to determine approximate length of pencil.	27	3.6	28	5.2	26	5.2
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	20	2.6	22	3.8	19	3.4
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	33	3.3	27	4.4	40	4.8
S02B	Yes	Calculate length of side of square given area.	7	2.2	3	1.7	10	3.7
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	9	2.2	11	3.4	7	2.5
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	11	1.4	12	1.9	11	2.6
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	1	0.6	1	0.6	2	1.1
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	30	2.1	30	3.8	31	3.5

COUNTRY ID=Iceland SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	55	1.8	63	1.8	46	2.4
B08	No	Solve word problem using proportions: 300 calories/100g = $?/30g$.	58	1.7	59	2.2	57	2.6
D08	No	Solve ratio problem for x: $7/13 = x/52$.	59	2.6	58	3.3	60	3.1
F07	No	Solve word problem to find average speed from distance and time.	20	1.6	23	2.2	16	2.4
G04	No	Solve simple proportionality equation.	48	2.5	52	3.7	44	2.7
L14	Yes	Identify missing numbers in table of proportional x and y values.	9	2.0	12	2.2	6	3.0
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	21	3.3	25	3.8	18	4.6
Q05	Yes	Solve word problem involving ratios.	70	3.4	76	4.6	65	4.8
R14	Yes	Solve multi-step word problem involving ratios.	15	2.7	14	3.6	15	3.7
T02A	Yes	Solve algebra word problem involving ratios.	12	1.8	9	2.6	15	2.8
T02B	Yes	Solve multi-step word problem computing fractions.	2	0.7	3	1.0	2	1.0
V03	Yes	Determine ratio of red paint in a mixture.	26	2.2	27	2.9	26	2.8

COUNTRY ID=Iran, Islamic Rep. SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	57	2.5	62	3.3	50	2.8
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	36	1.6	35	2.5	38	2.0
C05	No	Determine number which continues pattern based on figures.	27	1.6	28	2.3	25	2.3
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	27	2.4	24	4.0	30	2.0
E05	No	Find relationship between numbers in a set of ordered pairs.	28	2.9	29	4.9	27	2.9
F11	No	Solve multi-step problem using linear equations.	25	1.5	23	2.3	28	1.9
G06	No	Find solution to $-3X$ for given value of X .	25	1.8	26	2.7	23	2.4
H10	No	Identify equation expressing xy relationship from table of values.	23	1.7	25	2.7	20	2.0
H12	No	Select symbolic linear equation which fits word problem.	43	2.9	42	4.2	43	4.0
I01	Yes	Identify meaning of symbol in word problem equation.	23	3.2	24	3.9	22	5.2
I04	Yes	Determine next number which occurs in two number sequences.	20	3.2	17	5.2	25	4.7
J18	Yes	Identify missing number in table showing xy relationship.	25	3.6	25	4.6	26	5.4
K04	Yes	Identify expression equivalent to linear inequality.	33	3.5	31	5.8	36	3.6
L11	Yes	Solve multi-step word problem using pattern.	30	3.3	23	4.4	41	4.3
L13	Yes	Identify matching patterns of symbols.	88	2.2	88	2.9	89	3.6
L16	Yes	Simplify and solve linear equation for X .	3	0.7	2	0.8	3	1.3
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	15	2.8	14	4.3	16	3.4
O07	Yes	Solve linear equation for X .	36	4.5	41	6.5	30	5.4
P10	Yes	Identify equivalent algebraic expressions.	31	3.3	30	4.9	32	3.5
P15	Yes	Identify equivalent expression for a cubic relationship.	37	3.8	34	6.0	40	4.7
Q01	Yes	Identify linear expression based on word problem.	29	3.2	29	3.7	29	5.2
Q02	Yes	Subtract fractional expressions of X .	13	1.9	11	2.1	16	3.3
Q07	Yes	Solve $P=LW$ for W given values for P and L .	27	3.1	30	4.5	22	4.3
R09	Yes	Identify equivalent expressions from properties of real numbers.	25	2.2	30	2.8	20	3.5
R11	Yes	Solve algebra word problem: linear equation.	37	5.1	38	8.5	34	4.3
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	64	3.0	62	4.2	65	4.4
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	2	0.8	4	1.3	1	0.7
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	8	1.4	9	2.0	7	2.2
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	8	1.1	8	1.9	7	1.8

COUNTRY ID=Iran, Islamic Rep. SCALE=Data Rep., Analysis & Prob.

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	68	1.3	67	1.7	70	2.3
B07	No	Interpret line graph to find region of largest increase.	19	1.3	19	1.9	19	2.1
C02	No	Interpret pie graph to determine distribution.	60	1.8	64	2.1	55	2.8
E01	No	Interpret line graph to determine intersection point of two plots.	22	1.4	23	1.9	21	2.4
F08	No	Predict probability of occurrence for independent coin toss.	26	1.4	27	2.0	26	1.9
G01	No	Interpret frequency table to find number above a given level.	38	1.6	39	2.4	38	2.4
H07	No	Interpret bar chart histogram to find number above a given level.	36	1.5	34	1.8	40	2.8
H11	No	Predict number of total defective bulbs based on random sample.	39	1.7	45	2.0	32	2.3
I09	Yes	Predict most likely color of random card based on fraction of colors.	23	3.0	27	5.1	17	3.2
J13	Yes	Draw pictograph to represent number given in table.	52	3.3	57	3.6	46	5.6
K07	Yes	Determine the number of blue pens given probability of selection.	36	2.9	40	4.1	33	4.9
L10	Yes	Use data in a chart to identify time/day with highest temperature.	72	3.1	74	4.5	70	4.2
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	31	5.4	37	8.8	25	4.9
N18	Yes	Find probability of drawing an even number from 1 to 9.	31	2.8	31	2.9	30	5.2
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	17	3.2	16	4.7	19	3.8
O05	Yes	Calculate number of cube faces from probability of toss.	26	2.4	26	3.2	27	3.8
P17	Yes	Identify thermometer which shows temperature given in data table.	54	5.7	57	8.8	50	6.9
Q04	Yes	Interpret data in bar graph.	75	3.0	74	4.7	77	3.5
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	31	6.1	32	10.1	30	5.0
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	1	0.4	0	0.5	1	0.6

COUNTRY ID=Iran, Islamic Rep. SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	34	1.3	38	1.6	28	1.6
B09	No	Identify shaded figure which shows 2/5 = 4/10.	52	1.5	50	2.2	55	2.1
B10	No	Identify smallest of decimal fractions.	9	1.3	10	2.0	8	1.1
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	33	2.2	32	3.3	34	2.7
C06	No	Determine the worst estimate of: 848 + 677.	49	2.5	54	3.1	42	3.2
D09	No	Identify smallest fraction.	38	2.4	42	2.7	33	4.1
D12	No	Estimate rational number from point on number line.	21	1.9	19	3.0	23	1.7
E03	No	Find fraction of hour between two time points.	23	2.5	25	3.9	21	3.0
E04	No	Solve multi-step word problem: 4-digit whole numbers.	59	1.9	61	2.3	57	2.8
F09	No	Identify decimal fraction between 0.07 and 0.08.	28	1.6	29	2.0	27	2.3
F12	No	Identify fraction of circle which is shaded.	30	1.5	31	1.7	30	2.6
G05	No	Identify fraction represented in word problem.	44	2.8	45	4.5	41	3.0
H08	No	Identify figure showing 2/3 shaded.	75	3.0	76	4.6	73	3.4
H09	No	Identify sum which is closest to 691 + 208.	52	2.1	57	2.5	44	2.8
I02	Yes	Solve multi-step word problem: common fractions.	22	2.5	24	4.2	20	3.4
I05	Yes	Solve subtraction word problem: rational numbers.	48	4.3	48	7.3	49	4.1
I06	Yes	Write a fraction larger than a given number.	38	4.0	37	5.9	40	5.4
I07	Yes	Recognize when estimation is appropriate.	32	2.8	34	3.1	29	5.0
J12	Yes	Divide fractions.	35	3.2	33	3.8	37	5.6
J14	Yes	Divide rational numbers, fractional divisor.	20	2.9	21	4.1	20	4.1
J17	Yes	Use map and scale to find distance between two cities.	30	3.0	37	4.2	21	3.3
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	42	3.4	50	3.3	32	5.0
K02	Yes	Find total volume of mixture using rational number addition.	44	3.2	45	4.2	43	5.2
K06	Yes	Approximate amount increased by 15%.	12	1.9	13	2.8	10	2.7
K09	Yes	Compute sum of three fractions.	31	3.6	26	5.0	38	4.3
L08	Yes	Estimate actual height from diagram of relative heights.	41	5.5	52	8.5	25	4.5
L09	Yes	Identify 504.7 from its expression in words.	68	2.9	68	3.7	69	4.9
L17	Yes	Subtract three fractions.	17	2.5	13	2.9	23	3.9
M04	Yes	Identify the largest fraction.	8	1.4	10	2.3	5	1.5
M08	Yes	Multiply two decimal fractions.	37	2.4	39	2.9	34	4.0
N11	Yes	Identify number rounded to 18200.	40	2.7	39	3.0	40	5.0
N14	Yes	Identify list of equivalent fractions.	60	5.1	65	8.0	54	4.1
N16	Yes	Solve algebra word problem with fractions.	45	3.6	47	4.4	43	6.0
N17	Yes	Solve multi-step word problem: decimal fractions.	33	2.5	32	2.9	35	4.1
N19	Yes	Shade a given fraction of the squares in a grid.	24	2.5	28	3.3	19	3.5
O02	Yes	Calculate percent increase.	15	2.9	14	4.1	16	3.8
O04	Yes	Identify number rounded to the nearest 100th.	33	2.6	36	3.1	30	4.4
O09	Yes	Solve division word problem: common fractions.	19	2.1	23	2.7	13	2.7
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	38	4.6	39	7.4	36	4.3
P13	Yes	Use heart beats/min to find beats per hour.	33	3.8	32	6.0	34	4.1
P14	Yes	Solve subtraction word problem: common fractions.	47	2.5	51	3.8	41	4.1
P16	Yes	Reduce decimal to fraction in lowest terms.	48	4.5	43	6.6	55	4.8
Q06	Yes	Approximate water use/year from use/week.	16	3.1	18	5.1	13	2.5
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	11	2.2	11	2.6	12	3.5
Q09	Yes	Perform multiple operations of common fractions.	40	4.1	36	6.2	47	4.8
R06	Yes	Subtract two decimal numbers.	60	3.1	54	3.2	67	5.8
R07	Yes	Solve division word problem involving decimals.	23	2.7	23	3.9	23	3.5
R12	Yes	Subtract 4-digit whole numbers.	86	2.4	85	3.3	87	3.5
R13	Yes	Determine how much money left after spending 7/9.	19	3.5	23	5.0	14	3.4
U01A	Yes	Estimate the time required to record 5 songs.	6	1.4	5	1.7	8	2.3
U01B	Yes	Explain method of estimation.	9	1.3	7	1.8	11	2.0
V01	Yes	Determine actual weight from rounded value.	5	1.6	7	2.6	4	1.3

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Iran, Islamic Rep. SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	44	2.6	43	4.3	45	2.0
B11	No	Identify cube made by folding 2-dimensional net.	25	2.7	25	4.5	25	2.4
C03	No	Identify properties of congruent trapezoids.	36	1.6	38	2.6	32	2.3
D07	No	Identify relationship of angles in symmetric polygon.	40	1.8	42	2.5	36	2.7
E02	No	Determine angle in congruent triangles.	33	1.9	32	2.8	33	3.1
G03	No	Find sum of vertical angles from diagram of intersecting lines.	40	1.9	42	2.6	37	3.0
I08	Yes	Identify point on a line defined by two other points.	22	3.0	24	4.3	19	3.8
J11	Yes	Identify properties of a parallelogram.	30	3.3	29	4.5	31	4.7
J15	Yes	Identify similar triangles of different size.	47	2.5	50	3.1	44	4.5
J16	Yes	Identify coordinates for point on a grid.	27	2.7	21	3.6	34	3.7
K03	Yes	Identify figure from rotation of 3-dimensional object.	52	3.9	55	5.8	48	4.3
K08	Yes	Determine unknown angle in rotated congruent triangles.	28	3.8	31	5.4	23	4.9
L15	Yes	Find fourth quadrilateral angle, given the other three.	26	3.4	32	4.1	19	4.2
M02	Yes	Identify all lines of symmetry for a rectangle.	68	3.3	64	3.3	72	5.3
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	32	2.8	34	4.2	31	4.0
M07	Yes	Find angle based on supplementary pairs.	58	2.8	59	3.7	56	4.5
N12	Yes	Identify point on number line from distance of other points.	51	5.8	55	9.5	46	4.7
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	41	2.9	40	4.0	43	4.2
O08	Yes	Find center point of rotation for symmetry-related figures.	50	3.4	45	4.1	57	5.2
P08	Yes	Know relationship between side and perimeter for square.	57	3.9	64	5.2	47	4.3
P09	Yes	Find length of side for similar triangles.	25	3.8	23	4.6	28	6.2
Q10	Yes	Perform calculation involving addition/subtraction of angles.	35	5.5	37	9.6	31	3.7
R10	Yes	Determine into how many triangles a trapezoid can be divided.	46	5.1	51	8.1	38	4.9

COUNTRY ID=Iran, Islamic Rep. SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	8	0.9	8	1.5	8	0.9
C01	No	Compare volumes of different stacks of blocks.	24	2.2	28	3.0	20	2.6
D11	No	Identify best unit to measure the mass of an egg.	72	2.0	78	2.2	63	3.1
E06	No	Solve word problem to find length of rectangle from width and perimeter.	16	1.0	17	1.4	14	1.5
F10	No	Determine measurement accuracy of ruler.	17	1.2	18	1.3	17	2.3
G02	No	Read meter scale to determine length of a pipe.	27	1.9	28	2.5	25	2.5
I03	Yes	Find number of 750 mL bottles filled by a large volume.	23	3.3	22	4.1	25	5.2
J10	Yes	Determine area of sheet not covered by rectangular picture.	26	3.2	29	4.4	21	4.1
K05	Yes	Calculate area of a rectangle given its length and perimeter.	5	1.3	8	2.2	3	1.1
L12	Yes	Find longest pace from chart showing number of paces to cross room.	40	3.3	42	4.5	36	4.6
M01	Yes	Read mass shown on scale.	61	2.7	65	4.0	57	4.4
N15	Yes	Identify drawing with angle closest to 30 degrees.	52	3.1	54	4.3	47	3.7
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	17	2.5	19	4.4	14	2.6
P11	Yes	Use ruler to determine approximate length of pencil.	34	2.9	39	4.1	27	3.8
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	21	3.0	23	4.4	18	3.5
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	26	2.9	29	4.9	24	3.1
S02B	Yes	Calculate length of side of square given area.	1	0.6	2	0.8	1	0.7
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	0	0.1	.	.	0	0.3
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	13	2.0	16	3.3	10	1.9
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	4	1.1	4	1.5	3	1.7
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	21	2.3	19	3.8	24	2.5

COUNTRY ID=Iran, Islamic Rep. SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	53	1.7	59	1.9	44	2.2
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	62	1.5	63	2.5	61	2.1
D08	No	Solve ratio problem for x: $7/13 = x/52$.	49	2.6	50	4.5	47	2.0
F07	No	Solve word problem to find average speed from distance and time.	16	1.2	18	1.8	14	1.7
G04	No	Solve simple proportionality equation.	48	1.9	50	2.7	44	2.7
L14	Yes	Identify missing numbers in table of proportional x and y values.	20	3.0	17	3.3	24	5.0
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	19	2.6	18	3.4	20	3.7
Q05	Yes	Solve word problem involving ratios.	51	3.3	53	3.7	47	5.1
R14	Yes	Solve multi-step word problem involving ratios.	15	2.3	16	3.3	13	2.7
T02A	Yes	Solve algebra word problem involving ratios.	5	1.0	5	1.3	5	1.2
T02B	Yes	Solve multi-step word problem computing fractions.	1	0.4	1	0.7	0	0.2
V03	Yes	Determine ratio of red paint in a mixture.	27	2.2	29	3.1	25	3.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Ireland SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	68	1.2	73	1.5	64	1.6
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	60	1.6	63	2.3	57	2.1
C05	No	Determine number which continues pattern based on figures.	54	1.6	53	2.3	54	2.0
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	36	1.6	37	2.5	36	2.0
E05	No	Find relationship between numbers in a set of ordered pairs.	59	2.1	59	3.3	60	2.3
F11	No	Solve multi-step problem using linear equations.	61	2.1	64	3.1	58	2.4
G06	No	Find solution to $-3X$ for given value of X .	33	1.9	36	3.2	30	2.2
H10	No	Identify equation expressing xy relationship from table of values.	32	1.7	32	3.1	31	1.8
H12	No	Select symbolic linear equation which fits word problem.	80	1.6	78	2.4	82	1.9
I01	Yes	Identify meaning of symbol in word problem equation.	33	2.6	30	3.5	36	3.7
I04	Yes	Determine next number which occurs in two number sequences.	52	3.0	49	4.5	54	3.6
J18	Yes	Identify missing number in table showing xy relationship.	37	2.9	39	4.2	35	3.7
K04	Yes	Identify expression equivalent to linear inequality.	43	2.6	42	3.4	44	3.9
L11	Yes	Solve multi-step word problem using pattern.	35	2.4	34	3.4	36	3.6
L13	Yes	Identify matching patterns of symbols.	92	1.6	92	2.3	93	2.2
L16	Yes	Simplify and solve linear equation for X .	38	3.4	41	4.8	34	4.5
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	48	3.3	47	4.3	49	4.1
O07	Yes	Solve linear equation for X .	65	2.6	64	3.9	66	3.6
P10	Yes	Identify equivalent algebraic expressions.	39	2.9	41	4.2	38	4.1
P15	Yes	Identify equivalent expression for a cubic relationship.	62	2.7	62	4.2	62	3.7
Q01	Yes	Identify linear expression based on word problem.	44	2.1	40	3.0	47	3.3
Q02	Yes	Subtract fractional expressions of X .	31	2.4	32	3.3	30	3.3
Q07	Yes	Solve $P=LW$ for W given values for P and L .	54	2.3	53	3.7	55	3.4
R09	Yes	Identify equivalent expressions from properties of real numbers.	33	2.7	33	4.1	34	3.6
R11	Yes	Solve algebra word problem: linear equation.	36	2.5	38	3.5	34	3.5
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	72	2.2	69	3.4	74	3.2
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	19	2.0	22	3.2	17	2.8
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	29	1.8	35	3.3	24	2.0
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	32	1.9	38	3.1	27	2.3

COUNTRY ID=Ireland SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	84	0.9	84	1.3	85	1.2
B07	No	Interpret line graph to find region of largest increase.	61	1.8	62	2.1	60	2.5
C02	No	Interpret pie graph to determine distribution.	78	1.7	80	2.0	76	2.3
E01	No	Interpret line graph to determine intersection point of two plots.	62	1.8	65	2.4	59	2.5
F08	No	Predict probability of occurrence for independent coin toss.	62	1.6	63	2.3	61	2.3
G01	No	Interpret frequency table to find number above a given level.	46	1.8	51	2.7	43	2.3
H07	No	Interpret bar chart histogram to find number above a given level.	75	1.6	74	2.2	77	2.1
H11	No	Predict number of total defective bulbs based on random sample.	60	1.9	62	2.6	58	2.4
I09	Yes	Predict most likely color of random card based on fraction of colors.	81	2.2	86	3.2	77	2.7
J13	Yes	Draw pictograph to represent number given in table.	84	2.0	81	3.2	88	2.3
K07	Yes	Determine the number of blue pens given probability of selection.	69	2.5	68	4.0	70	2.6
L10	Yes	Use data in a chart to identify time/day with highest temperature.	90	1.5	91	2.3	89	2.4
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	76	2.3	76	3.4	76	3.1
N18	Yes	Find probability of drawing an even number from 1 to 9.	59	3.0	62	4.1	57	4.5
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	50	2.6	55	3.6	47	3.7
O05	Yes	Calculate number of cube faces from probability of toss.	58	2.4	58	3.8	57	3.6
P17	Yes	Identify thermometer which shows temperature given in data table.	80	2.1	79	3.3	80	2.8
Q04	Yes	Interpret data in bar graph.	90	1.6	87	2.6	92	1.8
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	40	2.6	46	4.0	35	3.5
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	18	1.6	18	2.4	17	2.1

COUNTRY ID=Ireland SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	63	1.6	68	2.1	58	2.2
B09	No	Identify shaded figure which shows 2/5 = 4/10.	53	1.8	52	2.6	54	2.5
B10	No	Identify smallest of decimal fractions.	44	2.1	50	2.9	38	2.4
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	51	1.5	52	2.4	51	1.9
C06	No	Determine the worst estimate of: 848 + 677.	79	1.4	79	2.0	79	1.7
D09	No	Identify smallest fraction.	88	1.1	90	1.5	86	1.5
D12	No	Estimate rational number from point on number line.	77	1.5	81	2.1	73	2.0
E03	No	Find fraction of hour between two time points.	69	1.8	72	3.0	68	2.2
E04	No	Solve multi-step word problem: 4-digit whole numbers.	75	2.0	72	3.0	77	2.3
F09	No	Identify decimal fraction between 0.07 and 0.08.	64	1.7	66	2.4	63	2.4
F12	No	Identify fraction of circle which is shaded.	62	1.7	65	2.3	60	2.3
G05	No	Identify fraction represented in word problem.	69	1.7	71	2.4	68	2.4
H08	No	Identify figure showing 2/3 shaded.	85	1.4	85	2.0	86	1.9
H09	No	Identify sum which is closest to 691 + 208.	88	1.0	90	1.4	87	1.6
I02	Yes	Solve multi-step word problem: common fractions.	69	2.5	72	3.6	67	3.6
I05	Yes	Solve subtraction word problem: rational numbers.	82	2.1	82	3.0	82	2.9
I06	Yes	Write a fraction larger than a given number.	83	1.9	86	3.0	81	2.4
I07	Yes	Recognize when estimation is appropriate.	76	2.4	71	3.5	79	3.3
J12	Yes	Divide fractions.	49	2.9	46	4.4	53	3.7
J14	Yes	Divide rational numbers, fractional divisor.	41	2.4	43	3.6	40	3.5
J17	Yes	Use map and scale to find distance between two cities.	58	2.9	66	4.3	50	3.6
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	69	2.6	73	2.8	65	4.0
K02	Yes	Find total volume of mixture using rational number addition.	71	2.4	70	3.9	72	3.1
K06	Yes	Approximate amount increased by 15%.	44	3.0	48	4.3	41	4.4
K09	Yes	Compute sum of three fractions.	55	2.9	54	4.5	56	3.5
L08	Yes	Estimate actual height from diagram of relative heights.	60	2.6	65	3.5	55	3.6
L09	Yes	Identify 504.7 from its expression in words.	80	2.9	79	4.1	81	3.5
L17	Yes	Subtract three fractions.	55	3.2	55	4.9	56	3.8
M04	Yes	Identify the largest fraction.	48	3.0	52	4.7	45	3.9
M08	Yes	Multiply two decimal fractions.	42	2.5	44	4.0	41	3.0
N11	Yes	Identify number rounded to 18200.	92	1.7	91	2.4	93	2.2
N14	Yes	Identify list of equivalent fractions.	74	2.6	70	3.3	77	3.3
N16	Yes	Solve algebra word problem with fractions.	46	2.8	45	3.7	47	3.8
N17	Yes	Solve multi-step word problem: decimal fractions.	44	2.9	45	3.4	43	4.1
N19	Yes	Shade a given fraction of the squares in a grid.	65	3.0	68	4.1	61	3.6
O02	Yes	Calculate percent increase.	35	2.5	41	3.7	29	3.3
O04	Yes	Identify number rounded to the nearest 100th.	35	2.7	33	4.2	36	3.4
O09	Yes	Solve division word problem: common fractions.	61	2.8	66	4.2	57	3.6
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	75	2.5	79	3.2	73	3.5
P13	Yes	Use heart beats/min to find beats per hour.	62	2.5	66	3.1	59	3.9
P14	Yes	Solve subtraction word problem: common fractions.	86	1.7	85	2.8	88	2.4
P16	Yes	Reduce decimal to fraction in lowest terms.	66	2.3	62	3.6	70	2.8
Q06	Yes	Approximate water use/year from use/week.	43	2.6	42	3.7	43	3.3
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	33	2.4	43	3.3	26	3.3
Q09	Yes	Perform multiple operations of common fractions.	63	2.5	59	4.2	66	3.4
R06	Yes	Subtract two decimal numbers.	85	1.9	83	2.7	87	2.7
R07	Yes	Solve division word problem involving decimals.	39	2.6	45	3.9	34	3.7
R12	Yes	Subtract 4-digit whole numbers.	93	1.5	93	1.9	92	2.0
R13	Yes	Determine how much money left after spending 7/9.	44	2.7	46	4.3	42	3.8
U01A	Yes	Estimate the time required to record 5 songs.	45	2.1	48	3.5	42	2.5
U01B	Yes	Explain method of estimation.	40	2.5	41	4.0	39	2.8
V01	Yes	Determine actual weight from rounded value.	65	2.1	71	2.7	60	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Ireland SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	35	1.0	36	1.4	35	1.3
B11	No	Identify cube made by folding 2-dimensional net.	47	1.5	49	2.3	46	2.0
C03	No	Identify properties of congruent trapezoids.	54	2.0	52	3.1	56	2.4
D07	No	Identify relationship of angles in symmetric polygon.	38	1.8	43	2.5	33	2.5
E02	No	Determine angle in congruent triangles.	32	1.6	33	2.1	30	2.3
G03	No	Find sum of vertical angles from diagram of intersecting lines.	47	1.7	48	2.9	47	2.1
I08	Yes	Identify point on a line defined by two other points.	45	2.7	48	4.1	43	3.5
J11	Yes	Identify properties of a parallelogram.	44	2.5	44	3.5	44	3.3
J15	Yes	Identify similar triangles of different size.	55	3.0	59	3.5	52	4.4
J16	Yes	Identify coordinates for point on a grid.	27	2.2	30	3.3	25	3.2
K03	Yes	Identify figure from rotation of 3-dimensional object.	69	2.2	75	3.2	64	3.4
K08	Yes	Determine unknown angle in rotated congruent triangles.	26	2.2	28	3.4	24	3.1
L15	Yes	Find fourth quadrilateral angle, given the other three.	32	2.7	30	3.8	34	4.2
M02	Yes	Identify all lines of symmetry for a rectangle.	59	2.6	57	4.0	60	3.3
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	28	2.5	27	3.8	29	3.0
M07	Yes	Find angle based on supplementary pairs.	56	2.9	62	4.4	51	3.9
N12	Yes	Identify point on number line from distance of other points.	61	2.9	67	4.2	55	3.4
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	35	2.4	40	3.2	30	3.4
O08	Yes	Find center point of rotation for symmetry-related figures.	48	2.9	51	4.2	46	3.7
P08	Yes	Know relationship between side and perimeter for square.	47	2.6	49	3.4	45	3.6
P09	Yes	Find length of side for similar triangles.	33	2.5	31	3.2	34	3.6
Q10	Yes	Perform calculation involving addition/subtraction of angles.	31	2.5	32	3.9	30	3.3
R10	Yes	Determine into how many triangles a trapezoid can be divided.	30	2.2	29	3.4	31	2.9

COUNTRY ID=Ireland SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	63	1.6	64	2.2	62	1.9
C01	No	Compare volumes of different stacks of blocks.	42	1.8	49	2.5	35	2.3
D11	No	Identify best unit to measure the mass of an egg.	73	1.7	76	2.3	71	2.4
E06	No	Solve word problem to find length of rectangle from width and perimeter.	33	1.6	37	2.6	30	2.1
F10	No	Determine measurement accuracy of ruler.	49	1.8	55	2.3	43	2.4
G02	No	Read meter scale to determine length of a pipe.	72	1.5	75	2.4	69	2.0
I03	Yes	Find number of 750 mL bottles filled by a large volume.	37	2.5	38	4.0	36	3.4
J10	Yes	Determine area of sheet not covered by rectangular picture.	35	2.7	41	4.4	30	3.3
K05	Yes	Calculate area of a rectangle given its length and perimeter.	29	2.5	35	4.2	24	2.7
L12	Yes	Find longest pace from chart showing number of paces to cross room.	81	2.1	83	3.1	79	2.9
M01	Yes	Read mass shown on scale.	83	2.2	87	2.5	79	3.0
N15	Yes	Identify drawing with angle closest to 30 degrees.	54	2.6	60	3.8	48	4.1
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	83	2.0	84	2.6	83	3.0
P11	Yes	Use ruler to determine approximate length of pencil.	40	3.1	46	4.3	36	4.0
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	35	2.4	35	3.4	36	3.5
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	72	2.8	72	4.5	72	3.3
S02B	Yes	Calculate length of side of square given area.	15	2.2	19	3.6	12	2.3
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	13	1.7	15	2.4	12	2.4
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	26	2.1	27	3.1	25	2.5
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	18	1.7	20	2.8	16	1.7
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	34	2.2	42	3.2	28	2.8

COUNTRY ID=Ireland SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	54	1.3	62	1.8	48	1.8
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	71	1.5	73	2.3	70	1.6
D08	No	Solve ratio problem for x: $7/13 = x/52$.	78	1.6	79	2.5	77	1.8
F07	No	Solve word problem to find average speed from distance and time.	28	1.4	28	2.2	27	2.1
G04	No	Solve simple proportionality equation.	77	1.8	77	2.4	77	2.3
L14	Yes	Identify missing numbers in table of proportional x and y values.	21	2.1	21	3.2	22	2.7
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	56	2.9	64	4.1	50	3.6
Q05	Yes	Solve word problem involving ratios.	71	2.7	72	3.5	70	3.6
R14	Yes	Solve multi-step word problem involving ratios.	32	2.8	36	3.9	30	3.9
T02A	Yes	Solve algebra word problem involving ratios.	22	1.9	25	3.0	20	2.3
T02B	Yes	Solve multi-step word problem computing fractions.	9	0.9	10	1.4	8	1.3
V03	Yes	Determine ratio of red paint in a mixture.	37	1.9	33	3.1	41	2.2

COUNTRY ID=Japan SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	82	0.6	84	0.8	80	0.8
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	83	0.9	82	1.2	85	1.1
C05	No	Determine number which continues pattern based on figures.	65	1.3	65	1.4	65	1.9
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	55	1.2	53	1.7	57	1.5
E05	No	Find relationship between numbers in a set of ordered pairs.	76	1.0	78	1.4	75	1.4
F11	No	Solve multi-step problem using linear equations.	68	1.3	69	1.6	66	1.7
G06	No	Find solution to $-3X$ for given value of X .	68	1.3	69	1.8	67	1.8
H10	No	Identify equation expressing xy relationship from table of values.	72	1.1	73	1.6	71	1.5
H12	No	Select symbolic linear equation which fits word problem.	82	0.9	82	1.4	82	1.2
I01	Yes	Identify meaning of symbol in word problem equation.	50	1.9	50	2.6	49	3.2
I04	Yes	Determine next number which occurs in two number sequences.	52	2.1	54	2.9	49	2.6
J18	Yes	Identify missing number in table showing xy relationship.	48	2.3	53	3.5	44	2.9
K04	Yes	Identify expression equivalent to linear inequality.	47	2.3	53	2.8	40	3.0
L11	Yes	Solve multi-step word problem using pattern.	38	2.2	36	3.1	40	2.7
L13	Yes	Identify matching patterns of symbols.	97	0.6	96	1.0	98	0.8
L16	Yes	Simplify and solve linear equation for X .	74	1.8	72	2.4	77	2.5
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	57	2.0	58	2.8	56	3.0
O07	Yes	Solve linear equation for X .	85	1.7	84	2.2	86	2.2
P10	Yes	Identify equivalent algebraic expressions.	60	2.0	64	2.8	57	2.5
P15	Yes	Identify equivalent expression for a cubic relationship.	86	1.6	87	2.1	84	2.3
Q01	Yes	Identify linear expression based on word problem.	48	2.3	45	3.3	52	2.8
Q02	Yes	Subtract fractional expressions of X .	64	2.2	66	2.8	62	2.8
Q07	Yes	Solve $P=LW$ for W given values for P and L .	84	1.6	84	2.2	84	2.2
R09	Yes	Identify equivalent expressions from properties of real numbers.	48	1.9	44	2.7	53	2.7
R11	Yes	Solve algebra word problem: linear equation.	62	2.0	66	3.2	56	3.2
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	89	1.4	87	2.1	90	1.6
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	43	2.2	44	2.7	43	3.0
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	41	1.7	42	2.3	41	2.3
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	45	1.9	45	2.4	44	2.4

COUNTRY ID=Japan SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	85	0.6	84	0.8	86	0.7
B07	No	Interpret line graph to find region of largest increase.	85	0.8	84	1.2	87	0.8
C02	No	Interpret pie graph to determine distribution.	90	0.8	90	1.1	90	1.0
E01	No	Interpret line graph to determine intersection point of two plots.	96	0.4	96	0.7	96	0.7
F08	No	Predict probability of occurrence for independent coin toss.	48	1.3	54	1.5	42	1.8
G01	No	Interpret frequency table to find number above a given level.	45	1.2	47	1.5	42	1.8
H07	No	Interpret bar chart histogram to find number above a given level.	82	1.0	81	1.4	83	1.4
H11	No	Predict number of total defective bulbs based on random sample.	67	1.2	69	1.6	64	1.9
I09	Yes	Predict most likely color of random card based on fraction of colors.	80	1.9	80	2.3	79	2.5
J13	Yes	Draw pictograph to represent number given in table.	93	0.9	91	1.8	95	1.2
K07	Yes	Determine the number of blue pens given probability of selection.	67	1.8	68	2.6	66	2.6
L10	Yes	Use data in a chart to identify time/day with highest temperature.	94	1.0	94	1.5	93	1.5
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	81	1.7	81	2.2	81	2.2
N18	Yes	Find probability of drawing an even number from 1 to 9.	81	1.7	82	2.2	79	2.6
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	71	1.9	74	2.8	68	2.3
O05	Yes	Calculate number of cube faces from probability of toss.	69	2.1	71	2.8	66	2.7
P17	Yes	Identify thermometer which shows temperature given in data table.	76	1.7	72	2.5	81	2.3
Q04	Yes	Interpret data in bar graph.	81	1.7	79	2.5	83	2.3
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	68	1.8	74	2.5	61	2.5
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	38	1.5	38	2.2	37	1.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Japan SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	77	0.6	76	0.9	77	0.9
B09	No	Identify shaded figure which shows 2/5 = 4/10.	75	0.9	73	1.3	78	1.2
B10	No	Identify smallest of decimal fractions.	69	1.0	76	1.3	62	1.4
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	52	1.3	53	1.7	50	1.8
C06	No	Determine the worst estimate of: 848 + 677.	68	1.1	69	1.3	68	1.7
D09	No	Identify smallest fraction.	88	0.9	91	1.0	86	1.3
D12	No	Estimate rational number from point on number line.	93	0.6	94	0.8	92	0.8
E03	No	Find fraction of hour between two time points.	70	1.2	71	1.8	68	1.5
E04	No	Solve multi-step word problem: 4-digit whole numbers.	82	0.9	80	1.6	84	1.2
F09	No	Identify decimal fraction between 0.07 and 0.08.	80	1.0	82	1.4	78	1.4
F12	No	Identify fraction of circle which is shaded.	56	1.1	59	1.6	54	1.4
G05	No	Identify fraction represented in word problem.	65	1.1	65	1.5	66	1.7
H08	No	Identify figure showing 2/3 shaded.	89	0.8	86	1.1	91	1.0
H09	No	Identify sum which is closest to 691 + 208.	93	0.7	94	0.8	91	1.1
I02	Yes	Solve multi-step word problem: common fractions.	73	2.0	74	2.8	72	2.6
I05	Yes	Solve subtraction word problem: rational numbers.	84	1.6	81	2.2	87	2.1
I06	Yes	Write a fraction larger than a given number.	85	1.3	86	1.8	84	1.9
I07	Yes	Recognize when estimation is appropriate.	70	1.9	63	2.6	77	2.6
J12	Yes	Divide fractions.	79	1.6	79	2.4	79	2.2
J14	Yes	Divide rational numbers, fractional divisor.	62	2.0	61	2.9	64	2.6
J17	Yes	Use map and scale to find distance between two cities.	76	1.7	78	2.2	73	2.4
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	80	1.5	83	2.0	77	2.7
K02	Yes	Find total volume of mixture using rational number addition.	82	1.6	84	2.0	79	2.3
K06	Yes	Approximate amount increased by 15%.	49	2.0	55	2.9	43	2.6
K09	Yes	Compute sum of three fractions.	83	1.5	81	2.2	84	2.3
L08	Yes	Estimate actual height from diagram of relative heights.	72	1.5	78	2.4	66	2.5
L09	Yes	Identify 504.7 from its expression in words.	87	1.1	85	1.9	89	1.9
L17	Yes	Subtract three fractions.	73	1.9	71	2.8	76	2.4
M04	Yes	Identify the largest fraction.	57	2.2	59	2.7	55	3.1
M08	Yes	Multiply two decimal fractions.	63	1.8	59	2.6	67	2.5
N11	Yes	Identify number rounded to 18200.	90	1.3	89	1.8	91	1.8
N14	Yes	Identify list of equivalent fractions.	79	1.7	81	2.2	77	2.5
N16	Yes	Solve algebra word problem with fractions.	52	2.3	53	3.0	50	3.1
N19	Yes	Shade a given fraction of the squares in a grid.	74	1.8	72	2.6	76	2.1
O02	Yes	Calculate percent increase.	34	2.0	44	2.9	23	2.2
O04	Yes	Identify number rounded to the nearest 100th.	56	2.0	55	2.7	58	3.1
O09	Yes	Solve division word problem: common fractions.	51	2.1	55	3.1	47	2.4
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	83	1.6	83	2.2	83	1.9
P13	Yes	Use heart beats/min to find beats per hour.	76	1.8	79	2.4	74	2.4
P14	Yes	Solve subtraction word problem: common fractions.	85	1.5	83	2.0	87	2.0
P16	Yes	Reduce decimal to fraction in lowest terms.	61	2.5	59	3.4	63	3.0
Q06	Yes	Approximate water use/year from use/week.	38	1.8	40	2.3	36	2.8
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	59	2.2	66	2.3	50	3.3
Q09	Yes	Perform multiple operations of common fractions.	84	1.5	82	2.1	87	2.0
R06	Yes	Subtract two decimal numbers.	80	1.9	78	2.5	82	2.4
R07	Yes	Solve division word problem involving decimals.	68	1.8	70	2.4	66	3.2
R12	Yes	Subtract 4-digit whole numbers.	89	1.4	90	1.8	89	2.0
R13	Yes	Determine how much money left after spending 7/9.	46	2.1	53	2.6	39	2.9
U01A	Yes	Estimate the time required to record 5 songs.	74	1.1	75	1.5	73	1.8
U01B	Yes	Explain method of estimation.	59	1.6	57	1.9	60	2.2
V01	Yes	Determine actual weight from rounded value.	67	1.3	67	1.9	66	1.8

COUNTRY ID=Japan SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	72	0.7	71	1.1	73	1.0
B11	No	Identify cube made by folding 2-dimensional net.	87	0.7	88	0.8	85	1.0
C03	No	Identify properties of congruent trapezoids.	77	1.1	75	1.6	80	1.4
D07	No	Identify relationship of angles in symmetric polygon.	71	1.1	73	1.5	69	1.7
E02	No	Determine angle in congruent triangles.	54	1.2	56	1.7	52	1.9
G03	No	Find sum of vertical angles from diagram of intersecting lines.	70	1.1	71	1.4	69	1.8
I08	Yes	Identify point on a line defined by two other points.	39	2.1	39	2.9	38	3.0
J15	Yes	Identify similar triangles of different size.	85	1.4	85	2.0	85	2.1
J16	Yes	Identify coordinates for point on a grid.	80	1.7	76	2.7	84	1.8
K03	Yes	Identify figure from rotation of 3-dimensional object.	74	1.9	77	2.4	71	3.0
K08	Yes	Determine unknown angle in rotated congruent triangles.	40	2.1	45	3.0	34	2.6
L15	Yes	Find fourth quadrilateral angle, given the other three.	42	2.2	41	3.3	44	2.7
M02	Yes	Identify all lines of symmetry for a rectangle.	82	1.6	80	2.6	84	2.1
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	81	1.6	82	2.3	80	2.4
M07	Yes	Find angle based on supplementary pairs.	87	1.2	86	2.0	87	1.9
N12	Yes	Identify point on number line from distance of other points.	78	1.7	82	2.0	73	2.7
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	65	1.8	65	2.9	66	2.6
O08	Yes	Find center point of rotation for symmetry-related figures.	87	1.5	88	1.7	86	2.1
P08	Yes	Know relationship between side and perimeter for square.	76	1.8	75	2.5	77	2.4
P09	Yes	Find length of side for similar triangles.	54	2.2	53	2.8	54	3.2
Q10	Yes	Perform calculation involving addition/subtraction of angles.	76	1.7	78	2.5	74	2.3
R10	Yes	Determine into how many triangles a trapezoid can be divided.	76	1.9	76	2.5	76	2.7

COUNTRY ID=Japan SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	64	0.8	65	1.1	63	1.0
C01	No	Compare volumes of different stacks of blocks.	81	1.1	79	1.4	82	1.4
D11	No	Identify best unit to measure the mass of an egg.	96	0.4	96	0.6	96	0.6
E06	No	Solve word problem to find length of rectangle from width and perimeter.	60	1.2	62	1.9	58	1.7
F10	No	Determine measurement accuracy of ruler.	36	1.1	39	1.6	32	1.3
G02	No	Read meter scale to determine length of a pipe.	94	0.6	93	0.9	94	0.7
I03	Yes	Find number of 750 mL bottles filled by a large volume.	38	2.6	42	3.4	34	3.0
J10	Yes	Determine area of sheet not covered by rectangular picture.	80	1.7	77	2.2	83	2.1
K05	Yes	Calculate area of a rectangle given its length and perimeter.	59	2.1	59	2.9	59	3.3
L12	Yes	Find longest pace from chart showing number of paces to cross room.	81	1.7	83	2.3	79	2.2
M01	Yes	Read mass shown on scale.	94	1.0	93	1.5	96	1.2
N15	Yes	Identify drawing with angle closest to 30 degrees.	77	2.0	75	2.8	79	2.5
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	61	2.1	61	2.9	60	2.8
P11	Yes	Use ruler to determine approximate length of pencil.	52	2.2	52	2.9	53	3.0
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	55	1.9	61	2.6	48	2.6
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	86	1.6	84	2.3	88	1.9
S02B	Yes	Calculate length of side of square given area.	43	1.9	50	2.8	35	2.8
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	44	2.0	48	2.9	39	2.5
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	73	1.3	75	2.0	72	1.9

COUNTRY ID=Japan SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	67	0.9	76	1.0	58	1.2
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	59	1.1	59	1.5	58	1.7
D08	No	Solve ratio problem for x: $7/13 = x/52$.	75	1.2	76	1.8	74	1.6
F07	No	Solve word problem to find average speed from distance and time.	42	1.2	50	1.9	35	1.6
G04	No	Solve simple proportionality equation.	77	1.2	78	1.7	76	1.4
L14	Yes	Identify missing numbers in table of proportional x and y values.	48	2.2	50	2.6	46	2.9
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	47	1.9	46	2.5	48	2.8
Q05	Yes	Solve word problem involving ratios.	76	1.9	79	2.2	73	2.6
R14	Yes	Solve multi-step word problem involving ratios.	61	2.2	62	3.1	60	2.9
T02A	Yes	Solve algebra word problem involving ratios.	33	1.7	33	2.2	32	2.0
T02B	Yes	Solve multi-step word problem computing fractions.	15	1.3	17	1.8	12	1.4
V03	Yes	Determine ratio of red paint in a mixture.	57	1.5	57	2.0	58	2.1

COUNTRY ID=Korea SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	78	0.8	78	1.1	78	1.2
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	79	1.3	79	1.8	80	1.7
C05	No	Determine number which continues pattern based on figures.	69	1.2	69	1.9	68	1.9
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	64	2.2	62	3.3	67	2.3
E05	No	Find relationship between numbers in a set of ordered pairs.	80	1.3	81	1.7	79	2.1
F11	No	Solve multi-step problem using linear equations.	74	1.5	76	2.0	72	2.5
G06	No	Find solution to $-3X$ for given value of X .	72	1.5	73	2.1	70	2.2
H10	No	Identify equation expressing xy relationship from table of values.	82	1.3	84	1.5	78	2.1
H12	No	Select symbolic linear equation which fits word problem.	77	1.1	77	1.3	77	1.9
I01	Yes	Identify meaning of symbol in word problem equation.	49	3.2	52	4.6	44	3.5
I04	Yes	Determine next number which occurs in two number sequences.	63	3.2	62	4.4	64	4.1
J18	Yes	Identify missing number in table showing xy relationship.	59	2.9	61	3.8	56	4.6
K04	Yes	Identify expression equivalent to linear inequality.	55	2.8	59	3.2	51	4.6
L11	Yes	Solve multi-step word problem using pattern.	37	2.6	40	3.0	33	4.4
L13	Yes	Identify matching patterns of symbols.	96	1.2	97	1.3	96	2.1
L16	Yes	Simplify and solve linear equation for X .	65	2.7	67	3.4	61	4.6
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	63	2.8	67	4.2	58	4.0
O07	Yes	Solve linear equation for X .	87	1.9	87	2.6	87	2.9
P10	Yes	Identify equivalent algebraic expressions.	56	3.1	57	4.2	55	4.2
P15	Yes	Identify equivalent expression for a cubic relationship.	82	2.0	80	2.7	85	3.0
Q01	Yes	Identify linear expression based on word problem.	60	3.2	56	4.4	66	4.3
Q02	Yes	Subtract fractional expressions of X .	51	2.6	51	3.4	51	4.4
Q07	Yes	Solve $P=LW$ for W given values for P and L .	76	2.3	73	3.0	81	3.4
R09	Yes	Identify equivalent expressions from properties of real numbers.	57	3.0	59	3.9	54	4.7
R11	Yes	Solve algebra word problem: linear equation.	57	2.9	56	3.8	60	4.3
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	80	2.6	80	3.7	81	3.7
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	32	2.8	32	4.1	31	3.5
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	35	2.2	38	3.4	30	2.7
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	39	2.3	42	3.2	35	2.8

COUNTRY ID=Korea SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	89	0.7	90	0.9	89	1.0
B07	No	Interpret line graph to find region of largest increase.	86	1.1	85	1.5	86	1.6
C02	No	Interpret pie graph to determine distribution.	89	0.9	89	1.4	90	1.2
E01	No	Interpret line graph to determine intersection point of two plots.	81	1.3	85	1.3	75	2.4
F08	No	Predict probability of occurrence for independent coin toss.	49	2.0	54	2.4	41	2.8
G01	No	Interpret frequency table to find number above a given level.	83	1.3	82	1.5	84	1.9
H07	No	Interpret bar chart histogram to find number above a given level.	91	1.0	91	1.2	90	1.3
H11	No	Predict number of total defective bulbs based on random sample.	78	1.2	82	1.4	73	1.9
I09	Yes	Predict most likely color of random card based on fraction of colors.	65	2.7	68	3.1	61	4.3
J13	Yes	Draw pictograph to represent number given in table.	92	1.7	94	2.1	89	2.6
K07	Yes	Determine the number of blue pens given probability of selection.	72	2.5	70	3.3	75	3.5
L10	Yes	Use data in a chart to identify time/day with highest temperature.	82	2.4	80	3.5	85	2.7
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	86	2.0	86	2.7	86	2.9
N18	Yes	Find probability of drawing an even number from 1 to 9.	85	2.0	87	2.9	82	2.5
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	61	2.5	68	3.1	50	4.2
O05	Yes	Calculate number of cube faces from probability of toss.	66	2.7	68	3.6	62	4.4
P17	Yes	Identify thermometer which shows temperature given in data table.	80	2.1	78	2.8	84	3.1
Q04	Yes	Interpret data in bar graph.	74	2.5	74	3.3	75	3.9
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	55	2.5	63	3.3	43	3.5
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	38	2.1	44	2.9	30	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Korea SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	74	0.8	76	1.2	73	1.6
B09	No	Identify shaded figure which shows 2/5 = 4/10.	78	1.1	79	1.2	75	1.9
B10	No	Identify smallest of decimal fractions.	77	1.2	80	1.5	73	1.7
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	69	1.5	72	1.9	65	2.3
C06	No	Determine the worst estimate of: 848 + 677.	78	1.4	80	1.8	75	2.5
D09	No	Identify smallest fraction.	80	1.2	82	1.5	76	2.2
D12	No	Estimate rational number from point on number line.	79	1.2	81	1.2	77	2.4
E03	No	Find fraction of hour between two time points.	66	1.6	71	1.7	59	2.5
E04	No	Solve multi-step word problem: 4-digit whole numbers.	88	1.1	90	1.2	85	1.7
F09	No	Identify decimal fraction between 0.07 and 0.08.	79	1.4	82	1.6	75	2.2
F12	No	Identify fraction of circle which is shaded.	49	1.4	49	2.1	49	2.2
G05	No	Identify fraction represented in word problem.	84	1.6	83	2.4	85	2.2
H08	No	Identify figure showing 2/3 shaded.	87	1.1	89	1.3	84	1.8
H09	No	Identify sum which is closest to 691 + 208.	91	0.9	92	1.1	88	1.4
I02	Yes	Solve multi-step word problem: common fractions.	72	2.9	72	4.9	71	3.4
I05	Yes	Solve subtraction word problem: rational numbers.	90	1.7	90	2.1	89	2.6
I06	Yes	Write a fraction larger than a given number.	77	2.3	83	2.8	68	2.8
I07	Yes	Recognize when estimation is appropriate.	52	2.6	53	4.1	52	4.0
J12	Yes	Divide fractions.	81	1.8	78	2.7	86	3.2
J14	Yes	Divide rational numbers, fractional divisor.	56	3.4	56	4.7	56	4.4
J17	Yes	Use map and scale to find distance between two cities.	65	2.1	65	3.3	65	3.8
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	76	2.5	77	3.8	75	3.5
K02	Yes	Find total volume of mixture using rational number addition.	71	2.5	71	3.2	70	3.8
K06	Yes	Approximate amount increased by 15%.	44	2.9	43	3.8	45	4.5
K09	Yes	Compute sum of three fractions.	76	2.5	76	3.7	76	3.7
L08	Yes	Estimate actual height from diagram of relative heights.	71	2.5	76	3.0	64	4.2
L09	Yes	Identify 504.7 from its expression in words.	85	1.9	86	2.5	83	2.8
L17	Yes	Subtract three fractions.	76	2.7	79	3.0	71	4.1
M04	Yes	Identify the largest fraction.	63	3.1	65	4.0	60	4.2
M08	Yes	Multiply two decimal fractions.	57	2.9	55	3.5	59	4.6
N11	Yes	Identify number rounded to 18200.	86	2.1	87	3.1	85	3.0
N14	Yes	Identify list of equivalent fractions.	86	1.8	87	2.7	86	3.0
N16	Yes	Solve algebra word problem with fractions.	50	2.5	49	4.2	52	3.0
N17	Yes	Solve multi-step word problem: decimal fractions.	41	2.9	46	4.1	34	4.1
N19	Yes	Shade a given fraction of the squares in a grid.	77	2.4	79	4.1	74	3.0
O02	Yes	Calculate percent increase.	36	3.1	41	4.0	27	4.1
O04	Yes	Identify number rounded to the nearest 100th.	68	2.8	72	3.6	63	3.8
O09	Yes	Solve division word problem: common fractions.	53	2.8	58	3.7	46	4.5
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	81	2.1	84	2.7	78	3.2
P13	Yes	Use heart beats/min to find beats per hour.	77	2.7	78	3.3	76	4.4
P14	Yes	Solve subtraction word problem: common fractions.	71	2.7	69	3.6	73	4.2
P16	Yes	Reduce decimal to fraction in lowest terms.	59	2.9	57	3.8	62	4.2
Q06	Yes	Approximate water use/year from use/week.	47	2.9	47	3.8	47	4.7
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	56	2.9	61	4.1	48	4.2
Q09	Yes	Perform multiple operations of common fractions.	83	2.1	81	3.0	86	3.0
R06	Yes	Subtract two decimal numbers.	85	1.9	86	2.2	84	3.6
R07	Yes	Solve division word problem involving decimals.	64	2.2	67	3.3	59	3.3
R12	Yes	Subtract 4-digit whole numbers.	91	1.6	94	1.6	86	3.4
R13	Yes	Determine how much money left after spending 7/9.	46	2.9	48	3.7	42	4.1
U01A	Yes	Estimate the time required to record 5 songs.	53	2.0	55	2.5	49	3.1
U01B	Yes	Explain method of estimation.	50	1.9	52	2.6	47	2.9
V01	Yes	Determine actual weight from rounded value.	80	1.6	83	2.1	75	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Korea SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	84	0.7	84	1.0	84	1.2
B11	No	Identify cube made by folding 2-dimensional net.	80	1.0	83	1.3	75	1.7
C03	No	Identify properties of congruent trapezoids.	80	1.9	79	3.2	80	1.5
D07	No	Identify relationship of angles in symmetric polygon.	74	1.5	76	2.3	72	2.2
E02	No	Determine angle in congruent triangles.	70	1.4	71	2.0	67	2.2
G03	No	Find sum of vertical angles from diagram of intersecting lines.	80	1.3	81	2.0	79	2.0
I08	Yes	Identify point on a line defined by two other points.	42	3.0	44	4.1	40	4.4
J11	Yes	Identify properties of a parallelogram.	59	2.3	58	3.0	61	4.0
J15	Yes	Identify similar triangles of different size.	82	2.1	80	2.5	83	3.2
J16	Yes	Identify coordinates for point on a grid.	79	2.2	77	2.5	83	3.3
K03	Yes	Identify figure from rotation of 3-dimensional object.	62	2.5	65	3.8	59	4.0
K08	Yes	Determine unknown angle in rotated congruent triangles.	55	2.8	58	3.6	52	4.4
L15	Yes	Find fourth quadrilateral angle, given the other three.	58	2.9	59	4.0	57	4.4
M02	Yes	Identify all lines of symmetry for a rectangle.	49	3.0	53	4.2	44	3.7
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	52	3.0	56	4.2	46	4.1
M07	Yes	Find angle based on supplementary pairs.	77	2.5	77	3.0	78	3.9
N12	Yes	Identify point on number line from distance of other points.	80	2.7	83	3.2	77	3.9
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	77	2.5	80	3.2	73	3.7
O08	Yes	Find center point of rotation for symmetry-related figures.	83	2.0	85	2.4	81	3.0
P08	Yes	Know relationship between side and perimeter for square.	77	2.0	77	2.5	78	3.9
P09	Yes	Find length of side for similar triangles.	57	2.5	62	3.2	50	4.6
Q10	Yes	Perform calculation involving addition/subtraction of angles.	82	2.3	81	2.6	83	3.3
R10	Yes	Determine into how many triangles a trapezoid can be divided.	80	2.2	82	2.3	78	4.1

COUNTRY ID=Korea SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	90	0.7	90	1.0	89	1.1
C01	No	Compare volumes of different stacks of blocks.	87	1.0	89	1.3	84	1.6
D11	No	Identify best unit to measure the mass of an egg.	90	0.9	92	1.2	88	1.6
E06	No	Solve word problem to find length of rectangle from width and perimeter.	57	1.9	59	3.0	54	2.8
F10	No	Determine measurement accuracy of ruler.	52	1.7	54	2.1	49	2.3
G02	No	Read meter scale to determine length of a pipe.	91	1.0	92	1.3	89	1.3
I03	Yes	Find number of 750 mL bottles filled by a large volume.	31	2.9	33	3.9	30	3.5
J10	Yes	Determine area of sheet not covered by rectangular picture.	74	2.5	77	3.8	70	4.0
K05	Yes	Calculate area of a rectangle given its length and perimeter.	60	2.5	60	3.6	59	4.1
L12	Yes	Find longest pace from chart showing number of paces to cross room.	73	2.8	77	3.1	68	4.0
M01	Yes	Read mass shown on scale.	94	1.3	95	1.5	93	1.9
N15	Yes	Identify drawing with angle closest to 30 degrees.	77	2.5	75	3.6	80	3.4
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	53	3.3	57	4.4	48	4.7
P11	Yes	Use ruler to determine approximate length of pencil.	56	2.6	62	3.7	49	3.8
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	55	2.8	56	3.6	53	4.1
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	73	2.3	74	3.4	73	3.3
S02B	Yes	Calculate length of side of square given area.	40	2.8	45	4.2	33	3.6
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	36	2.7	40	4.3	31	3.2
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	48	2.2	48	2.9	48	3.2
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	31	2.1	32	2.8	30	3.0
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	67	2.2	69	2.7	64	3.5

COUNTRY ID=Korea SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	48	1.1	50	1.7	44	1.8
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	76	1.1	77	1.4	76	1.6
D08	No	Solve ratio problem for x: $7/13 = x/52$.	86	1.2	86	1.8	86	2.1
F07	No	Solve word problem to find average speed from distance and time.	24	1.8	30	2.6	17	2.1
G04	No	Solve simple proportionality equation.	79	1.5	81	1.6	76	2.5
L14	Yes	Identify missing numbers in table of proportional x and y values.	34	3.1	32	4.7	35	4.0
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	58	3.1	55	4.2	61	4.3
Q05	Yes	Solve word problem involving ratios.	78	2.1	83	2.8	70	4.3
R14	Yes	Solve multi-step word problem involving ratios.	63	2.3	62	3.4	64	4.1
T02A	Yes	Solve algebra word problem involving ratios.	26	1.7	27	2.1	25	2.7
T02B	Yes	Solve multi-step word problem computing fractions.	8	0.9	8	1.2	7	1.6
V03	Yes	Determine ratio of red paint in a mixture.	78	1.8	77	2.6	78	2.5

COUNTRY ID=Latvia (LSS) SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	80	1.1	81	1.3	78	1.6
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	56	1.6	53	2.6	58	2.2
C05	No	Determine number which continues pattern based on figures.	37	2.2	37	2.5	37	3.1
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	26	1.6	24	2.0	28	2.1
E05	No	Find relationship between numbers in a set of ordered pairs.	53	2.1	50	2.6	55	2.7
F11	No	Solve multi-step problem using linear equations.	38	1.9	37	2.3	39	2.7
G06	No	Find solution to $-3X$ for given value of X .	47	1.7	43	2.4	50	2.3
H10	No	Identify equation expressing xy relationship from table of values.	31	2.0	25	2.6	36	2.8
H12	No	Select symbolic linear equation which fits word problem.	60	1.5	55	2.1	65	2.1
I01	Yes	Identify meaning of symbol in word problem equation.	33	2.9	31	4.2	35	4.1
I04	Yes	Determine next number which occurs in two number sequences.	26	2.7	26	4.4	26	3.8
J18	Yes	Identify missing number in table showing xy relationship.	27	2.5	29	3.6	27	3.4
K04	Yes	Identify expression equivalent to linear inequality.	33	2.8	39	4.3	28	3.7
L11	Yes	Solve multi-step word problem using pattern.	23	2.5	19	3.0	26	3.5
L13	Yes	Identify matching patterns of symbols.	93	1.6	94	2.0	93	2.5
L16	Yes	Simplify and solve linear equation for X .	49	3.6	47	4.4	52	4.8
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	46	3.1	44	4.0	48	4.9
O07	Yes	Solve linear equation for X .	70	3.1	67	4.5	72	4.0
P10	Yes	Identify equivalent algebraic expressions.	49	3.3	51	4.7	47	4.1
P15	Yes	Identify equivalent expression for a cubic relationship.	52	3.4	55	4.3	49	4.8
Q01	Yes	Identify linear expression based on word problem.	45	3.2	39	4.0	51	4.4
Q02	Yes	Subtract fractional expressions of X .	54	3.3	54	5.0	54	4.6
Q07	Yes	Solve $P=LW$ for W given values for P and L .	43	3.3	41	5.0	45	4.3
R09	Yes	Identify equivalent expressions from properties of real numbers.	32	3.1	31	4.5	33	4.0
R11	Yes	Solve algebra word problem: linear equation.	38	3.0	45	4.7	33	4.0
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	67	2.8	61	4.3	73	3.9
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	13	2.2	12	2.7	14	3.2
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	19	1.8	20	2.7	17	2.5
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	21	1.9	21	2.3	21	2.8

COUNTRY ID=Latvia (LSS) SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	66	1.4	65	1.8	67	2.0
B07	No	Interpret line graph to find region of largest increase.	47	1.6	41	2.2	52	2.1
C02	No	Interpret pie graph to determine distribution.	76	1.4	77	2.2	75	2.0
E01	No	Interpret line graph to determine intersection point of two plots.	63	1.8	66	2.4	61	2.9
F08	No	Predict probability of occurrence for independent coin toss.	61	1.9	61	2.7	62	2.3
G01	No	Interpret frequency table to find number above a given level.	38	1.7	40	2.4	36	2.3
H07	No	Interpret bar chart histogram to find number above a given level.	44	1.6	42	2.4	45	2.4
H11	No	Predict number of total defective bulbs based on random sample.	55	2.1	58	3.0	52	2.7
I09	Yes	Predict most likely color of random card based on fraction of colors.	60	2.8	56	4.1	64	3.8
J13	Yes	Draw pictograph to represent number given in table.	72	2.4	71	3.6	73	3.4
K07	Yes	Determine the number of blue pens given probability of selection.	39	3.1	43	4.4	35	4.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	80	2.6	84	3.6	78	3.6
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	51	2.8	51	4.2	51	4.1
N18	Yes	Find probability of drawing an even number from 1 to 9.	22	2.6	23	3.1	20	4.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	43	3.2	42	4.7	45	4.8
O05	Yes	Calculate number of cube faces from probability of toss.	22	2.1	23	4.0	21	2.7
P17	Yes	Identify thermometer which shows temperature given in data table.	81	2.5	78	3.6	84	3.4
Q04	Yes	Interpret data in bar graph.	82	2.4	77	3.7	88	2.8
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	33	2.7	34	4.7	31	4.1
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	5	1.2	6	1.7	5	1.3

COUNTRY ID=Latvia (LSS) SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	46	1.6	47	2.0	45	1.9
B09	No	Identify shaded figure which shows 2/5 = 4/10.	43	1.8	39	2.5	46	2.2
B10	No	Identify smallest of decimal fractions.	30	1.7	34	2.5	27	2.1
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	41	2.0	43	2.5	39	2.5
C06	No	Determine the worst estimate of: 848 + 677.	47	1.8	45	2.4	50	2.7
D09	No	Identify smallest fraction.	48	1.7	52	2.4	45	2.3
D12	No	Estimate rational number from point on number line.	68	1.3	71	1.8	66	2.4
E03	No	Find fraction of hour between two time points.	57	1.7	57	2.7	56	2.2
E04	No	Solve multi-step word problem: 4-digit whole numbers.	67	2.1	60	2.4	72	2.7
F09	No	Identify decimal fraction between 0.07 and 0.08.	53	1.9	55	2.6	50	3.0
F12	No	Identify fraction of circle which is shaded.	35	1.4	32	1.9	37	2.5
G05	No	Identify fraction represented in word problem.	34	1.9	34	3.0	35	2.3
H08	No	Identify figure showing 2/3 shaded.	52	2.2	54	3.0	50	3.1
H09	No	Identify sum which is closest to 691 + 208.	78	1.7	80	2.1	77	2.3
I02	Yes	Solve multi-step word problem: common fractions.	45	2.9	49	4.0	40	4.1
I05	Yes	Solve subtraction word problem: rational numbers.	59	3.1	58	4.1	61	4.5
I06	Yes	Write a fraction larger than a given number.	60	2.6	58	3.6	62	4.2
I07	Yes	Recognize when estimation is appropriate.	58	2.6	56	4.0	60	3.8
J12	Yes	Divide fractions.	43	2.8	40	3.7	45	4.5
J14	Yes	Divide rational numbers, fractional divisor.	40	3.1	34	3.5	46	4.8
J17	Yes	Use map and scale to find distance between two cities.	61	2.8	67	3.5	56	4.4
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	68	2.8	69	4.1	67	4.0
K02	Yes	Find total volume of mixture using rational number addition.	40	3.2	37	4.5	42	4.3
K06	Yes	Approximate amount increased by 15%.	25	2.5	26	3.4	23	3.6
K09	Yes	Compute sum of three fractions.	38	2.8	36	3.5	39	4.1
L08	Yes	Estimate actual height from diagram of relative heights.	57	3.4	63	4.6	51	4.5
L09	Yes	Identify 504.7 from its expression in words.	80	2.8	85	3.0	76	4.2
L17	Yes	Subtract three fractions.	42	2.9	32	4.1	50	4.2
M04	Yes	Identify the largest fraction.	17	1.9	20	3.2	15	2.6
M08	Yes	Multiply two decimal fractions.	50	3.0	52	4.2	48	4.4
N11	Yes	Identify number rounded to 18200.	75	2.4	75	3.9	75	3.4
N14	Yes	Identify list of equivalent fractions.	57	3.3	57	4.2	57	4.7
N16	Yes	Solve algebra word problem with fractions.	38	2.8	39	4.3	37	4.4
N17	Yes	Solve multi-step word problem: decimal fractions.	36	3.0	32	3.9	40	4.5
N19	Yes	Shade a given fraction of the squares in a grid.	32	3.2	30	4.3	34	4.7
O02	Yes	Calculate percent increase.	14	2.4	17	3.5	12	3.2
O04	Yes	Identify number rounded to the nearest 100th.	28	2.4	30	3.4	27	3.9
O09	Yes	Solve division word problem: common fractions.	35	3.2	38	4.8	33	3.9
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	49	2.6	48	4.3	51	3.9
P13	Yes	Use heart beats/min to find beats per hour.	57	2.4	54	4.0	60	3.6
P14	Yes	Solve subtraction word problem: common fractions.	71	2.8	69	4.2	74	3.5
P16	Yes	Reduce decimal to fraction in lowest terms.	23	2.9	23	3.7	23	4.0
Q06	Yes	Approximate water use/year from use/week.	28	2.6	33	3.9	22	3.5
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	28	2.6	32	4.0	25	3.4
Q09	Yes	Perform multiple operations of common fractions.	52	3.2	47	4.9	56	4.0
R06	Yes	Subtract two decimal numbers.	68	3.0	59	4.3	76	3.6
R07	Yes	Solve division word problem involving decimals.	31	3.2	36	4.4	27	4.2
R12	Yes	Subtract 4-digit whole numbers.	84	2.3	82	3.4	85	2.8
R13	Yes	Determine how much money left after spending 7/9.	19	2.4	20	3.6	18	3.1
U01A	Yes	Estimate the time required to record 5 songs.	9	1.6	11	2.6	6	1.5
U01B	Yes	Explain method of estimation.	16	1.7	19	2.6	13	2.4
V01	Yes	Determine actual weight from rounded value.	38	2.0	37	2.8	39	2.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Latvia (LSS) SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	68	1.3	63	1.8	73	1.7
B11	No	Identify cube made by folding 2-dimensional net.	64	1.7	65	1.9	62	2.4
C03	No	Identify properties of congruent trapezoids.	52	2.0	49	2.9	55	2.8
D07	No	Identify relationship of angles in symmetric polygon.	61	1.9	63	2.6	59	2.6
E02	No	Determine angle in congruent triangles.	45	2.1	47	2.8	44	2.8
G03	No	Find sum of vertical angles from diagram of intersecting lines.	50	1.9	49	2.4	51	2.6
I08	Yes	Identify point on a line defined by two other points.	34	3.1	40	4.7	29	4.0
J11	Yes	Identify properties of a parallelogram.	27	2.8	21	2.9	32	4.2
J15	Yes	Identify similar triangles of different size.	58	2.6	57	3.7	58	3.7
J16	Yes	Identify coordinates for point on a grid.	45	3.1	42	3.7	48	4.6
K03	Yes	Identify figure from rotation of 3-dimensional object.	85	1.9	90	2.4	81	2.9
K08	Yes	Determine unknown angle in rotated congruent triangles.	20	2.3	24	3.6	17	2.9
L15	Yes	Find fourth quadrilateral angle, given the other three.	21	2.6	22	3.8	21	3.2
M02	Yes	Identify all lines of symmetry for a rectangle.	45	3.4	45	4.2	45	4.5
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	46	2.6	53	3.8	39	3.9
M07	Yes	Find angle based on supplementary pairs.	68	2.6	73	3.9	63	3.7
N12	Yes	Identify point on number line from distance of other points.	55	3.2	56	4.7	54	4.1
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	46	2.9	41	3.9	51	4.3
O08	Yes	Find center point of rotation for symmetry-related figures.	60	2.7	59	4.7	61	3.7
P08	Yes	Know relationship between side and perimeter for square.	40	3.5	39	4.9	41	4.1
P09	Yes	Find length of side for similar triangles.	22	2.3	24	3.5	20	3.2
Q10	Yes	Perform calculation involving addition/subtraction of angles.	39	3.3	35	4.5	42	4.6
R10	Yes	Determine into how many triangles a trapezoid can be divided.	42	3.2	47	4.2	38	4.6

COUNTRY ID=Latvia (LSS) SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	48	1.4	47	1.8	49	1.9
C01	No	Compare volumes of different stacks of blocks.	52	2.0	58	2.7	46	2.5
D11	No	Identify best unit to measure the mass of an egg.	88	1.2	87	1.9	89	1.5
E06	No	Solve word problem to find length of rectangle from width and perimeter.	37	1.9	39	2.7	35	2.5
F10	No	Determine measurement accuracy of ruler.	59	1.9	64	2.4	53	3.0
G02	No	Read meter scale to determine length of a pipe.	67	1.7	67	2.3	66	2.4
I03	Yes	Find number of 750 mL bottles filled by a large volume.	40	3.0	48	4.1	31	4.2
J10	Yes	Determine area of sheet not covered by rectangular picture.	20	2.6	25	4.0	15	3.4
K05	Yes	Calculate area of a rectangle given its length and perimeter.	27	2.7	32	4.6	22	3.2
L12	Yes	Find longest pace from chart showing number of paces to cross room.	78	2.6	78	3.1	78	3.8
M01	Yes	Read mass shown on scale.	82	2.5	84	3.5	81	3.5
N15	Yes	Identify drawing with angle closest to 30 degrees.	64	2.9	60	4.8	68	4.2
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	36	3.0	36	4.2	36	4.2
P11	Yes	Use ruler to determine approximate length of pencil.	56	2.5	60	3.2	52	4.1
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	21	2.4	26	3.9	17	3.2
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	48	2.9	46	4.2	50	4.6
S02B	Yes	Calculate length of side of square given area.	13	2.3	14	3.5	13	3.1
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	11	1.9	12	3.1	10	2.5
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	29	2.3	28	3.2	28	2.6
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	5	1.2	7	2.1	3	0.8
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	18	1.6	19	2.2	16	2.3

COUNTRY ID=Latvia (LSS) SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	47	1.3	55	1.7	38	1.7
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	71	1.5	70	2.2	71	2.0
D08	No	Solve ratio problem for x: $7/13 = x/52$.	56	2.0	55	2.6	58	2.7
F07	No	Solve word problem to find average speed from distance and time.	22	1.4	26	2.0	19	2.3
G04	No	Solve simple proportionality equation.	54	1.9	52	2.3	56	2.5
L14	Yes	Identify missing numbers in table of proportional x and y values.	12	1.9	11	2.8	12	2.8
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	21	3.0	24	3.9	18	3.3
Q05	Yes	Solve word problem involving ratios.	44	3.1	48	4.7	40	4.0
R14	Yes	Solve multi-step word problem involving ratios.	25	2.7	29	4.2	21	3.3
T02A	Yes	Solve algebra word problem involving ratios.	11	1.4	11	2.1	11	1.9
T02B	Yes	Solve multi-step word problem computing fractions.	7	1.1	7	1.6	6	1.7
V03	Yes	Determine ratio of red paint in a mixture.	23	2.0	21	2.8	24	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Lithuania SCALE=Algebra

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	77	1.2	78	1.6	76	1.7
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	53	2.1	47	2.4	59	2.5
C05	No	Determine number which continues pattern based on figures.	48	2.3	42	2.9	54	3.1
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	32	2.2	33	2.9	30	2.8
E05	No	Find relationship between numbers in a set of ordered pairs.	41	2.5	37	2.8	44	3.0
G06	No	Find solution to $-3X$ for given value of X .	49	2.2	44	3.0	53	2.6
H10	No	Identify equation expressing xy relationship from table of values.	27	2.2	25	2.6	29	2.5
H12	No	Select symbolic linear equation which fits word problem.	47	2.1	41	2.8	54	2.8
I01	Yes	Identify meaning of symbol in word problem equation.	22	2.4	17	2.9	26	3.5
I04	Yes	Determine next number which occurs in two number sequences.	23	2.6	24	4.0	21	3.6
J18	Yes	Identify missing number in table showing xy relationship.	21	2.3	20	3.0	21	3.5
K04	Yes	Identify expression equivalent to linear inequality.	16	2.6	18	3.8	14	3.1
L11	Yes	Solve multi-step word problem using pattern.	18	2.0	18	3.4	19	3.2
L13	Yes	Identify matching patterns of symbols.	87	2.0	87	2.9	88	2.8
L16	Yes	Simplify and solve linear equation for X .	48	3.4	40	4.6	55	4.4
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	46	3.5	41	4.8	51	4.4
O07	Yes	Solve linear equation for X .	66	3.3	60	4.7	72	4.5
P10	Yes	Identify equivalent algebraic expressions.	48	3.4	41	4.4	55	4.4
P15	Yes	Identify equivalent expression for a cubic relationship.	36	3.6	31	4.2	42	5.0
Q01	Yes	Identify linear expression based on word problem.	39	3.2	37	4.2	41	4.5
Q02	Yes	Subtract fractional expressions of X .	40	2.9	36	4.3	45	4.5
Q07	Yes	Solve $P=LW$ for W given values for P and L .	41	3.3	35	4.3	46	4.8
R09	Yes	Identify equivalent expressions from properties of real numbers.	32	2.7	29	3.5	36	4.6
R11	Yes	Solve algebra word problem: linear equation.	41	3.4	41	4.8	41	4.7
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	56	3.4	49	4.8	63	4.4
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	6	1.6	4	1.4	8	2.6
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	18	2.3	17	2.8	20	2.8
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	20	2.6	18	2.9	22	3.2

COUNTRY ID=Lithuania SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	73	1.5	69	2.0	77	1.8
B07	No	Interpret line graph to find region of largest increase.	46	2.3	43	2.7	48	3.2
C02	No	Interpret pie graph to determine distribution.	59	1.7	56	2.1	62	2.6
E01	No	Interpret line graph to determine intersection point of two plots.	64	2.5	67	2.5	61	3.9
F08	No	Predict probability of occurrence for independent coin toss.	40	1.9	37	2.7	42	2.7
G01	No	Interpret frequency table to find number above a given level.	40	2.0	39	2.6	41	2.8
H07	No	Interpret bar chart histogram to find number above a given level.	38	2.2	35	3.3	42	2.9
H11	No	Predict number of total defective bulbs based on random sample.	38	2.4	41	3.1	36	2.8
I09	Yes	Predict most likely color of random card based on fraction of colors.	40	2.7	41	4.3	39	4.1
J13	Yes	Draw pictograph to represent number given in table.	59	3.3	52	4.6	66	4.5
K07	Yes	Determine the number of blue pens given probability of selection.	32	3.2	39	4.7	26	3.8
L10	Yes	Use data in a chart to identify time/day with highest temperature.	74	3.2	71	3.9	77	4.7
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	56	3.1	57	4.8	55	4.0
N18	Yes	Find probability of drawing an even number from 1 to 9.	24	2.6	23	3.5	24	3.7
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	47	3.0	51	4.4	44	4.4
O05	Yes	Calculate number of cube faces from probability of toss.	18	2.7	19	4.3	18	3.2
P17	Yes	Identify thermometer which shows temperature given in data table.	75	2.8	72	4.2	78	3.5
Q04	Yes	Interpret data in bar graph.	74	2.9	72	4.0	76	3.6
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	39	3.6	39	4.9	39	4.7
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	3	0.9	2	1.0	4	1.4

COUNTRY ID=Lithuania SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	36	2.1	37	2.5	34	2.5
B09	No	Identify shaded figure which shows 2/5 = 4/10.	38	1.6	37	1.8	40	2.4
B10	No	Identify smallest of decimal fractions.	39	2.0	42	2.3	36	2.3
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	38	2.0	40	3.0	37	2.5
C06	No	Determine the worst estimate of: 848 + 677.	65	1.8	64	2.5	66	2.6
D09	No	Identify smallest fraction.	35	1.9	39	2.8	31	2.3
D12	No	Estimate rational number from point on number line.	49	2.2	53	2.9	46	2.8
E03	No	Find fraction of hour between two time points.	32	2.1	33	2.7	31	2.5
E04	No	Solve multi-step word problem: 4-digit whole numbers.	56	2.3	51	2.9	60	2.9
F09	No	Identify decimal fraction between 0.07 and 0.08.	53	2.0	52	2.9	54	2.8
F12	No	Identify fraction of circle which is shaded.	25	1.6	26	2.4	25	2.1
G05	No	Identify fraction represented in word problem.	20	1.8	19	2.3	21	2.5
H08	No	Identify figure showing 2/3 shaded.	33	2.0	31	2.6	35	2.7
H09	No	Identify sum which is closest to 691 + 208.	72	2.0	70	2.4	74	2.8
I02	Yes	Solve multi-step word problem: common fractions.	31	3.4	26	3.8	37	5.3
I05	Yes	Solve subtraction word problem: rational numbers.	57	3.0	49	4.2	65	4.1
I06	Yes	Write a fraction larger than a given number.	61	3.8	58	4.6	64	5.4
I07	Yes	Recognize when estimation is appropriate.	43	3.4	44	4.8	43	4.3
J12	Yes	Divide fractions.	40	3.4	33	4.6	48	4.7
J14	Yes	Divide rational numbers, fractional divisor.	50	3.5	41	4.4	60	4.8
J17	Yes	Use map and scale to find distance between two cities.	50	3.5	49	4.8	52	4.7
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	52	3.2	60	4.7	45	4.1
K02	Yes	Find total volume of mixture using rational number addition.	35	3.3	32	4.6	38	4.9
K06	Yes	Approximate amount increased by 15%.	17	2.6	17	3.4	17	3.4
K09	Yes	Compute sum of three fractions.	37	3.4	31	4.7	42	4.5
L08	Yes	Estimate actual height from diagram of relative heights.	53	3.9	53	5.1	54	5.3
L09	Yes	Identify 504.7 from its expression in words.	83	2.5	81	3.6	86	3.9
L17	Yes	Subtract three fractions.	38	3.6	32	4.1	43	5.5
M04	Yes	Identify the largest fraction.	16	2.4	16	3.6	15	3.1
M08	Yes	Multiply two decimal fractions.	61	3.2	53	4.8	69	4.0
N11	Yes	Identify number rounded to 18200.	60	3.9	57	5.3	64	4.3
N14	Yes	Identify list of equivalent fractions.	39	3.3	36	4.2	42	4.4
N16	Yes	Solve algebra word problem with fractions.	36	3.4	35	4.7	37	3.9
N17	Yes	Solve multi-step word problem: decimal fractions.	36	2.9	36	4.4	36	4.4
N19	Yes	Shade a given fraction of the squares in a grid.	24	3.1	25	4.6	24	4.0
O02	Yes	Calculate percent increase.	12	2.0	15	3.0	10	2.5
O04	Yes	Identify number rounded to the nearest 100th.	47	3.4	44	4.6	50	4.9
O09	Yes	Solve division word problem: common fractions.	22	2.5	27	4.1	17	2.7
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	51	3.2	48	4.2	53	4.7
P13	Yes	Use heart beats/min to find beats per hour.	58	2.9	54	4.0	62	4.2
P14	Yes	Solve subtraction word problem: common fractions.	55	3.1	51	4.1	60	4.6
P16	Yes	Reduce decimal to fraction in lowest terms.	14	2.2	13	3.0	16	3.0
Q06	Yes	Approximate water use/year from use/week.	23	2.7	21	3.4	26	3.8
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	28	3.4	25	3.8	32	4.9
Q09	Yes	Perform multiple operations of common fractions.	38	3.3	23	3.6	54	4.3
R06	Yes	Subtract two decimal numbers.	80	2.8	75	3.8	84	3.0
R07	Yes	Solve division word problem involving decimals.	42	3.7	38	4.7	45	4.7
R12	Yes	Subtract 4-digit whole numbers.	88	2.3	87	2.9	90	3.5
R13	Yes	Determine how much money left after spending 7/9.	12	2.2	12	3.0	13	3.0
U01A	Yes	Estimate the time required to record 5 songs.	6	1.2	7	1.6	4	1.3
U01B	Yes	Explain method of estimation.	3	0.8	5	1.2	2	0.8
V01	Yes	Determine actual weight from rounded value.	37	2.5	37	3.5	38	3.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Lithuania SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	61	1.8	55	2.1	67	1.9
B11	No	Identify cube made by folding 2-dimensional net.	52	1.9	53	2.7	52	2.2
C03	No	Identify properties of congruent trapezoids.	37	2.1	33	2.6	42	3.1
D07	No	Identify relationship of angles in symmetric polygon.	57	2.4	59	2.8	55	3.2
E02	No	Determine angle in congruent triangles.	23	1.9	23	2.4	23	2.7
G03	No	Find sum of vertical angles from diagram of intersecting lines.	38	2.4	36	2.9	39	2.9
I08	Yes	Identify point on a line defined by two other points.	21	3.0	22	3.4	20	4.5
J11	Yes	Identify properties of a parallelogram.	30	3.5	28	4.7	31	4.8
J15	Yes	Identify similar triangles of different size.	45	2.6	43	3.9	47	4.5
J16	Yes	Identify coordinates for point on a grid.	35	3.0	31	3.6	39	4.8
K03	Yes	Identify figure from rotation of 3-dimensional object.	60	3.0	61	4.3	60	4.1
K08	Yes	Determine unknown angle in rotated congruent triangles.	10	2.0	11	2.5	10	2.7
L15	Yes	Find fourth quadrilateral angle, given the other three.	6	1.0	5	1.3	6	1.6
M02	Yes	Identify all lines of symmetry for a rectangle.	49	3.2	48	5.0	49	4.4
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	35	2.9	37	4.3	33	4.2
M07	Yes	Find angle based on supplementary pairs.	59	2.9	62	4.2	56	4.2
N12	Yes	Identify point on number line from distance of other points.	45	3.6	47	4.9	43	4.9
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	40	3.5	39	4.2	41	4.8
O08	Yes	Find center point of rotation for symmetry-related figures.	56	3.3	55	4.4	57	4.7
P08	Yes	Know relationship between side and perimeter for square.	33	2.8	36	4.1	30	3.8
P09	Yes	Find length of side for similar triangles.	23	3.1	18	3.4	28	4.7
Q10	Yes	Perform calculation involving addition/subtraction of angles.	34	3.3	30	3.9	38	4.5
R10	Yes	Determine into how many triangles a trapezoid can be divided.	33	3.3	32	4.2	34	4.7

COUNTRY ID=Lithuania SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	16	1.3	16	1.3	17	2.0
C01	No	Compare volumes of different stacks of blocks.	47	2.3	47	3.1	46	3.0
D11	No	Identify best unit to measure the mass of an egg.	78	1.4	79	1.9	78	2.0
E06	No	Solve word problem to find length of rectangle from width and perimeter.	25	1.8	25	2.2	25	2.5
F10	No	Determine measurement accuracy of ruler.	46	2.3	50	3.1	43	2.9
G02	No	Read meter scale to determine length of a pipe.	67	1.5	67	2.2	67	2.4
I03	Yes	Find number of 750 mL bottles filled by a large volume.	28	2.9	29	4.0	27	3.9
J10	Yes	Determine area of sheet not covered by rectangular picture.	17	2.4	18	3.4	15	3.2
K05	Yes	Calculate area of a rectangle given its length and perimeter.	22	3.0	24	4.5	21	3.9
L12	Yes	Find longest pace from chart showing number of paces to cross room.	64	3.3	62	4.5	67	4.4
M01	Yes	Read mass shown on scale.	77	2.4	82	3.2	73	3.5
N15	Yes	Identify drawing with angle closest to 30 degrees.	60	3.1	61	4.8	60	4.2
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	27	3.1	29	4.1	25	4.0
P11	Yes	Use ruler to determine approximate length of pencil.	37	3.5	35	4.2	39	5.0
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	22	2.9	19	3.4	26	4.4
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	43	3.3	42	4.2	44	4.5
S02B	Yes	Calculate length of side of square given area.	11	2.0	9	2.6	12	3.0
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	5	1.3	4	1.6	6	2.4
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	14	1.8	14	2.6	13	2.1
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	0	0.2	1	0.4	0	0.2
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	14	1.6	16	2.2	12	2.1

COUNTRY ID=Lithuania SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	48	1.5	51	1.7	44	2.0
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	45	1.8	49	2.4	40	2.5
D08	No	Solve ratio problem for x: $7/13 = x/52$.	39	2.3	41	2.9	38	2.8
F07	No	Solve word problem to find average speed from distance and time.	24	1.8	22	2.0	25	2.6
G04	No	Solve simple proportionality equation.	37	2.1	38	2.5	36	2.8
L14	Yes	Identify missing numbers in table of proportional x and y values.	6	1.4	7	2.1	5	1.9
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	13	2.7	13	4.0	13	3.4
Q05	Yes	Solve word problem involving ratios.	44	3.1	42	4.5	46	4.3
R14	Yes	Solve multi-step word problem involving ratios.	28	3.4	28	4.2	27	4.2
T02A	Yes	Solve algebra word problem involving ratios.	3	0.7	3	1.1	4	1.3
T02B	Yes	Solve multi-step word problem computing fractions.	1	0.5	1	0.5	1	0.7
V03	Yes	Determine ratio of red paint in a mixture.	8	1.2	8	1.7	8	1.7

COUNTRY ID=Netherlands SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	80	0.9	80	1.4	79	1.3
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	45	2.4	43	2.8	46	2.9
C05	No	Determine number which continues pattern based on figures.	50	2.8	49	2.8	51	4.4
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	51	2.2	50	3.3	52	2.9
E05	No	Find relationship between numbers in a set of ordered pairs.	58	2.3	57	2.7	59	3.4
F11	No	Solve multi-step problem using linear equations.	40	2.3	39	2.8	41	2.7
G06	No	Find solution to $-3X$ for given value of X .	9	1.7	9	2.1	10	1.8
H10	No	Identify equation expressing xy relationship from table of values.	50	1.9	48	2.6	52	2.3
H12	No	Select symbolic linear equation which fits word problem.	81	1.6	77	2.6	84	2.4
I01	Yes	Identify meaning of symbol in word problem equation.	26	4.2	32	4.6	20	5.2
I04	Yes	Determine next number which occurs in two number sequences.	36	3.6	36	4.9	37	5.8
J18	Yes	Identify missing number in table showing xy relationship.	46	3.9	44	4.7	48	5.8
K04	Yes	Identify expression equivalent to linear inequality.	40	3.3	33	4.9	47	5.4
L11	Yes	Solve multi-step word problem using pattern.	32	2.9	32	4.6	32	4.0
L13	Yes	Identify matching patterns of symbols.	87	2.4	84	4.0	90	2.8
L16	Yes	Simplify and solve linear equation for X .	2	0.9	2	1.2	2	1.3
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	6	1.9	4	2.4	8	2.6
O07	Yes	Solve linear equation for X .	49	4.0	44	5.6	53	4.2
P10	Yes	Identify equivalent algebraic expressions.	33	4.1	36	5.1	29	5.6
P15	Yes	Identify equivalent expression for a cubic relationship.	42	3.8	45	4.8	39	4.6
Q01	Yes	Identify linear expression based on word problem.	27	2.9	27	3.6	28	5.0
Q02	Yes	Subtract fractional expressions of X .	31	3.6	34	4.5	28	5.1
Q07	Yes	Solve $P=LW$ for W given values for P and L .	51	3.5	50	5.1	52	4.5
R09	Yes	Identify equivalent expressions from properties of real numbers.	26	3.4	25	4.2	27	4.3
R11	Yes	Solve algebra word problem: linear equation.	48	3.6	46	4.8	51	4.5
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	82	2.8	82	3.7	83	5.5
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	29	2.9	35	4.4	22	3.7
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	28	2.5	30	3.2	27	2.9
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	27	2.3	29	3.1	25	2.6

COUNTRY ID=Netherlands SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	72	1.1	72	1.3	72	2.0
B07	No	Interpret line graph to find region of largest increase.	73	1.7	74	2.4	72	2.3
C02	No	Interpret pie graph to determine distribution.	83	1.5	84	2.4	82	2.2
E01	No	Interpret line graph to determine intersection point of two plots.	73	1.7	71	2.3	75	3.0
F08	No	Predict probability of occurrence for independent coin toss.	63	2.3	61	3.3	66	2.6
G01	No	Interpret frequency table to find number above a given level.	69	1.8	70	2.3	67	2.3
H07	No	Interpret bar chart histogram to find number above a given level.	75	2.0	75	2.7	74	2.2
H11	No	Predict number of total defective bulbs based on random sample.	76	2.1	79	2.4	73	2.4
I09	Yes	Predict most likely color of random card based on fraction of colors.	83	2.9	83	4.3	83	3.5
J13	Yes	Draw pictograph to represent number given in table.	89	2.3	91	2.7	88	3.8
K07	Yes	Determine the number of blue pens given probability of selection.	57	4.0	64	5.1	49	4.5
L10	Yes	Use data in a chart to identify time/day with highest temperature.	92	2.0	93	2.3	92	3.0
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	89	2.1	86	3.1	93	2.1
N18	Yes	Find probability of drawing an even number from 1 to 9.	63	3.3	58	4.6	68	5.2
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	70	3.4	76	4.4	65	4.4
O05	Yes	Calculate number of cube faces from probability of toss.	60	3.3	63	5.7	58	4.1
P17	Yes	Identify thermometer which shows temperature given in data table.	93	2.1	93	2.3	94	3.1
Q04	Yes	Interpret data in bar graph.	85	2.5	82	3.6	88	4.6
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	64	2.9	62	5.0	66	5.8
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	14	2.2	15	2.8	13	2.5

COUNTRY ID=Netherlands SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	68	1.9	70	2.3	66	2.2
B09	No	Identify shaded figure which shows 2/5 = 4/10.	65	2.4	63	2.4	67	3.3
B10	No	Identify smallest of decimal fractions.	52	2.2	57	3.2	46	2.4
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	51	2.1	50	2.8	51	2.9
C06	No	Determine the worst estimate of: 848 + 677.	75	2.3	72	3.1	77	2.6
D09	No	Identify smallest fraction.	84	1.9	90	2.4	79	2.9
D12	No	Estimate rational number from point on number line.	87	1.4	88	1.9	86	1.9
E03	No	Find fraction of hour between two time points.	62	2.4	64	2.7	61	3.3
E04	No	Solve multi-step word problem: 4-digit whole numbers.	50	3.4	44	4.0	56	3.7
F09	No	Identify decimal fraction between 0.07 and 0.08.	72	2.2	73	2.9	71	2.8
F12	No	Identify fraction of circle which is shaded.	69	2.2	65	3.5	72	2.8
G05	No	Identify fraction represented in word problem.	76	2.5	75	4.0	77	2.6
H08	No	Identify figure showing 2/3 shaded.	91	1.6	88	2.2	93	1.5
H09	No	Identify sum which is closest to 691 + 208.	91	1.3	93	1.7	89	2.0
I02	Yes	Solve multi-step word problem: common fractions.	69	3.6	75	5.0	63	4.9
I05	Yes	Solve subtraction word problem: rational numbers.	60	3.5	60	6.3	60	4.7
I06	Yes	Write a fraction larger than a given number.	86	2.5	88	2.8	85	3.2
I07	Yes	Recognize when estimation is appropriate.	55	3.1	49	5.8	60	4.0
J12	Yes	Divide fractions.	13	2.5	13	3.3	13	3.5
J14	Yes	Divide rational numbers, fractional divisor.	30	3.4	39	4.2	23	4.5
J17	Yes	Use map and scale to find distance between two cities.	71	2.7	75	3.7	67	4.2
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	73	2.7	74	3.8	72	4.2
K02	Yes	Find total volume of mixture using rational number addition.	46	3.1	44	5.4	47	5.2
K06	Yes	Approximate amount increased by 15%.	46	3.7	49	4.9	42	5.5
K09	Yes	Compute sum of three fractions.	37	2.8	41	4.4	34	3.8
L08	Yes	Estimate actual height from diagram of relative heights.	62	3.2	63	4.6	61	4.3
L09	Yes	Identify 504.7 from its expression in words.	90	1.9	86	3.2	93	2.1
L17	Yes	Subtract three fractions.	55	3.6	54	5.0	56	4.4
M04	Yes	Identify the largest fraction.	41	3.6	48	4.2	35	6.2
M08	Yes	Multiply two decimal fractions.	19	2.6	17	3.7	19	4.0
N11	Yes	Identify number rounded to 18200.	92	1.9	93	2.6	90	2.7
N14	Yes	Identify list of equivalent fractions.	74	3.1	75	3.7	73	5.3
N16	Yes	Solve algebra word problem with fractions.	54	4.4	59	5.3	49	5.1
N17	Yes	Solve multi-step word problem: decimal fractions.	32	3.1	35	3.9	28	4.2
N19	Yes	Shade a given fraction of the squares in a grid.	67	3.5	75	4.3	59	5.2
O02	Yes	Calculate percent increase.	33	3.7	41	5.5	27	4.2
O04	Yes	Identify number rounded to the nearest 100th.	50	3.3	55	5.6	47	4.8
O09	Yes	Solve division word problem: common fractions.	71	3.3	74	4.1	68	5.3
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	77	2.2	76	3.5	78	3.8
P13	Yes	Use heart beats/min to find beats per hour.	72	3.3	71	3.4	73	4.8
P14	Yes	Solve subtraction word problem: common fractions.	91	2.3	90	3.3	93	2.8
P16	Yes	Reduce decimal to fraction in lowest terms.	30	4.0	30	4.7	30	5.2
Q06	Yes	Approximate water use/year from use/week.	46	2.8	48	4.5	44	3.9
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	50	3.2	54	5.1	44	5.0
Q09	Yes	Perform multiple operations of common fractions.	51	3.6	50	4.9	53	4.4
R06	Yes	Subtract two decimal numbers.	66	3.8	65	5.2	68	4.1
R07	Yes	Solve division word problem involving decimals.	51	3.3	52	5.3	50	3.9
R12	Yes	Subtract 4-digit whole numbers.	88	2.6	83	4.0	92	2.3
R13	Yes	Determine how much money left after spending 7/9.	49	3.6	49	5.2	49	4.0
U01A	Yes	Estimate the time required to record 5 songs.	41	2.0	41	2.8	41	3.6
U01B	Yes	Explain method of estimation.	43	2.3	41	3.4	45	3.4
V01	Yes	Determine actual weight from rounded value.	51	2.1	57	3.3	45	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Netherlands SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	66	1.8	64	1.9	68	2.5
B11	No	Identify cube made by folding 2-dimensional net.	77	1.4	75	2.2	79	2.0
C03	No	Identify properties of congruent trapezoids.	58	2.2	57	3.6	59	2.6
D07	No	Identify relationship of angles in symmetric polygon.	58	2.6	57	2.8	58	3.7
E02	No	Determine angle in congruent triangles.	30	2.0	31	2.9	30	2.4
G03	No	Find sum of vertical angles from diagram of intersecting lines.	53	2.8	55	2.8	51	3.5
I08	Yes	Identify point on a line defined by two other points.	62	3.4	67	4.3	57	4.7
J11	Yes	Identify properties of a parallelogram.	27	2.9	32	4.6	24	3.5
J15	Yes	Identify similar triangles of different size.	62	2.6	64	4.7	62	3.6
J16	Yes	Identify coordinates for point on a grid.	71	3.8	74	3.4	70	6.3
K03	Yes	Identify figure from rotation of 3-dimensional object.	64	3.3	61	3.8	67	5.1
K08	Yes	Determine unknown angle in rotated congruent triangles.	14	2.4	18	4.2	10	2.5
L15	Yes	Find fourth quadrilateral angle, given the other three.	26	3.2	32	4.2	22	4.5
M02	Yes	Identify all lines of symmetry for a rectangle.	85	2.4	86	3.5	84	4.4
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	46	3.4	46	4.1	47	4.8
M07	Yes	Find angle based on supplementary pairs.	75	4.3	75	5.3	76	4.8
N12	Yes	Identify point on number line from distance of other points.	67	3.6	74	4.2	60	5.2
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	44	2.8	40	4.0	48	5.0
O08	Yes	Find center point of rotation for symmetry-related figures.	56	3.3	63	5.3	50	4.3
P08	Yes	Know relationship between side and perimeter for square.	54	2.7	56	5.0	52	5.0
P09	Yes	Find length of side for similar triangles.	33	3.2	36	4.4	29	4.0
Q10	Yes	Perform calculation involving addition/subtraction of angles.	43	3.4	39	4.7	47	5.2
R10	Yes	Determine into how many triangles a trapezoid can be divided.	65	3.2	67	4.5	64	4.5

COUNTRY ID=Netherlands SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	80	1.4	79	1.9	80	1.5
C01	No	Compare volumes of different stacks of blocks.	72	1.9	69	2.9	75	2.4
D11	No	Identify best unit to measure the mass of an egg.	87	1.2	88	1.7	86	2.2
E06	No	Solve word problem to find length of rectangle from width and perimeter.	51	2.2	52	2.8	51	2.8
F10	No	Determine measurement accuracy of ruler.	64	2.4	68	3.5	61	2.4
G02	No	Read meter scale to determine length of a pipe.	82	2.4	81	3.1	83	2.5
I03	Yes	Find number of 750 mL bottles filled by a large volume.	46	5.3	48	6.6	43	5.9
J10	Yes	Determine area of sheet not covered by rectangular picture.	37	3.9	35	4.9	39	6.1
K05	Yes	Calculate area of a rectangle given its length and perimeter.	36	3.2	42	4.5	29	4.8
L12	Yes	Find longest pace from chart showing number of paces to cross room.	85	2.4	85	3.5	86	3.1
M01	Yes	Read mass shown on scale.	94	1.9	92	2.5	97	2.1
N15	Yes	Identify drawing with angle closest to 30 degrees.	52	4.7	50	5.6	54	5.4
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	85	2.6	87	3.4	83	3.9
P11	Yes	Use ruler to determine approximate length of pencil.	68	3.2	70	4.4	67	3.8
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	28	3.0	28	3.5	28	4.3
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	60	3.4	60	4.2	61	5.0
S02B	Yes	Calculate length of side of square given area.	10	2.6	11	3.8	10	3.0
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	25	3.5	25	4.4	25	4.2
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	31	2.5	31	3.2	32	3.6
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	6	1.2	7	2.0	5	1.4
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	41	3.3	45	3.6	37	4.1

COUNTRY ID=Netherlands SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	68	1.9	75	2.9	62	1.9
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	69	2.8	70	3.2	68	3.4
D08	No	Solve ratio problem for x: $7/13 = x/52$.	68	2.0	65	2.7	72	2.7
F07	No	Solve word problem to find average speed from distance and time.	32	1.7	32	2.7	32	4.5
G04	No	Solve simple proportionality equation.	78	1.9	78	2.4	78	2.8
L14	Yes	Identify missing numbers in table of proportional x and y values.	33	3.3	29	4.0	36	4.8
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	43	3.5	40	4.4	45	4.7
Q05	Yes	Solve word problem involving ratios.	85	2.7	87	3.7	83	3.8
R14	Yes	Solve multi-step word problem involving ratios.	44	4.7	43	4.8	45	6.6
T02A	Yes	Solve algebra word problem involving ratios.	29	2.0	30	2.3	28	2.7
T02B	Yes	Solve multi-step word problem computing fractions.	9	1.5	8	1.8	10	2.8
V03	Yes	Determine ratio of red paint in a mixture.	58	2.8	57	3.7	59	3.7

COUNTRY ID=New Zealand SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	74	1.1	75	1.5	74	1.3
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	45	1.7	43	2.1	47	2.3
C05	No	Determine number which continues pattern based on figures.	56	1.8	55	2.4	57	2.4
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	39	1.8	35	2.2	43	2.4
E05	No	Find relationship between numbers in a set of ordered pairs.	60	1.8	59	2.4	62	2.6
F11	No	Solve multi-step problem using linear equations.	40	2.1	41	2.5	39	2.8
G06	No	Find solution to $-3X$ for given value of X .	10	1.1	9	1.6	11	1.5
H10	No	Identify equation expressing xy relationship from table of values.	33	1.6	35	2.3	31	2.2
H12	No	Select symbolic linear equation which fits word problem.	72	2.0	72	2.7	74	2.5
I01	Yes	Identify meaning of symbol in word problem equation.	32	2.4	32	3.6	32	3.6
I04	Yes	Determine next number which occurs in two number sequences.	30	2.9	30	3.7	31	3.6
J18	Yes	Identify missing number in table showing xy relationship.	42	2.6	44	3.4	40	4.3
K04	Yes	Identify expression equivalent to linear inequality.	27	2.5	33	3.8	20	3.2
L11	Yes	Solve multi-step word problem using pattern.	38	2.7	40	3.7	35	4.0
L13	Yes	Identify matching patterns of symbols.	90	1.9	88	3.0	93	1.6
L16	Yes	Simplify and solve linear equation for X .	9	1.6	11	2.1	8	2.4
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	10	1.4	11	2.3	10	1.8
O07	Yes	Solve linear equation for X .	56	2.9	53	4.2	59	4.2
P10	Yes	Identify equivalent algebraic expressions.	40	2.8	41	3.7	38	4.3
P15	Yes	Identify equivalent expression for a cubic relationship.	52	2.9	48	3.9	57	4.1
Q01	Yes	Identify linear expression based on word problem.	27	2.8	23	3.2	31	4.4
Q02	Yes	Subtract fractional expressions of X .	30	2.3	28	3.0	33	4.0
Q07	Yes	Solve $P=LW$ for W given values for P and L .	42	2.9	37	3.9	49	4.1
R09	Yes	Identify equivalent expressions from properties of real numbers.	30	3.1	25	3.2	35	4.3
R11	Yes	Solve algebra word problem: linear equation.	34	2.7	34	3.6	34	4.1
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	72	2.5	74	3.4	71	4.2
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	23	2.5	23	3.3	23	3.3
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	22	1.9	24	2.0	19	2.6
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	21	1.8	23	2.2	18	2.5

COUNTRY ID=New Zealand SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	66	1.1	62	1.8	70	1.3
B07	No	Interpret line graph to find region of largest increase.	65	1.6	65	2.0	65	2.2
C02	No	Interpret pie graph to determine distribution.	74	1.9	74	2.2	74	2.3
E01	No	Interpret line graph to determine intersection point of two plots.	64	1.9	66	2.1	61	2.8
F08	No	Predict probability of occurrence for independent coin toss.	65	1.8	66	2.3	63	2.8
G01	No	Interpret frequency table to find number above a given level.	42	1.8	43	2.4	41	2.5
H07	No	Interpret bar chart histogram to find number above a given level.	73	1.7	73	2.4	74	2.1
H11	No	Predict number of total defective bulbs based on random sample.	52	1.8	53	2.3	51	2.5
I09	Yes	Predict most likely color of random card based on fraction of colors.	73	3.0	75	3.3	70	4.3
J13	Yes	Draw pictograph to represent number given in table.	87	1.9	85	2.7	90	2.0
K07	Yes	Determine the number of blue pens given probability of selection.	43	3.0	47	3.5	39	4.3
L10	Yes	Use data in a chart to identify time/day with highest temperature.	91	1.9	90	3.1	92	2.5
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	74	2.3	75	3.5	73	4.2
N18	Yes	Find probability of drawing an even number from 1 to 9.	51	3.4	50	4.8	53	4.1
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	51	2.6	53	3.9	47	3.5
O05	Yes	Calculate number of cube faces from probability of toss.	37	2.6	37	3.8	37	4.1
P17	Yes	Identify thermometer which shows temperature given in data table.	73	2.3	70	3.1	78	3.1
Q04	Yes	Interpret data in bar graph.	88	1.8	86	2.3	91	2.0
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	40	2.7	43	3.7	37	4.0
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	15	1.5	13	2.0	16	1.9

COUNTRY ID=New Zealand SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	49	1.7	50	1.9	47	2.1
B09	No	Identify shaded figure which shows 2/5 = 4/10.	52	1.5	52	2.1	52	2.1
B10	No	Identify smallest of decimal fractions.	34	2.1	38	2.7	29	2.1
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	48	1.6	48	2.2	47	2.3
C06	No	Determine the worst estimate of: 848 + 677.	77	1.5	78	2.0	76	2.2
D09	No	Identify smallest fraction.	71	1.9	74	2.5	69	2.3
D12	No	Estimate rational number from point on number line.	70	1.6	70	2.3	70	2.1
E03	No	Find fraction of hour between two time points.	59	1.6	63	2.1	55	2.5
E04	No	Solve multi-step word problem: 4-digit whole numbers.	59	1.9	56	2.5	63	2.1
F09	No	Identify decimal fraction between 0.07 and 0.08.	61	2.1	61	2.9	61	2.5
F12	No	Identify fraction of circle which is shaded.	59	1.8	60	2.0	57	2.7
G05	No	Identify fraction represented in word problem.	67	1.9	64	2.6	70	2.5
H08	No	Identify figure showing 2/3 shaded.	77	1.8	75	2.6	79	2.0
H09	No	Identify sum which is closest to 691 + 208.	85	1.2	87	1.7	83	1.9
I02	Yes	Solve multi-step word problem: common fractions.	53	3.1	52	4.1	54	4.9
I05	Yes	Solve subtraction word problem: rational numbers.	66	2.5	57	3.5	74	3.6
I06	Yes	Write a fraction larger than a given number.	81	2.4	78	3.2	84	3.2
I07	Yes	Recognize when estimation is appropriate.	70	2.7	64	3.6	77	3.6
J12	Yes	Divide fractions.	4	1.3	4	1.8	5	1.6
J14	Yes	Divide rational numbers, fractional divisor.	18	2.0	20	2.4	15	3.0
J17	Yes	Use map and scale to find distance between two cities.	64	2.6	67	3.4	61	3.8
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	70	2.4	74	2.7	66	4.0
K02	Yes	Find total volume of mixture using rational number addition.	49	3.4	45	4.5	54	4.4
K06	Yes	Approximate amount increased by 15%.	32	2.4	34	3.0	30	3.7
K09	Yes	Compute sum of three fractions.	9	1.7	9	2.1	10	2.4
L08	Yes	Estimate actual height from diagram of relative heights.	54	3.0	57	4.1	50	3.9
L09	Yes	Identify 504.7 from its expression in words.	78	2.6	78	3.7	79	3.5
L17	Yes	Subtract three fractions.	32	2.7	32	3.7	32	3.8
M04	Yes	Identify the largest fraction.	38	2.8	36	3.5	39	3.9
M08	Yes	Multiply two decimal fractions.	16	2.5	15	2.3	17	4.0
N11	Yes	Identify number rounded to 18200.	82	2.4	81	4.3	83	2.8
N14	Yes	Identify list of equivalent fractions.	53	2.7	49	3.9	56	3.8
N16	Yes	Solve algebra word problem with fractions.	40	2.7	40	3.8	40	3.8
N17	Yes	Solve multi-step word problem: decimal fractions.	36	2.7	33	3.2	40	4.0
N19	Yes	Shade a given fraction of the squares in a grid.	35	2.9	33	4.1	37	4.2
O02	Yes	Calculate percent increase.	21	2.3	23	3.3	19	3.5
O04	Yes	Identify number rounded to the nearest 100th.	32	2.5	34	3.7	29	3.4
O09	Yes	Solve division word problem: common fractions.	52	3.0	52	4.1	52	4.2
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	58	3.0	59	3.4	57	4.4
P13	Yes	Use heart beats/min to find beats per hour.	54	2.6	54	3.7	54	3.9
P14	Yes	Solve subtraction word problem: common fractions.	82	2.1	78	3.4	88	2.6
P16	Yes	Reduce decimal to fraction in lowest terms.	13	2.0	16	3.0	10	2.3
Q06	Yes	Approximate water use/year from use/week.	35	3.0	33	3.8	37	4.1
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	26	2.6	33	3.9	18	3.4
Q09	Yes	Perform multiple operations of common fractions.	27	2.8	26	3.2	27	3.8
R06	Yes	Subtract two decimal numbers.	56	3.2	45	4.7	69	4.1
R07	Yes	Solve division word problem involving decimals.	34	2.8	32	3.4	36	4.3
R12	Yes	Subtract 4-digit whole numbers.	69	3.5	63	3.9	77	4.3
R13	Yes	Determine how much money left after spending 7/9.	23	2.6	22	3.0	25	4.0
U01A	Yes	Estimate the time required to record 5 songs.	43	2.3	42	3.1	43	2.8
U01B	Yes	Explain method of estimation.	54	2.1	50	2.4	58	3.1
V01	Yes	Determine actual weight from rounded value.	65	2.0	66	2.5	63	2.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=New Zealand SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	43	1.3	42	1.7	45	1.6
B11	No	Identify cube made by folding 2-dimensional net.	67	1.8	67	2.3	66	2.0
C03	No	Identify properties of congruent trapezoids.	52	2.0	47	2.6	58	2.5
D07	No	Identify relationship of angles in symmetric polygon.	49	1.8	50	2.5	48	2.3
E02	No	Determine angle in congruent triangles.	30	1.6	31	2.3	29	2.3
G03	No	Find sum of vertical angles from diagram of intersecting lines.	40	2.0	41	2.2	40	2.9
I08	Yes	Identify point on a line defined by two other points.	45	3.1	47	4.1	44	4.1
J11	Yes	Identify properties of a parallelogram.	42	2.7	38	3.3	48	4.4
J15	Yes	Identify similar triangles of different size.	59	2.8	56	3.8	62	3.9
J16	Yes	Identify coordinates for point on a grid.	42	2.6	42	3.5	43	3.5
K03	Yes	Identify figure from rotation of 3-dimensional object.	65	2.9	68	3.4	61	4.1
K08	Yes	Determine unknown angle in rotated congruent triangles.	19	2.0	19	2.7	19	3.1
L15	Yes	Find fourth quadrilateral angle, given the other three.	24	2.4	25	3.0	23	2.9
M02	Yes	Identify all lines of symmetry for a rectangle.	70	2.7	69	3.8	70	4.6
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	38	3.1	33	3.8	44	4.6
M07	Yes	Find angle based on supplementary pairs.	68	2.8	65	4.0	70	4.1
N12	Yes	Identify point on number line from distance of other points.	55	3.2	58	4.5	52	4.2
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	27	2.5	28	3.4	25	3.5
O08	Yes	Find center point of rotation for symmetry-related figures.	59	2.7	60	3.5	59	3.9
P08	Yes	Know relationship between side and perimeter for square.	40	2.6	37	3.3	43	4.3
P09	Yes	Find length of side for similar triangles.	35	2.7	36	3.7	33	3.6
Q10	Yes	Perform calculation involving addition/subtraction of angles.	34	3.1	34	3.7	33	4.4
R10	Yes	Determine into how many triangles a trapezoid can be divided.	44	3.0	42	3.8	46	4.0

COUNTRY ID=New Zealand SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	54	1.4	52	1.6	55	1.7
C01	No	Compare volumes of different stacks of blocks.	50	2.0	53	2.5	47	2.6
D11	No	Identify best unit to measure the mass of an egg.	77	1.4	80	2.0	74	2.0
E06	No	Solve word problem to find length of rectangle from width and perimeter.	40	1.9	42	2.7	38	2.2
F10	No	Determine measurement accuracy of ruler.	53	1.9	57	2.8	48	2.4
G02	No	Read meter scale to determine length of a pipe.	68	1.9	68	2.5	69	2.3
I03	Yes	Find number of 750 mL bottles filled by a large volume.	39	2.4	43	3.3	35	3.6
J10	Yes	Determine area of sheet not covered by rectangular picture.	25	2.2	31	3.5	19	2.8
K05	Yes	Calculate area of a rectangle given its length and perimeter.	22	2.2	23	3.0	21	3.5
L12	Yes	Find longest pace from chart showing number of paces to cross room.	57	3.3	65	4.4	47	4.5
M01	Yes	Read mass shown on scale.	86	1.9	85	2.6	86	2.7
N15	Yes	Identify drawing with angle closest to 30 degrees.	55	2.8	55	4.2	55	3.3
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	72	2.6	72	3.5	72	3.3
P11	Yes	Use ruler to determine approximate length of pencil.	48	2.9	51	3.9	44	4.0
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	24	2.9	23	3.5	26	4.1
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	43	2.8	43	3.4	43	4.1
S02B	Yes	Calculate length of side of square given area.	9	1.6	7	1.9	11	2.8
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	14	2.1	11	2.4	18	3.2
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	17	1.8	16	2.1	19	2.5
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	3	0.5	3	0.7	2	0.7
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	29	1.9	30	2.6	27	2.9

COUNTRY ID=New Zealand SCALE=Proportionality

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	45	1.5	50	1.7	38	1.9
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	63	1.5	63	1.9	63	2.1
D08	No	Solve ratio problem for x: $7/13 = x/52$.	64	1.8	65	2.2	62	2.4
F07	No	Solve word problem to find average speed from distance and time.	24	1.6	24	2.3	23	2.0
G04	No	Solve simple proportionality equation.	60	1.9	64	2.5	55	2.4
L14	Yes	Identify missing numbers in table of proportional x and y values.	13	1.8	15	2.8	12	2.4
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	30	2.7	35	3.6	25	3.9
Q05	Yes	Solve word problem involving ratios.	69	2.5	65	3.3	73	3.7
R14	Yes	Solve multi-step word problem involving ratios.	19	2.4	19	2.8	20	3.9
T02A	Yes	Solve algebra word problem involving ratios.	16	1.8	15	2.0	18	2.6
T02B	Yes	Solve multi-step word problem computing fractions.	5	0.8	5	1.0	6	1.3
V03	Yes	Determine ratio of red paint in a mixture.	43	2.3	40	3.6	46	2.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Norway SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	68	1.2	68	1.5	68	1.6
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	46	1.5	47	2.9	46	2.9
C05	No	Determine number which continues pattern based on figures.	45	1.7	40	2.8	51	2.9
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	29	2.3	26	2.4	31	3.7
E05	No	Find relationship between numbers in a set of ordered pairs.	35	2.1	36	3.2	35	2.7
F11	No	Solve multi-step problem using linear equations.	28	1.8	28	2.2	28	2.8
G06	No	Find solution to $-3X$ for given value of X .	7	1.1	9	1.7	5	1.2
H10	No	Identify equation expressing xy relationship from table of values.	21	1.5	18	2.2	23	2.5
H12	No	Select symbolic linear equation which fits word problem.	68	1.8	67	2.3	68	2.4
I01	Yes	Identify meaning of symbol in word problem equation.	28	5.2	34	8.8	21	3.3
I04	Yes	Determine next number which occurs in two number sequences.	40	3.7	34	6.0	48	4.1
J18	Yes	Identify missing number in table showing xy relationship.	34	3.6	39	4.5	30	4.9
K04	Yes	Identify expression equivalent to linear inequality.	28	3.6	28	5.6	29	4.1
L11	Yes	Solve multi-step word problem using pattern.	25	2.5	21	3.7	29	3.7
L13	Yes	Identify matching patterns of symbols.	88	2.1	82	3.6	94	2.4
L16	Yes	Simplify and solve linear equation for X .	3	1.2	3	1.3	4	2.0
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	14	2.1	14	2.8	13	2.8
O07	Yes	Solve linear equation for X .	32	2.8	35	4.1	29	4.0
P10	Yes	Identify equivalent algebraic expressions.	42	4.2	47	4.6	36	7.4
P15	Yes	Identify equivalent expression for a cubic relationship.	28	3.5	30	4.6	25	4.8
Q01	Yes	Identify linear expression based on word problem.	13	2.8	10	3.1	16	5.0
Q02	Yes	Subtract fractional expressions of X .	30	3.3	35	3.9	24	4.2
Q07	Yes	Solve $P=LW$ for W given values for P and L .	31	2.9	28	3.9	34	5.7
R09	Yes	Identify equivalent expressions from properties of real numbers.	20	2.7	25	3.9	14	3.4
R11	Yes	Solve algebra word problem: linear equation.	31	3.3	35	4.5	26	4.7
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	73	3.0	74	4.4	73	4.1
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	14	2.4	15	3.5	11	2.8
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	16	1.7	17	2.5	14	1.9
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	16	1.8	18	2.8	15	1.9

COUNTRY ID=Norway SCALE=Data Rep., Analysis & Prob.

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	69	1.4	66	1.7	72	1.7
B07	No	Interpret line graph to find region of largest increase.	61	1.7	66	2.6	56	3.0
C02	No	Interpret pie graph to determine distribution.	69	1.8	66	3.5	71	2.5
E01	No	Interpret line graph to determine intersection point of two plots.	56	2.0	57	3.1	55	2.6
F08	No	Predict probability of occurrence for independent coin toss.	68	2.1	67	2.5	68	2.8
G01	No	Interpret frequency table to find number above a given level.	38	1.9	38	2.3	38	2.8
H07	No	Interpret bar chart histogram to find number above a given level.	69	1.8	70	2.5	67	2.0
H11	No	Predict number of total defective bulbs based on random sample.	51	1.9	54	2.5	48	2.6
I09	Yes	Predict most likely color of random card based on fraction of colors.	54	4.9	57	8.1	51	4.2
J13	Yes	Draw pictograph to represent number given in table.	85	2.3	82	3.0	87	2.8
K07	Yes	Determine the number of blue pens given probability of selection.	47	3.2	51	4.5	44	4.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	88	2.0	88	2.6	88	3.1
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	79	2.8	80	3.6	78	4.0
N18	Yes	Find probability of drawing an even number from 1 to 9.	55	2.8	56	4.1	53	4.3
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	58	3.4	69	4.6	48	4.3
O05	Yes	Calculate number of cube faces from probability of toss.	42	3.5	48	4.9	37	4.5
P17	Yes	Identify thermometer which shows temperature given in data table.	90	2.2	87	3.2	95	1.9
Q04	Yes	Interpret data in bar graph.	85	2.5	81	3.8	90	2.9
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	44	3.7	51	5.0	36	5.7
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	16	1.8	17	2.4	15	2.1

COUNTRY ID=Norway SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	50	1.4	52	1.8	47	1.8
B09	No	Identify shaded figure which shows 2/5 = 4/10.	45	1.6	45	2.6	44	2.6
B10	No	Identify smallest of decimal fractions.	49	2.3	58	2.8	39	2.6
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	42	2.6	37	2.8	47	3.5
C06	No	Determine the worst estimate of: 848 + 677.	62	2.0	58	3.3	66	2.6
D09	No	Identify smallest fraction.	67	2.1	68	2.6	65	2.7
D12	No	Estimate rational number from point on number line.	75	1.6	77	2.1	74	2.4
E03	No	Find fraction of hour between two time points.	58	2.5	61	3.8	54	2.9
E04	No	Solve multi-step word problem: 4-digit whole numbers.	42	2.3	40	3.4	44	2.7
F09	No	Identify decimal fraction between 0.07 and 0.08.	60	2.2	63	2.7	58	3.1
F12	No	Identify fraction of circle which is shaded.	58	2.3	57	2.8	59	3.6
G05	No	Identify fraction represented in word problem.	64	1.6	63	2.6	66	2.1
H08	No	Identify figure showing 2/3 shaded.	72	1.6	70	2.5	74	2.5
H09	No	Identify sum which is closest to 691 + 208.	85	1.4	84	2.1	86	2.0
I02	Yes	Solve multi-step word problem: common fractions.	51	4.7	51	7.2	50	4.4
I05	Yes	Solve subtraction word problem: rational numbers.	63	5.0	53	7.5	76	3.6
I06	Yes	Write a fraction larger than a given number.	73	5.3	73	9.0	73	4.5
I07	Yes	Recognize when estimation is appropriate.	52	3.9	43	5.7	62	3.5
J12	Yes	Divide fractions.	2	0.8	3	1.6	2	0.9
J14	Yes	Divide rational numbers, fractional divisor.	18	2.7	20	3.8	17	3.7
J17	Yes	Use map and scale to find distance between two cities.	68	3.8	66	4.6	70	5.1
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	71	3.0	77	3.7	64	4.2
K02	Yes	Find total volume of mixture using rational number addition.	43	3.6	47	5.1	39	3.9
K06	Yes	Approximate amount increased by 15%.	38	3.1	38	4.0	38	4.5
K09	Yes	Compute sum of three fractions.	19	3.2	19	4.9	19	4.2
L08	Yes	Estimate actual height from diagram of relative heights.	58	3.1	64	3.7	51	5.2
L09	Yes	Identify 504.7 from its expression in words.	68	3.4	70	4.3	66	4.8
L17	Yes	Subtract three fractions.	23	2.6	24	3.2	21	4.0
M04	Yes	Identify the largest fraction.	32	3.5	38	4.3	24	4.4
M08	Yes	Multiply two decimal fractions.	41	3.4	35	4.6	49	4.6
N11	Yes	Identify number rounded to 18200.	87	2.4	86	2.6	89	3.8
N14	Yes	Identify list of equivalent fractions.	51	2.9	53	4.1	49	4.3
N16	Yes	Solve algebra word problem with fractions.	43	3.1	41	4.3	45	5.0
N17	Yes	Solve multi-step word problem: decimal fractions.	37	3.6	37	4.5	36	5.0
N19	Yes	Shade a given fraction of the squares in a grid.	35	3.2	36	3.9	33	5.0
O02	Yes	Calculate percent increase.	16	2.6	19	3.8	13	2.9
O04	Yes	Identify number rounded to the nearest 100th.	38	3.2	37	4.7	38	4.3
O09	Yes	Solve division word problem: common fractions.	32	3.3	37	4.9	27	4.0
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	56	4.5	57	4.8	55	7.6
P13	Yes	Use heart beats/min to find beats per hour.	60	4.4	64	3.7	56	7.7
P14	Yes	Solve subtraction word problem: common fractions.	66	3.3	63	4.2	69	5.0
P16	Yes	Reduce decimal to fraction in lowest terms.	4	1.3	6	2.1	2	1.1
Q06	Yes	Approximate water use/year from use/week.	49	4.5	49	4.9	49	9.1
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	39	3.3	50	4.1	25	4.6
Q09	Yes	Perform multiple operations of common fractions.	29	3.4	27	4.6	32	5.8
R06	Yes	Subtract two decimal numbers.	74	5.3	75	3.7	72	11.0
R07	Yes	Solve division word problem involving decimals.	33	3.3	38	4.1	27	5.4
R12	Yes	Subtract 4-digit whole numbers.	85	5.5	88	2.8	81	11.9
R13	Yes	Determine how much money left after spending 7/9.	21	2.6	23	3.6	19	4.0
U01A	Yes	Estimate the time required to record 5 songs.	33	2.2	36	2.9	28	3.1
U01B	Yes	Explain method of estimation.	34	2.2	35	3.5	32	2.8
V01	Yes	Determine actual weight from rounded value.	64	2.4	67	2.8	61	3.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Norway SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	40	1.1	38	1.7	41	2.2
B11	No	Identify cube made by folding 2-dimensional net.	53	1.9	55	2.8	52	2.6
C03	No	Identify properties of congruent trapezoids.	44	1.9	38	3.1	51	3.1
D07	No	Identify relationship of angles in symmetric polygon.	52	2.2	49	2.7	55	2.9
E02	No	Determine angle in congruent triangles.	25	1.8	27	2.7	22	2.1
G03	No	Find sum of vertical angles from diagram of intersecting lines.	34	1.8	37	2.5	32	2.6
I08	Yes	Identify point on a line defined by two other points.	29	3.2	27	4.7	31	4.4
J11	Yes	Identify properties of a parallelogram.	37	3.6	38	4.3	36	5.9
J15	Yes	Identify similar triangles of different size.	59	4.4	51	4.6	65	5.4
J16	Yes	Identify coordinates for point on a grid.	34	3.4	35	4.7	34	5.4
K03	Yes	Identify figure from rotation of 3-dimensional object.	73	2.9	75	3.6	71	4.4
K08	Yes	Determine unknown angle in rotated congruent triangles.	25	2.5	24	3.6	26	3.8
L15	Yes	Find fourth quadrilateral angle, given the other three.	27	2.5	29	3.9	25	3.9
M02	Yes	Identify all lines of symmetry for a rectangle.	47	3.1	45	4.0	49	4.6
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	46	3.0	50	4.1	41	4.3
M07	Yes	Find angle based on supplementary pairs.	80	2.6	81	3.0	77	4.1
N12	Yes	Identify point on number line from distance of other points.	66	3.0	68	3.7	63	4.5
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	29	3.6	30	4.9	27	4.3
O08	Yes	Find center point of rotation for symmetry-related figures.	28	2.7	34	4.3	22	3.6
P08	Yes	Know relationship between side and perimeter for square.	33	3.0	34	3.7	31	5.4
P09	Yes	Find length of side for similar triangles.	31	3.3	30	4.3	32	5.6
Q10	Yes	Perform calculation involving addition/subtraction of angles.	29	3.2	28	4.3	30	5.3
R10	Yes	Determine into how many triangles a trapezoid can be divided.	51	4.7	48	4.4	53	8.4

COUNTRY ID=Norway SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	64	1.3	66	1.4	61	1.8
C01	No	Compare volumes of different stacks of blocks.	47	2.0	48	2.7	47	3.1
D11	No	Identify best unit to measure the mass of an egg.	81	1.3	79	1.7	82	1.9
E06	No	Solve word problem to find length of rectangle from width and perimeter.	30	2.1	32	3.6	28	2.3
F10	No	Determine measurement accuracy of ruler.	53	1.9	59	2.3	46	3.2
G02	No	Read meter scale to determine length of a pipe.	68	1.8	70	2.5	67	2.7
I03	Yes	Find number of 750 mL bottles filled by a large volume.	48	3.9	58	6.8	37	3.8
J10	Yes	Determine area of sheet not covered by rectangular picture.	32	3.9	33	4.4	31	5.3
K05	Yes	Calculate area of a rectangle given its length and perimeter.	26	3.0	28	3.8	22	3.8
L12	Yes	Find longest pace from chart showing number of paces to cross room.	73	2.9	70	4.0	76	4.2
M01	Yes	Read mass shown on scale.	85	2.1	86	3.0	85	3.4
N15	Yes	Identify drawing with angle closest to 30 degrees.	70	3.0	67	4.2	73	4.1
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	71	3.0	75	4.1	67	4.0
P11	Yes	Use ruler to determine approximate length of pencil.	52	4.8	59	4.3	44	8.1
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	34	5.1	30	4.0	38	9.9
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	51	4.4	43	5.7	60	4.6
S02B	Yes	Calculate length of side of square given area.	6	1.2	7	1.9	4	1.6
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	12	2.6	11	3.4	14	3.2
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	21	2.2	21	2.9	21	3.1
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	2	0.4	2	0.6	1	0.5
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	28	2.7	33	4.1	22	2.8

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Norway SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	48	1.6	56	1.8	40	2.1
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	61	2.6	62	2.9	59	3.4
D08	No	Solve ratio problem for x: $7/13 = x/52$.	61	2.3	65	2.4	58	3.3
F07	No	Solve word problem to find average speed from distance and time.	23	2.3	22	2.2	24	4.0
G04	No	Solve simple proportionality equation.	51	1.9	51	2.2	51	3.1
L14	Yes	Identify missing numbers in table of proportional x and y values.	11	1.8	9	2.5	13	3.1
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	15	2.2	16	3.0	14	3.4
Q05	Yes	Solve word problem involving ratios.	70	4.2	70	4.6	71	6.5
R14	Yes	Solve multi-step word problem involving ratios.	16	2.5	19	3.5	13	3.2
T02A	Yes	Solve algebra word problem involving ratios.	22	2.3	20	3.0	24	2.8
T02B	Yes	Solve multi-step word problem computing fractions.	7	1.1	7	1.4	7	1.5
V03	Yes	Determine ratio of red paint in a mixture.	28	2.2	28	2.9	27	3.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Portugal SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	70	1.2	75	1.6	66	1.5
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	37	1.6	35	2.0	38	2.1
C05	No	Determine number which continues pattern based on figures.	40	1.7	41	2.2	38	2.3
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	32	1.5	31	2.0	33	2.1
E05	No	Find relationship between numbers in a set of ordered pairs.	28	1.7	29	2.5	27	2.1
F11	No	Solve multi-step problem using linear equations.	16	1.3	15	1.8	16	1.6
G06	No	Find solution to $-3X$ for given value of X .	19	1.6	16	2.0	22	1.9
H10	No	Identify equation expressing xy relationship from table of values.	20	1.2	21	1.8	19	1.5
H12	No	Select symbolic linear equation which fits word problem.	64	1.7	61	2.5	68	2.2
I01	Yes	Identify meaning of symbol in word problem equation.	25	2.5	26	3.4	25	3.3
I04	Yes	Determine next number which occurs in two number sequences.	16	2.0	13	2.5	19	3.1
J18	Yes	Identify missing number in table showing xy relationship.	32	2.3	38	3.5	27	2.7
K04	Yes	Identify expression equivalent to linear inequality.	23	2.3	24	3.3	22	3.1
L11	Yes	Solve multi-step word problem using pattern.	26	2.3	25	3.7	27	2.8
L13	Yes	Identify matching patterns of symbols.	89	1.9	91	2.4	88	2.6
L16	Yes	Simplify and solve linear equation for X .	10	1.9	9	2.2	12	2.6
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	23	3.0	21	3.2	25	4.2
O07	Yes	Solve linear equation for X .	47	2.6	44	3.3	50	3.6
P10	Yes	Identify equivalent algebraic expressions.	26	2.9	26	3.5	26	3.6
P15	Yes	Identify equivalent expression for a cubic relationship.	59	2.7	50	3.7	67	3.7
Q01	Yes	Identify linear expression based on word problem.	30	2.6	28	3.4	31	3.5
Q02	Yes	Subtract fractional expressions of X .	33	3.2	33	4.4	32	4.1
Q07	Yes	Solve $P=LW$ for W given values for P and L .	31	2.9	31	3.4	31	3.9
R09	Yes	Identify equivalent expressions from properties of real numbers.	21	2.4	21	3.4	21	3.0
R11	Yes	Solve algebra word problem: linear equation.	27	2.1	29	3.3	25	2.9
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	62	2.6	61	3.9	63	4.2
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	6	1.5	6	1.7	7	2.3
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	5	0.9	6	1.6	3	0.9
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	6	1.0	6	1.7	5	1.1

COUNTRY ID=Portugal SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	68	1.0	67	1.3	69	1.1
B07	No	Interpret line graph to find region of largest increase.	53	1.8	52	2.2	53	2.4
C02	No	Interpret pie graph to determine distribution.	63	1.6	63	2.0	63	2.1
E01	No	Interpret line graph to determine intersection point of two plots.	36	1.8	41	2.5	31	2.5
F08	No	Predict probability of occurrence for independent coin toss.	47	1.5	47	2.0	47	2.0
G01	No	Interpret frequency table to find number above a given level.	45	1.9	47	2.5	42	2.4
H07	No	Interpret bar chart histogram to find number above a given level.	60	1.4	64	2.2	57	2.4
H11	No	Predict number of total defective bulbs based on random sample.	39	1.7	44	2.5	35	2.2
I09	Yes	Predict most likely color of random card based on fraction of colors.	37	2.6	39	3.9	35	4.2
J13	Yes	Draw pictograph to represent number given in table.	78	2.1	82	2.6	73	2.7
K07	Yes	Determine the number of blue pens given probability of selection.	35	2.5	36	3.2	35	3.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	84	2.0	84	3.1	85	2.5
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	60	2.4	60	3.3	60	3.6
N18	Yes	Find probability of drawing an even number from 1 to 9.	31	2.2	32	3.6	31	2.9
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	38	2.4	40	4.4	36	3.7
O05	Yes	Calculate number of cube faces from probability of toss.	18	1.9	17	2.9	18	3.0
P17	Yes	Identify thermometer which shows temperature given in data table.	87	1.7	89	2.2	86	2.1
Q04	Yes	Interpret data in bar graph.	80	2.1	77	2.9	82	2.7
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	30	2.0	35	3.4	26	3.2
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	4	0.7	5	1.1	3	0.7

COUNTRY ID=Portugal SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	26	1.1	27	1.4	25	1.3
B09	No	Identify shaded figure which shows 2/5 = 4/10.	36	1.5	31	1.8	41	2.1
B10	No	Identify smallest of decimal fractions.	23	1.8	25	2.4	21	2.0
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	73	1.5	72	1.7	73	2.1
C06	No	Determine the worst estimate of: 848 + 677.	58	1.6	56	2.0	60	2.3
D09	No	Identify smallest fraction.	34	1.6	39	2.3	30	2.0
D12	No	Estimate rational number from point on number line.	66	1.7	69	2.0	64	2.2
E03	No	Find fraction of hour between two time points.	29	1.5	32	2.4	26	1.9
E04	No	Solve multi-step word problem: 4-digit whole numbers.	52	1.8	50	2.3	55	2.5
F09	No	Identify decimal fraction between 0.07 and 0.08.	49	1.8	48	2.7	50	2.2
F12	No	Identify fraction of circle which is shaded.	35	1.4	36	2.2	34	2.0
G05	No	Identify fraction represented in word problem.	35	2.0	33	2.5	38	2.2
H08	No	Identify figure showing 2/3 shaded.	34	1.7	34	2.2	35	2.3
H09	No	Identify sum which is closest to 691 + 208.	71	1.6	73	2.0	68	1.9
I02	Yes	Solve multi-step word problem: common fractions.	37	3.0	37	3.7	38	4.0
I05	Yes	Solve subtraction word problem: rational numbers.	50	3.0	50	3.9	50	3.6
I06	Yes	Write a fraction larger than a given number.	62	2.4	57	3.5	66	3.2
I07	Yes	Recognize when estimation is appropriate.	47	2.9	40	3.7	54	3.8
J12	Yes	Divide fractions.	18	1.9	18	2.9	18	2.5
J14	Yes	Divide rational numbers, fractional divisor.	21	2.7	21	3.5	20	3.2
J17	Yes	Use map and scale to find distance between two cities.	48	2.8	58	3.7	39	3.6
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	64	2.5	69	3.2	60	3.6
K02	Yes	Find total volume of mixture using rational number addition.	61	2.9	54	4.2	68	3.2
K06	Yes	Approximate amount increased by 15%.	32	2.2	38	3.8	26	3.1
K09	Yes	Compute sum of three fractions.	23	2.2	22	2.7	24	3.2
L08	Yes	Estimate actual height from diagram of relative heights.	50	2.7	52	3.3	48	4.1
L09	Yes	Identify 504.7 from its expression in words.	83	2.1	85	2.9	82	3.1
L17	Yes	Subtract three fractions.	23	2.5	24	3.2	21	3.6
M04	Yes	Identify the largest fraction.	16	1.9	19	3.3	14	2.2
M08	Yes	Multiply two decimal fractions.	32	2.5	24	3.0	39	3.8
N11	Yes	Identify number rounded to 18200.	75	2.4	74	3.4	75	3.5
N14	Yes	Identify list of equivalent fractions.	48	2.9	52	3.5	44	3.5
N16	Yes	Solve algebra word problem with fractions.	48	2.9	49	3.5	48	4.0
N17	Yes	Solve multi-step word problem: decimal fractions.	32	2.3	25	3.1	38	3.2
N19	Yes	Shade a given fraction of the squares in a grid.	12	1.6	13	2.5	11	2.0
O02	Yes	Calculate percent increase.	10	1.4	14	2.5	7	1.6
O04	Yes	Identify number rounded to the nearest 100th.	43	2.9	46	3.9	41	4.0
O09	Yes	Solve division word problem: common fractions.	19	2.0	20	3.0	17	2.6
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	54	2.7	54	3.4	54	4.0
P13	Yes	Use heart beats/min to find beats per hour.	47	3.2	46	4.1	48	4.2
P14	Yes	Solve subtraction word problem: common fractions.	46	2.9	48	3.9	44	4.0
P16	Yes	Reduce decimal to fraction in lowest terms.	4	1.1	3	1.1	5	1.5
Q06	Yes	Approximate water use/year from use/week.	16	1.9	16	2.8	16	3.0
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	24	2.3	24	2.7	23	3.4
Q09	Yes	Perform multiple operations of common fractions.	33	2.7	27	3.3	40	3.6
R06	Yes	Subtract two decimal numbers.	61	2.8	53	4.2	68	3.5
R07	Yes	Solve division word problem involving decimals.	32	2.4	31	3.5	32	3.3
R12	Yes	Subtract 4-digit whole numbers.	78	2.4	71	3.5	85	2.5
R13	Yes	Determine how much money left after spending 7/9.	2	0.7	4	1.2	1	0.6
U01A	Yes	Estimate the time required to record 5 songs.	12	1.4	13	1.8	12	1.6
U01B	Yes	Explain method of estimation.	13	1.5	13	1.9	14	1.7
V01	Yes	Determine actual weight from rounded value.	29	1.9	29	2.7	29	2.4

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Portugal SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	47	1.5	47	2.1	46	1.8
B11	No	Identify cube made by folding 2-dimensional net.	46	1.5	48	2.8	44	1.8
C03	No	Identify properties of congruent trapezoids.	41	2.1	40	2.3	42	3.0
D07	No	Identify relationship of angles in symmetric polygon.	43	1.8	47	2.5	39	2.4
E02	No	Determine angle in congruent triangles.	21	1.7	23	2.2	18	2.1
G03	No	Find sum of vertical angles from diagram of intersecting lines.	35	1.5	39	2.2	32	1.7
I08	Yes	Identify point on a line defined by two other points.	35	2.7	38	3.8	33	3.4
J11	Yes	Identify properties of a parallelogram.	33	2.7	34	3.5	33	3.7
J15	Yes	Identify similar triangles of different size.	59	2.6	60	4.1	58	3.5
J16	Yes	Identify coordinates for point on a grid.	19	1.9	19	2.5	20	2.8
K03	Yes	Identify figure from rotation of 3-dimensional object.	51	2.8	58	3.6	44	3.3
K08	Yes	Determine unknown angle in rotated congruent triangles.	21	2.0	22	2.9	19	2.7
L15	Yes	Find fourth quadrilateral angle, given the other three.	19	2.4	21	2.9	17	3.3
M02	Yes	Identify all lines of symmetry for a rectangle.	46	2.3	48	3.4	44	3.3
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	28	2.7	34	4.3	23	3.2
M07	Yes	Find angle based on supplementary pairs.	55	2.8	57	3.9	53	3.8
N12	Yes	Identify point on number line from distance of other points.	63	2.8	57	4.2	69	3.1
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	30	2.3	33	3.4	28	3.5
O08	Yes	Find center point of rotation for symmetry-related figures.	56	2.6	59	3.2	54	3.8
P08	Yes	Know relationship between side and perimeter for square.	45	2.8	48	3.9	42	3.7
P09	Yes	Find length of side for similar triangles.	29	2.3	29	3.0	29	3.5
Q10	Yes	Perform calculation involving addition/subtraction of angles.	22	2.1	22	2.9	22	2.5
R10	Yes	Determine into how many triangles a trapezoid can be divided.	25	2.2	29	3.6	22	3.3

COUNTRY ID=Portugal SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	49	1.4	50	1.7	48	1.8
C01	No	Compare volumes of different stacks of blocks.	39	1.8	41	2.4	36	2.3
D11	No	Identify best unit to measure the mass of an egg.	77	1.2	79	1.7	75	1.6
E06	No	Solve word problem to find length of rectangle from width and perimeter.	26	1.2	29	1.9	23	1.5
F10	No	Determine measurement accuracy of ruler.	29	1.5	30	1.8	28	2.6
G02	No	Read meter scale to determine length of a pipe.	62	1.7	63	2.3	61	2.2
I03	Yes	Find number of 750 mL bottles filled by a large volume.	41	2.6	49	3.9	34	3.7
J10	Yes	Determine area of sheet not covered by rectangular picture.	14	2.1	16	3.2	12	2.7
K05	Yes	Calculate area of a rectangle given its length and perimeter.	14	2.0	19	3.0	10	2.1
L12	Yes	Find longest pace from chart showing number of paces to cross room.	73	2.5	76	2.9	71	3.9
M01	Yes	Read mass shown on scale.	81	2.1	83	3.0	79	2.9
N15	Yes	Identify drawing with angle closest to 30 degrees.	48	2.4	56	3.6	42	3.3
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	67	2.7	75	3.1	60	3.8
P11	Yes	Use ruler to determine approximate length of pencil.	37	3.3	38	4.3	36	4.4
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	20	2.2	21	3.3	19	2.7
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	31	2.6	26	3.1	36	3.8
S02B	Yes	Calculate length of side of square given area.	3	1.0	3	1.2	3	1.7
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	6	1.3	5	1.7	7	2.1
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	14	1.3	14	1.6	14	2.0
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	2	0.6	1	0.5	3	0.9
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	13	1.4	11	1.5	15	1.9

COUNTRY ID=Portugal SCALE=Proportionality

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	29	0.9	35	1.4	23	1.1
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	62	1.3	63	1.8	61	2.0
D08	No	Solve ratio problem for x: $7/13 = x/52$.	54	1.8	57	2.2	50	2.5
F07	No	Solve word problem to find average speed from distance and time.	14	1.3	15	1.6	14	1.6
G04	No	Solve simple proportionality equation.	43	1.7	46	2.5	40	2.1
L14	Yes	Identify missing numbers in table of proportional x and y values.	19	2.1	18	2.9	21	3.2
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	8	1.4	11	2.3	5	1.6
Q05	Yes	Solve word problem involving ratios.	39	2.2	41	2.8	36	3.5
R14	Yes	Solve multi-step word problem involving ratios.	9	1.5	11	2.2	8	2.0
T02A	Yes	Solve algebra word problem involving ratios.	5	0.8	4	1.2	5	1.2
T02B	Yes	Solve multi-step word problem computing fractions.	3	0.7	3	0.9	3	1.0
V03	Yes	Determine ratio of red paint in a mixture.	16	1.6	17	2.1	16	1.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Romania SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	73	1.3	74	1.5	71	1.5
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	60	2.0	58	2.3	62	2.4
C05	No	Determine number which continues pattern based on figures.	48	2.0	48	2.3	47	2.7
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	37	2.2	37	2.8	37	2.5
E05	No	Find relationship between numbers in a set of ordered pairs.	35	1.9	35	2.1	36	2.4
F11	No	Solve multi-step problem using linear equations.	32	2.0	31	2.5	32	2.4
G06	No	Find solution to $-3X$ for given value of X .	51	2.3	50	3.0	52	2.7
H10	No	Identify equation expressing xy relationship from table of values.	25	1.7	23	1.9	28	2.4
H12	No	Select symbolic linear equation which fits word problem.	58	1.6	56	2.4	60	1.8
I01	Yes	Identify meaning of symbol in word problem equation.	41	3.1	42	3.6	40	4.0
I04	Yes	Determine next number which occurs in two number sequences.	34	2.8	31	3.6	37	3.4
J18	Yes	Identify missing number in table showing xy relationship.	29	2.5	30	3.1	28	3.2
K04	Yes	Identify expression equivalent to linear inequality.	36	2.9	35	3.6	37	3.9
L11	Yes	Solve multi-step word problem using pattern.	28	2.3	23	3.5	31	2.8
L13	Yes	Identify matching patterns of symbols.	83	2.0	82	3.5	85	2.6
L16	Yes	Simplify and solve linear equation for X .	60	2.7	56	3.9	63	3.6
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	50	2.9	51	3.8	49	3.7
O07	Yes	Solve linear equation for X .	70	2.6	67	4.0	72	3.1
P10	Yes	Identify equivalent algebraic expressions.	57	2.6	56	3.4	57	3.7
P15	Yes	Identify equivalent expression for a cubic relationship.	55	2.7	53	3.5	56	3.5
Q01	Yes	Identify linear expression based on word problem.	45	3.0	40	3.6	51	4.3
Q02	Yes	Subtract fractional expressions of X .	58	2.8	56	3.7	61	3.7
Q07	Yes	Solve $P=LW$ for W given values for P and L .	54	2.8	54	3.8	55	3.9
R09	Yes	Identify equivalent expressions from properties of real numbers.	41	2.7	39	3.7	42	3.6
R11	Yes	Solve algebra word problem: linear equation.	46	3.0	45	4.1	47	3.9
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	53	2.9	50	3.8	56	3.6
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	15	2.0	15	2.6	15	2.5
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	30	2.2	29	2.9	32	2.8
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	34	2.1	33	3.0	36	2.7

COUNTRY ID=Romania SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	78	1.2	77	1.4	78	1.5
B07	No	Interpret line graph to find region of largest increase.	31	1.7	32	1.8	31	2.4
C02	No	Interpret pie graph to determine distribution.	62	1.7	63	2.0	62	2.4
E01	No	Interpret line graph to determine intersection point of two plots.	57	2.1	58	2.4	57	2.5
F08	No	Predict probability of occurrence for independent coin toss.	42	1.6	40	2.0	43	2.4
G01	No	Interpret frequency table to find number above a given level.	49	2.1	48	2.7	50	2.4
H07	No	Interpret bar chart histogram to find number above a given level.	38	1.8	41	2.4	36	2.4
H11	No	Predict number of total defective bulbs based on random sample.	50	2.1	55	2.5	47	2.5
I09	Yes	Predict most likely color of random card based on fraction of colors.	47	2.6	48	3.9	46	3.2
J13	Yes	Draw pictograph to represent number given in table.	64	3.0	66	3.4	62	3.9
K07	Yes	Determine the number of blue pens given probability of selection.	43	2.7	39	3.7	46	3.4
L10	Yes	Use data in a chart to identify time/day with highest temperature.	72	3.1	71	3.9	72	3.9
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	52	2.8	54	4.3	50	3.4
N18	Yes	Find probability of drawing an even number from 1 to 9.	29	2.7	27	3.5	31	3.3
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	31	2.6	29	4.0	32	3.3
O05	Yes	Calculate number of cube faces from probability of toss.	20	2.2	26	3.7	16	2.3
P17	Yes	Identify thermometer which shows temperature given in data table.	65	2.6	65	3.3	64	3.7
Q04	Yes	Interpret data in bar graph.	68	2.5	67	3.5	69	3.5
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	22	2.2	28	3.1	16	2.6
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	7	1.2	7	1.2	6	1.6

COUNTRY ID=Romania SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	51	2.4	51	2.5	51	2.6
B09	No	Identify shaded figure which shows 2/5 = 4/10.	39	1.7	39	2.3	40	2.0
B10	No	Identify smallest of decimal fractions.	26	1.8	28	2.1	24	2.2
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	44	1.8	44	2.4	43	2.2
C06	No	Determine the worst estimate of: 848 + 677.	58	1.9	57	2.4	58	2.4
D09	No	Identify smallest fraction.	41	2.1	44	2.6	37	2.7
D12	No	Estimate rational number from point on number line.	42	1.5	45	2.5	40	2.1
E03	No	Find fraction of hour between two time points.	42	2.1	41	2.6	43	2.6
E04	No	Solve multi-step word problem: 4-digit whole numbers.	65	1.8	64	2.3	66	2.4
F09	No	Identify decimal fraction between 0.07 and 0.08.	48	2.0	48	2.6	47	2.2
F12	No	Identify fraction of circle which is shaded.	35	1.8	35	2.4	34	2.3
G05	No	Identify fraction represented in word problem.	35	2.0	35	2.9	35	2.1
H08	No	Identify figure showing 2/3 shaded.	35	2.2	37	2.8	34	2.5
H09	No	Identify sum which is closest to 691 + 208.	73	1.8	75	2.0	71	2.2
I02	Yes	Solve multi-step word problem: common fractions.	39	2.7	45	3.3	33	3.4
I05	Yes	Solve subtraction word problem: rational numbers.	57	2.7	56	3.4	60	3.8
I06	Yes	Write a fraction larger than a given number.	61	2.9	61	4.0	61	4.2
I07	Yes	Recognize when estimation is appropriate.	39	2.5	41	3.2	36	3.6
J12	Yes	Divide fractions.	53	2.9	54	3.8	53	3.8
J14	Yes	Divide rational numbers, fractional divisor.	39	2.9	40	3.6	38	3.9
J17	Yes	Use map and scale to find distance between two cities.	50	2.9	55	3.6	44	4.0
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	59	2.6	60	3.9	59	3.5
K02	Yes	Find total volume of mixture using rational number addition.	60	2.1	54	3.4	64	2.8
K06	Yes	Approximate amount increased by 15%.	20	2.3	19	3.4	21	3.1
K09	Yes	Compute sum of three fractions.	66	2.4	59	3.6	72	2.9
L08	Yes	Estimate actual height from diagram of relative heights.	46	2.8	52	3.8	42	3.6
L09	Yes	Identify 504.7 from its expression in words.	65	2.5	63	3.9	67	3.2
L17	Yes	Subtract three fractions.	46	3.1	45	4.1	48	3.9
M04	Yes	Identify the largest fraction.	19	2.2	26	3.3	13	2.3
M08	Yes	Multiply two decimal fractions.	39	2.7	36	3.5	41	3.6
N11	Yes	Identify number rounded to 18200.	60	2.8	61	3.9	60	3.8
N14	Yes	Identify list of equivalent fractions.	47	3.0	48	4.1	47	4.0
N16	Yes	Solve algebra word problem with fractions.	38	2.9	38	3.7	38	3.7
N17	Yes	Solve multi-step word problem: decimal fractions.	33	2.4	35	3.3	30	3.4
N19	Yes	Shade a given fraction of the squares in a grid.	35	2.9	38	4.1	32	3.4
O02	Yes	Calculate percent increase.	13	1.9	15	2.6	11	2.2
O04	Yes	Identify number rounded to the nearest 100th.	20	2.3	24	4.0	17	2.5
O09	Yes	Solve division word problem: common fractions.	32	2.9	37	4.0	28	3.6
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	57	2.9	56	3.6	58	3.9
P13	Yes	Use heart beats/min to find beats per hour.	56	2.8	54	3.6	59	4.0
P14	Yes	Solve subtraction word problem: common fractions.	62	2.8	60	4.0	63	3.4
P16	Yes	Reduce decimal to fraction in lowest terms.	28	2.5	25	3.1	32	4.0
Q06	Yes	Approximate water use/year from use/week.	28	2.7	25	3.2	31	3.9
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	20	2.3	22	3.0	18	3.2
Q09	Yes	Perform multiple operations of common fractions.	54	3.0	54	3.9	53	4.3
R06	Yes	Subtract two decimal numbers.	69	2.7	68	3.2	69	3.8
R07	Yes	Solve division word problem involving decimals.	35	2.3	30	3.4	40	3.6
R12	Yes	Subtract 4-digit whole numbers.	80	2.0	75	3.4	84	2.4
R13	Yes	Determine how much money left after spending 7/9.	19	2.2	24	3.2	15	2.8
U01A	Yes	Estimate the time required to record 5 songs.	5	1.0	5	1.2	4	1.2
U01B	Yes	Explain method of estimation.	8	1.5	8	1.5	7	1.9
V01	Yes	Determine actual weight from rounded value.	25	1.9	26	2.4	24	2.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Romania SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	65	1.6	64	1.9	66	1.8
B11	No	Identify cube made by folding 2-dimensional net.	36	1.7	36	2.1	36	2.0
C03	No	Identify properties of congruent trapezoids.	63	2.0	63	2.3	64	2.4
D07	No	Identify relationship of angles in symmetric polygon.	70	1.6	73	2.1	69	2.0
E02	No	Determine angle in congruent triangles.	49	2.0	51	2.4	46	2.4
G03	No	Find sum of vertical angles from diagram of intersecting lines.	51	2.3	54	2.9	48	2.6
I08	Yes	Identify point on a line defined by two other points.	18	2.0	17	2.4	19	2.7
J11	Yes	Identify properties of a parallelogram.	60	2.9	58	4.2	63	3.7
J15	Yes	Identify similar triangles of different size.	67	2.5	67	3.3	68	3.3
J16	Yes	Identify coordinates for point on a grid.	32	2.6	36	3.3	29	3.4
K03	Yes	Identify figure from rotation of 3-dimensional object.	50	2.8	57	3.9	45	3.6
K08	Yes	Determine unknown angle in rotated congruent triangles.	34	2.5	36	3.9	33	3.5
L15	Yes	Find fourth quadrilateral angle, given the other three.	39	2.9	37	3.9	41	3.7
M02	Yes	Identify all lines of symmetry for a rectangle.	49	2.5	49	3.7	49	3.0
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	32	2.9	31	3.4	32	3.6
M07	Yes	Find angle based on supplementary pairs.	63	2.6	65	4.0	62	3.3
N12	Yes	Identify point on number line from distance of other points.	53	2.8	53	4.1	52	3.4
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	42	2.6	43	4.1	40	3.5
O08	Yes	Find center point of rotation for symmetry-related figures.	60	3.0	59	3.8	61	3.7
P08	Yes	Know relationship between side and perimeter for square.	52	2.9	52	3.7	52	3.7
P09	Yes	Find length of side for similar triangles.	33	2.8	32	3.7	34	3.6
Q10	Yes	Perform calculation involving addition/subtraction of angles.	40	2.9	42	3.7	37	3.7
R10	Yes	Determine into how many triangles a trapezoid can be divided.	37	2.4	33	3.2	40	3.8

COUNTRY ID=Romania SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
C01	No	Compare volumes of different stacks of blocks.	36	2.0	37	2.3	35	2.6
D11	No	Identify best unit to measure the mass of an egg.	86	1.1	84	1.6	87	1.3
E06	No	Solve word problem to find length of rectangle from width and perimeter.	37	1.8	39	2.5	35	2.3
F10	No	Determine measurement accuracy of ruler.	37	2.2	40	2.8	35	2.4
G02	No	Read meter scale to determine length of a pipe.	65	1.9	64	2.5	66	2.3
I03	Yes	Find number of 750 mL bottles filled by a large volume.	35	2.8	35	3.3	35	3.2
J10	Yes	Determine area of sheet not covered by rectangular picture.	29	2.6	30	3.7	28	3.3
K05	Yes	Calculate area of a rectangle given its length and perimeter.	40	2.8	39	4.3	40	3.4
L12	Yes	Find longest pace from chart showing number of paces to cross room.	65	2.8	66	3.6	63	3.8
M01	Yes	Read mass shown on scale.	72	2.5	71	3.6	72	3.2
N15	Yes	Identify drawing with angle closest to 30 degrees.	58	2.8	61	3.9	55	3.6
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	65	2.7	69	3.9	62	3.0
P11	Yes	Use ruler to determine approximate length of pencil.	40	2.6	38	3.1	41	3.4
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	23	2.0	28	3.1	17	2.7
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	52	3.0	53	4.0	52	3.5
S02B	Yes	Calculate length of side of square given area.	34	3.2	33	4.1	35	3.6
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	15	2.3	14	2.8	17	3.0
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	23	2.0	22	2.4	24	2.4
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	10	1.6	9	2.3	10	1.8
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	29	2.2	26	2.9	32	2.6

COUNTRY ID=Romania SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	43	1.5	47	1.6	39	1.8
B08	No	Solve word problem using proportions: 300 calories/100g = $?/30g$.	69	1.7	69	2.0	69	2.1
D08	No	Solve ratio problem for x: $7/13 = x/52$.	58	1.8	59	2.5	57	2.0
F07	No	Solve word problem to find average speed from distance and time.	28	1.9	30	2.7	27	2.1
G04	No	Solve simple proportionality equation.	60	2.0	56	2.9	63	2.4
L14	Yes	Identify missing numbers in table of proportional x and y values.	22	2.5	20	3.4	25	3.2
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	22	2.6	23	3.3	20	3.2
Q05	Yes	Solve word problem involving ratios.	48	2.6	48	4.0	48	3.6
R14	Yes	Solve multi-step word problem involving ratios.	30	2.3	32	3.3	28	3.0
T02A	Yes	Solve algebra word problem involving ratios.	13	1.8	12	2.3	13	2.2
T02B	Yes	Solve multi-step word problem computing fractions.	4	0.9	4	1.2	4	1.1
V03	Yes	Determine ratio of red paint in a mixture.	29	2.0	27	2.4	30	2.7

COUNTRY ID=Russian Federation SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	84	1.1	84	1.1	83	1.5
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	81	1.6	79	1.9	82	1.7
C05	No	Determine number which continues pattern based on figures.	47	1.9	44	2.4	51	2.2
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	40	1.6	39	2.5	40	2.3
E05	No	Find relationship between numbers in a set of ordered pairs.	59	2.0	57	2.6	60	2.3
F11	No	Solve multi-step problem using linear equations.	59	1.6	56	2.5	62	1.8
G06	No	Find solution to $-3X$ for given value of X .	75	1.7	71	2.2	78	2.1
H10	No	Identify equation expressing xy relationship from table of values.	50	2.6	50	3.4	49	2.6
H12	No	Select symbolic linear equation which fits word problem.	72	1.7	74	2.4	70	1.8
I01	Yes	Identify meaning of symbol in word problem equation.	37	2.7	40	3.6	34	3.3
I04	Yes	Determine next number which occurs in two number sequences.	40	2.9	38	4.0	42	3.7
J18	Yes	Identify missing number in table showing xy relationship.	27	1.9	30	4.1	24	2.6
K04	Yes	Identify expression equivalent to linear inequality.	36	2.9	37	5.2	35	3.0
L11	Yes	Solve multi-step word problem using pattern.	23	3.0	25	4.6	21	3.0
L13	Yes	Identify matching patterns of symbols.	92	1.5	90	2.2	94	1.6
L16	Yes	Simplify and solve linear equation for X .	70	3.2	68	3.4	72	3.8
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	69	2.6	62	4.2	75	3.0
O07	Yes	Solve linear equation for X .	84	2.0	84	2.1	85	2.7
P10	Yes	Identify equivalent algebraic expressions.	61	2.9	55	4.8	67	3.5
P15	Yes	Identify equivalent expression for a cubic relationship.	70	2.3	67	3.5	72	2.6
Q01	Yes	Identify linear expression based on word problem.	54	2.5	51	3.9	56	2.9
Q02	Yes	Subtract fractional expressions of X .	59	2.7	54	3.5	63	3.5
Q07	Yes	Solve $P=LW$ for W given values for P and L .	59	2.4	53	3.9	65	3.4
R09	Yes	Identify equivalent expressions from properties of real numbers.	52	2.4	46	3.7	57	3.1
R11	Yes	Solve algebra word problem: linear equation.	59	2.2	60	4.1	57	2.6
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	70	1.8	67	3.5	73	2.6
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	11	1.5	11	1.7	11	2.3
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	35	2.1	35	2.8	35	3.0
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	37	2.0	36	2.8	38	2.6

COUNTRY ID=Russian Federation SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	74	1.2	73	1.7	75	1.0
B07	No	Interpret line graph to find region of largest increase.	64	1.6	62	2.0	66	1.9
C02	No	Interpret pie graph to determine distribution.	76	1.4	74	2.1	77	1.5
E01	No	Interpret line graph to determine intersection point of two plots.	79	1.9	81	2.1	78	2.4
F08	No	Predict probability of occurrence for independent coin toss.	51	1.8	48	1.8	54	2.9
G01	No	Interpret frequency table to find number above a given level.	47	1.8	48	2.0	46	2.7
H07	No	Interpret bar chart histogram to find number above a given level.	53	1.7	56	2.6	50	2.4
H11	No	Predict number of total defective bulbs based on random sample.	58	1.7	62	2.5	53	1.9
I09	Yes	Predict most likely color of random card based on fraction of colors.	56	2.3	58	3.2	54	3.2
J13	Yes	Draw pictograph to represent number given in table.	77	2.2	77	2.2	78	3.4
K07	Yes	Determine the number of blue pens given probability of selection.	46	2.5	51	3.4	42	3.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	84	2.2	83	2.9	86	3.9
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	63	2.8	69	3.7	57	3.7
N18	Yes	Find probability of drawing an even number from 1 to 9.	36	2.9	39	4.6	34	3.5
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	49	3.2	52	4.0	45	4.6
O05	Yes	Calculate number of cube faces from probability of toss.	29	2.7	33	3.6	24	3.6
P17	Yes	Identify thermometer which shows temperature given in data table.	75	2.1	73	3.3	76	2.9
Q04	Yes	Interpret data in bar graph.	81	2.3	75	3.1	86	2.4
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	42	2.8	45	3.6	38	3.4
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	11	1.3	13	1.9	9	1.5

COUNTRY ID=Russian Federation SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	57	2.1	58	2.3	56	2.3
B09	No	Identify shaded figure which shows 2/5 = 4/10.	58	2.2	57	2.4	59	2.3
B10	No	Identify smallest of decimal fractions.	39	1.5	43	1.8	35	1.8
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	50	1.7	55	2.6	46	2.2
C06	No	Determine the worst estimate of: 848 + 677.	69	1.9	68	2.3	69	2.2
D09	No	Identify smallest fraction.	50	1.6	56	2.6	44	1.8
D12	No	Estimate rational number from point on number line.	75	1.4	78	1.9	71	2.2
E03	No	Find fraction of hour between two time points.	54	1.8	56	2.2	53	2.1
E04	No	Solve multi-step word problem: 4-digit whole numbers.	72	1.8	69	2.6	75	2.2
F09	No	Identify decimal fraction between 0.07 and 0.08.	57	1.7	59	2.1	55	2.0
F12	No	Identify fraction of circle which is shaded.	45	1.5	45	1.8	45	2.2
G05	No	Identify fraction represented in word problem.	50	1.8	51	2.4	49	2.2
H08	No	Identify figure showing 2/3 shaded.	60	2.3	58	2.8	61	2.3
H09	No	Identify sum which is closest to 691 + 208.	80	1.2	81	1.8	79	1.9
I02	Yes	Solve multi-step word problem: common fractions.	49	2.9	56	3.5	43	4.1
I05	Yes	Solve subtraction word problem: rational numbers.	77	2.3	79	3.3	76	3.1
I06	Yes	Write a fraction larger than a given number.	78	1.9	77	2.9	80	2.4
I07	Yes	Recognize when estimation is appropriate.	53	1.9	53	2.8	53	2.2
J12	Yes	Divide fractions.	61	2.5	55	4.1	66	3.2
J14	Yes	Divide rational numbers, fractional divisor.	68	2.9	63	3.5	73	3.4
J17	Yes	Use map and scale to find distance between two cities.	66	2.2	68	2.7	64	3.0
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	62	2.6	61	4.5	62	3.0
K02	Yes	Find total volume of mixture using rational number addition.	65	3.3	62	4.2	68	3.5
K06	Yes	Approximate amount increased by 15%.	29	2.0	34	3.5	24	2.5
K09	Yes	Compute sum of three fractions.	53	2.7	50	4.9	55	2.9
L08	Yes	Estimate actual height from diagram of relative heights.	51	2.6	45	3.9	57	3.4
L09	Yes	Identify 504.7 from its expression in words.	92	1.5	91	2.3	94	1.6
L17	Yes	Subtract three fractions.	58	3.4	58	4.9	58	3.9
M04	Yes	Identify the largest fraction.	25	2.1	31	3.3	19	2.3
M08	Yes	Multiply two decimal fractions.	76	2.3	77	2.5	75	3.4
N11	Yes	Identify number rounded to 18200.	70	2.4	67	3.4	72	3.2
N14	Yes	Identify list of equivalent fractions.	65	2.4	65	3.0	65	3.1
N16	Yes	Solve algebra word problem with fractions.	47	3.0	48	3.9	47	3.8
N17	Yes	Solve multi-step word problem: decimal fractions.	42	2.5	44	3.3	41	3.6
N19	Yes	Shade a given fraction of the squares in a grid.	47	2.8	50	4.0	44	4.0
O02	Yes	Calculate percent increase.	16	1.8	19	3.3	13	2.2
O04	Yes	Identify number rounded to the nearest 100th.	65	2.7	71	3.2	58	3.9
O09	Yes	Solve division word problem: common fractions.	51	2.4	60	2.8	40	3.3
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	64	2.1	64	3.2	63	3.2
P13	Yes	Use heart beats/min to find beats per hour.	68	2.4	64	3.3	71	3.2
P14	Yes	Solve subtraction word problem: common fractions.	64	2.6	58	3.7	69	3.0
P16	Yes	Reduce decimal to fraction in lowest terms.	55	3.3	48	4.4	62	3.4
Q06	Yes	Approximate water use/year from use/week.	32	2.4	26	3.5	38	2.9
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	30	2.6	32	3.9	28	2.5
Q09	Yes	Perform multiple operations of common fractions.	57	2.9	48	4.3	66	3.4
R06	Yes	Subtract two decimal numbers.	80	2.9	75	3.8	85	3.6
R07	Yes	Solve division word problem involving decimals.	53	2.7	48	3.7	57	3.2
R12	Yes	Subtract 4-digit whole numbers.	92	1.6	90	2.5	94	1.3
R13	Yes	Determine how much money left after spending 7/9.	26	2.5	25	3.1	27	3.0
U01A	Yes	Estimate the time required to record 5 songs.	25	1.5	25	2.7	24	2.0
U01B	Yes	Explain method of estimation.	17	1.5	18	1.8	16	1.9
V01	Yes	Determine actual weight from rounded value.	54	2.0	55	2.8	52	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Russian Federation SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	72	1.3	69	1.8	74	1.3
B11	No	Identify cube made by folding 2-dimensional net.	56	1.9	58	1.9	55	2.7
C03	No	Identify properties of congruent trapezoids.	59	2.3	56	2.7	61	2.7
D07	No	Identify relationship of angles in symmetric polygon.	66	1.6	68	2.2	65	2.0
E02	No	Determine angle in congruent triangles.	59	2.9	61	2.7	57	4.0
G03	No	Find sum of vertical angles from diagram of intersecting lines.	59	2.1	60	2.7	57	2.3
I08	Yes	Identify point on a line defined by two other points.	35	3.3	33	4.1	37	3.8
J11	Yes	Identify properties of a parallelogram.	42	2.4	39	3.4	45	3.9
J15	Yes	Identify similar triangles of different size.	54	3.0	56	3.9	53	4.7
J16	Yes	Identify coordinates for point on a grid.	56	2.1	51	3.7	60	3.1
K03	Yes	Identify figure from rotation of 3-dimensional object.	69	2.4	71	3.4	67	3.1
K08	Yes	Determine unknown angle in rotated congruent triangles.	33	3.2	36	4.4	30	3.6
L15	Yes	Find fourth quadrilateral angle, given the other three.	33	2.4	34	3.5	31	2.7
M02	Yes	Identify all lines of symmetry for a rectangle.	61	2.4	59	3.3	64	3.0
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	50	2.7	53	3.3	47	3.5
M07	Yes	Find angle based on supplementary pairs.	71	2.6	77	3.1	64	4.4
N12	Yes	Identify point on number line from distance of other points.	78	1.9	79	1.8	76	2.9
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	62	3.2	67	4.0	57	4.6
O08	Yes	Find center point of rotation for symmetry-related figures.	74	1.8	74	3.1	73	3.5
P08	Yes	Know relationship between side and perimeter for square.	49	3.1	47	3.7	50	3.4
P09	Yes	Find length of side for similar triangles.	27	2.7	28	3.7	26	3.5
Q10	Yes	Perform calculation involving addition/subtraction of angles.	44	2.7	40	3.4	48	3.2
R10	Yes	Determine into how many triangles a trapezoid can be divided.	50	3.3	50	4.7	50	4.5

COUNTRY ID=Russian Federation SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	52	1.5	51	2.1	53	1.6
C01	No	Compare volumes of different stacks of blocks.	51	2.4	55	2.8	47	2.6
D11	No	Identify best unit to measure the mass of an egg.	87	1.2	87	1.7	88	1.5
E06	No	Solve word problem to find length of rectangle from width and perimeter.	42	2.6	43	3.0	41	2.8
F10	No	Determine measurement accuracy of ruler.	68	1.1	69	1.9	67	1.9
G02	No	Read meter scale to determine length of a pipe.	78	1.2	79	1.6	78	2.1
I03	Yes	Find number of 750 mL bottles filled by a large volume.	40	2.2	48	3.2	33	4.3
J10	Yes	Determine area of sheet not covered by rectangular picture.	40	2.8	40	3.9	41	3.3
K05	Yes	Calculate area of a rectangle given its length and perimeter.	35	2.3	39	3.0	32	2.9
L12	Yes	Find longest pace from chart showing number of paces to cross room.	81	2.2	82	2.7	80	3.5
M01	Yes	Read mass shown on scale.	83	2.2	87	2.1	80	3.5
N15	Yes	Identify drawing with angle closest to 30 degrees.	71	2.4	74	3.1	69	3.7
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	50	3.2	52	3.7	48	4.7
P11	Yes	Use ruler to determine approximate length of pencil.	51	2.4	49	5.0	54	3.9
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	26	1.9	26	3.5	26	2.3
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	65	2.4	61	3.9	68	2.0
S02B	Yes	Calculate length of side of square given area.	25	2.8	25	4.4	25	3.5
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	16	2.2	16	3.0	16	2.6
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	27	1.8	25	2.0	30	2.3
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	7	1.4	8	2.1	5	1.4
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	31	2.2	34	2.3	29	3.0

COUNTRY ID=Russian Federation SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	57	1.5	65	1.9	49	1.5
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	71	1.1	71	1.6	71	1.5
D08	No	Solve ratio problem for x: $7/13 = x/52$.	58	2.5	61	2.5	56	2.9
F07	No	Solve word problem to find average speed from distance and time.	35	1.9	35	2.6	35	2.6
G04	No	Solve simple proportionality equation.	57	1.7	57	2.3	57	2.2
L14	Yes	Identify missing numbers in table of proportional x and y values.	20	2.5	20	2.6	21	4.0
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	25	2.1	29	3.7	22	2.3
Q05	Yes	Solve word problem involving ratios.	47	3.1	44	4.5	50	4.4
R14	Yes	Solve multi-step word problem involving ratios.	50	2.5	43	3.8	56	3.2
T02A	Yes	Solve algebra word problem involving ratios.	22	2.1	23	2.0	21	3.3
T02B	Yes	Solve multi-step word problem computing fractions.	6	0.9	6	1.0	7	1.5
V03	Yes	Determine ratio of red paint in a mixture.	27	2.0	27	2.7	28	2.4

COUNTRY ID=Singapore SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	82	0.9	83	1.2	82	1.3
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	87	1.4	86	1.8	88	1.5
C05	No	Determine number which continues pattern based on figures.	70	1.6	69	2.4	70	2.1
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	48	2.0	48	2.9	47	2.3
E05	No	Find relationship between numbers in a set of ordered pairs.	63	2.3	64	2.9	63	3.0
F11	No	Solve multi-step problem using linear equations.	79	2.2	78	2.5	79	2.8
G06	No	Find solution to $-3X$ for given value of X .	60	2.6	57	3.4	64	3.0
H10	No	Identify equation expressing xy relationship from table of values.	51	2.5	54	3.0	48	3.4
H12	No	Select symbolic linear equation which fits word problem.	93	0.9	94	1.2	93	1.0
I01	Yes	Identify meaning of symbol in word problem equation.	46	2.8	51	3.2	41	4.4
I04	Yes	Determine next number which occurs in two number sequences.	51	2.8	48	3.9	54	3.6
J18	Yes	Identify missing number in table showing xy relationship.	40	2.2	40	3.0	40	3.1
K04	Yes	Identify expression equivalent to linear inequality.	56	2.7	54	3.8	57	3.6
L11	Yes	Solve multi-step word problem using pattern.	34	2.2	32	2.9	36	3.8
L13	Yes	Identify matching patterns of symbols.	93	1.3	91	2.1	94	1.3
L16	Yes	Simplify and solve linear equation for X .	59	2.9	62	3.4	57	3.9
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	72	2.3	75	3.6	70	3.0
O07	Yes	Solve linear equation for X .	91	1.7	92	2.1	89	2.3
P10	Yes	Identify equivalent algebraic expressions.	77	2.2	81	2.7	73	3.3
P15	Yes	Identify equivalent expression for a cubic relationship.	84	1.6	86	2.2	82	2.7
Q01	Yes	Identify linear expression based on word problem.	78	2.4	75	3.0	82	3.2
Q02	Yes	Subtract fractional expressions of X .	77	2.2	81	2.6	74	3.9
Q07	Yes	Solve $P=LW$ for W given values for P and L .	91	1.7	92	2.4	89	2.2
R09	Yes	Identify equivalent expressions from properties of real numbers.	62	3.1	57	3.8	68	4.3
R11	Yes	Solve algebra word problem: linear equation.	82	2.0	84	2.3	79	3.2
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	79	2.4	79	3.1	80	2.9
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	37	2.9	37	4.0	37	3.9
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	63	3.1	60	3.9	66	3.6
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	66	3.2	64	3.9	68	3.6

COUNTRY ID=Singapore SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	91	0.6	90	0.8	92	0.9
B07	No	Interpret line graph to find region of largest increase.	79	1.5	77	2.0	82	1.6
C02	No	Interpret pie graph to determine distribution.	83	1.7	84	2.0	83	2.1
E01	No	Interpret line graph to determine intersection point of two plots.	68	2.0	70	2.4	66	2.5
F08	No	Predict probability of occurrence for independent coin toss.	37	2.1	37	2.8	37	2.9
G01	No	Interpret frequency table to find number above a given level.	53	2.0	54	2.5	52	2.6
H07	No	Interpret bar chart histogram to find number above a given level.	82	1.4	80	2.0	83	1.7
H11	No	Predict number of total defective bulbs based on random sample.	73	2.0	77	2.2	70	2.9
I09	Yes	Predict most likely color of random card based on fraction of colors.	84	1.9	85	2.7	83	2.5
J13	Yes	Draw pictograph to represent number given in table.	92	1.3	92	2.1	93	1.6
K07	Yes	Determine the number of blue pens given probability of selection.	88	1.8	84	2.8	92	2.1
L10	Yes	Use data in a chart to identify time/day with highest temperature.	80	2.1	81	3.2	80	2.9
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	82	2.0	81	2.7	84	2.8
N18	Yes	Find probability of drawing an even number from 1 to 9.	56	3.3	55	4.8	57	4.2
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	57	2.5	59	3.7	54	2.8
O05	Yes	Calculate number of cube faces from probability of toss.	80	2.1	81	2.9	79	3.2
P17	Yes	Identify thermometer which shows temperature given in data table.	73	2.2	71	3.4	76	2.8
Q04	Yes	Interpret data in bar graph.	94	1.3	95	1.5	94	2.0
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	46	2.4	49	4.0	42	3.7
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	49	2.6	48	3.3	51	3.5

COUNTRY ID=Singapore SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	81	1.8	82	1.9	80	2.2
B09	No	Identify shaded figure which shows 2/5 = 4/10.	79	1.4	77	1.8	81	1.8
B10	No	Identify smallest of decimal fractions.	85	1.6	87	1.7	84	2.2
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	65	2.2	66	2.6	64	2.9
C06	No	Determine the worst estimate of: 848 + 677.	87	1.2	88	1.4	87	1.6
D09	No	Identify smallest fraction.	88	1.4	89	1.7	87	1.6
D12	No	Estimate rational number from point on number line.	89	1.0	90	1.4	89	1.4
E03	No	Find fraction of hour between two time points.	79	2.0	78	2.4	81	2.4
E04	No	Solve multi-step word problem: 4-digit whole numbers.	87	1.3	87	1.8	88	1.5
F09	No	Identify decimal fraction between 0.07 and 0.08.	81	1.6	83	1.8	80	2.2
F12	No	Identify fraction of circle which is shaded.	66	1.8	67	2.1	65	2.4
G05	No	Identify fraction represented in word problem.	85	1.4	83	2.0	88	1.9
H08	No	Identify figure showing 2/3 shaded.	94	0.8	93	1.2	94	1.0
H09	No	Identify sum which is closest to 691 + 208.	96	0.6	96	0.9	96	0.7
I02	Yes	Solve multi-step word problem: common fractions.	83	2.4	80	3.2	86	2.4
I05	Yes	Solve subtraction word problem: rational numbers.	89	1.6	85	2.8	93	1.6
I06	Yes	Write a fraction larger than a given number.	84	2.1	87	2.7	82	3.1
I07	Yes	Recognize when estimation is appropriate.	76	2.0	74	3.0	78	3.2
J12	Yes	Divide fractions.	84	1.9	82	2.9	86	2.5
J14	Yes	Divide rational numbers, fractional divisor.	70	2.7	69	3.8	71	3.8
J17	Yes	Use map and scale to find distance between two cities.	79	2.4	78	3.8	80	2.8
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	72	2.3	75	2.9	70	3.6
K02	Yes	Find total volume of mixture using rational number addition.	87	2.0	84	2.6	91	2.3
K06	Yes	Approximate amount increased by 15%.	62	2.6	62	3.4	62	3.5
K09	Yes	Compute sum of three fractions.	86	1.9	85	2.5	87	2.7
L08	Yes	Estimate actual height from diagram of relative heights.	58	2.8	61	3.7	56	4.2
L09	Yes	Identify 504.7 from its expression in words.	90	1.5	92	1.8	88	2.3
L17	Yes	Subtract three fractions.	86	2.0	85	2.7	86	2.8
M04	Yes	Identify the largest fraction.	73	2.8	67	3.6	79	3.5
M08	Yes	Multiply two decimal fractions.	61	3.3	57	4.0	65	4.6
N11	Yes	Identify number rounded to 18200.	96	0.9	95	1.5	96	1.6
N14	Yes	Identify list of equivalent fractions.	83	2.0	81	2.7	85	2.6
N16	Yes	Solve algebra word problem with fractions.	64	2.6	67	3.8	60	3.2
N17	Yes	Solve multi-step word problem: decimal fractions.	62	3.1	59	3.7	66	4.0
N19	Yes	Shade a given fraction of the squares in a grid.	86	1.7	88	2.0	83	2.5
O02	Yes	Calculate percent increase.	69	3.0	72	3.6	65	4.0
O04	Yes	Identify number rounded to the nearest 100th.	68	2.4	69	3.7	67	3.4
O09	Yes	Solve division word problem: common fractions.	72	3.1	74	4.2	70	4.0
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	91	1.6	91	2.0	91	2.0
P13	Yes	Use heart beats/min to find beats per hour.	85	1.8	87	2.2	83	2.8
P14	Yes	Solve subtraction word problem: common fractions.	88	1.8	91	2.1	85	2.9
P16	Yes	Reduce decimal to fraction in lowest terms.	89	1.7	88	2.2	91	2.3
Q06	Yes	Approximate water use/year from use/week.	51	2.9	53	3.6	49	4.2
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	78	2.4	83	2.7	74	4.0
Q09	Yes	Perform multiple operations of common fractions.	88	2.0	86	2.4	90	2.4
R06	Yes	Subtract two decimal numbers.	92	1.5	89	2.4	94	1.5
R07	Yes	Solve division word problem involving decimals.	73	2.4	77	3.0	68	3.6
R12	Yes	Subtract 4-digit whole numbers.	98	0.6	99	0.7	98	1.1
R13	Yes	Determine how much money left after spending 7/9.	78	2.5	78	3.3	78	3.6
U01A	Yes	Estimate the time required to record 5 songs.	62	2.5	62	3.0	62	3.3
U01B	Yes	Explain method of estimation.	64	2.8	62	3.3	66	3.6
V01	Yes	Determine actual weight from rounded value.	82	2.2	81	2.8	83	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Singapore SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	61	1.7	61	1.9	62	2.1
B11	No	Identify cube made by folding 2-dimensional net.	79	1.4	83	1.5	75	2.2
C03	No	Identify properties of congruent trapezoids.	77	2.0	74	2.5	80	2.4
D07	No	Identify relationship of angles in symmetric polygon.	70	2.0	70	2.5	70	2.6
E02	No	Determine angle in congruent triangles.	75	1.7	77	1.9	74	2.6
G03	No	Find sum of vertical angles from diagram of intersecting lines.	83	1.3	81	2.0	86	1.7
I08	Yes	Identify point on a line defined by two other points.	47	2.6	49	3.7	46	3.7
J11	Yes	Identify properties of a parallelogram.	58	2.9	58	3.3	58	3.7
J15	Yes	Identify similar triangles of different size.	74	1.8	75	2.9	74	2.7
J16	Yes	Identify coordinates for point on a grid.	76	2.1	76	3.0	76	2.9
K03	Yes	Identify figure from rotation of 3-dimensional object.	77	1.9	81	2.7	73	3.2
K08	Yes	Determine unknown angle in rotated congruent triangles.	55	2.8	51	3.5	60	3.9
L15	Yes	Find fourth quadrilateral angle, given the other three.	62	2.6	63	3.8	60	3.4
M02	Yes	Identify all lines of symmetry for a rectangle.	77	3.0	76	3.9	78	3.9
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	51	3.1	48	4.5	54	4.5
M07	Yes	Find angle based on supplementary pairs.	85	1.9	84	3.0	87	2.3
N12	Yes	Identify point on number line from distance of other points.	71	2.3	67	3.5	74	3.1
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	79	2.2	79	3.0	80	2.8
O08	Yes	Find center point of rotation for symmetry-related figures.	68	2.7	73	3.2	63	3.7
P08	Yes	Know relationship between side and perimeter for square.	75	2.5	70	3.5	80	2.7
P09	Yes	Find length of side for similar triangles.	50	3.4	52	4.2	47	4.4
Q10	Yes	Perform calculation involving addition/subtraction of angles.	60	3.1	62	3.7	59	4.3
R10	Yes	Determine into how many triangles a trapezoid can be divided.	66	2.7	65	3.5	68	3.8

COUNTRY ID=Singapore SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	87	1.3	85	1.5	88	1.4
C01	No	Compare volumes of different stacks of blocks.	88	1.2	90	1.3	86	1.7
D11	No	Identify best unit to measure the mass of an egg.	92	0.9	92	1.0	92	1.1
E06	No	Solve word problem to find length of rectangle from width and perimeter.	74	2.5	74	2.9	74	3.1
F10	No	Determine measurement accuracy of ruler.	53	2.4	53	2.7	53	3.5
G02	No	Read meter scale to determine length of a pipe.	94	0.7	94	1.0	95	0.9
I03	Yes	Find number of 750 mL bottles filled by a large volume.	58	3.3	56	4.0	60	4.3
J10	Yes	Determine area of sheet not covered by rectangular picture.	85	1.9	83	2.6	87	2.6
K05	Yes	Calculate area of a rectangle given its length and perimeter.	75	2.7	73	3.8	77	3.4
L12	Yes	Find longest pace from chart showing number of paces to cross room.	70	3.0	72	3.2	67	4.2
M01	Yes	Read mass shown on scale.	93	1.1	93	1.6	94	1.8
N15	Yes	Identify drawing with angle closest to 30 degrees.	73	2.4	73	3.7	74	2.8
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	78	2.7	81	3.1	74	3.4
P11	Yes	Use ruler to determine approximate length of pencil.	62	2.6	66	3.8	58	3.5
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	55	2.7	56	4.3	53	3.6
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	92	1.3	92	1.8	93	1.7
S02B	Yes	Calculate length of side of square given area.	73	2.9	74	3.5	72	3.5
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	59	2.8	57	3.7	60	3.7
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	73	2.1	73	2.7	73	3.1

COUNTRY ID=Singapore SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	75	1.5	76	1.7	74	1.9
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	87	1.2	86	1.4	88	1.4
D08	No	Solve ratio problem for x: $7/13 = x/52$.	94	1.0	94	1.2	94	1.2
F07	No	Solve word problem to find average speed from distance and time.	65	2.4	64	2.8	66	3.1
G04	No	Solve simple proportionality equation.	92	0.9	93	1.1	91	1.3
L14	Yes	Identify missing numbers in table of proportional x and y values.	42	2.9	43	3.9	40	4.0
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	89	1.7	87	2.6	92	2.1
Q05	Yes	Solve word problem involving ratios.	83	1.9	83	2.4	82	3.0
R14	Yes	Solve multi-step word problem involving ratios.	79	2.4	79	3.2	78	3.2
T02A	Yes	Solve algebra word problem involving ratios.	37	3.2	36	4.2	39	3.9
T02B	Yes	Solve multi-step word problem computing fractions.	14	1.7	15	2.4	14	2.1
V03	Yes	Determine ratio of red paint in a mixture.	89	1.6	86	2.2	92	1.6

COUNTRY ID=South Africa SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	30	1.8	33	2.6	28	1.6
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	20	1.7	20	2.1	21	2.0
C05	No	Determine number which continues pattern based on figures.	21	1.7	22	2.5	19	1.8
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	26	1.2	26	1.7	26	1.5
E05	No	Find relationship between numbers in a set of ordered pairs.	21	1.2	23	2.0	20	1.6
F11	No	Solve multi-step problem using linear equations.	24	1.2	26	2.0	23	1.6
G06	No	Find solution to $-3X$ for given value of X .	13	0.9	16	1.3	12	1.1
H10	No	Identify equation expressing xy relationship from table of values.	16	1.1	17	1.5	16	1.8
H12	No	Select symbolic linear equation which fits word problem.	34	2.1	35	2.2	34	2.6
I01	Yes	Identify meaning of symbol in word problem equation.	29	2.0	30	3.3	30	2.5
I04	Yes	Determine next number which occurs in two number sequences.	5	1.3	5	1.9	5	1.3
J18	Yes	Identify missing number in table showing xy relationship.	26	2.0	27	2.8	25	2.7
K04	Yes	Identify expression equivalent to linear inequality.	20	1.6	19	2.7	20	2.0
L11	Yes	Solve multi-step word problem using pattern.	39	2.2	38	3.6	40	2.9
L13	Yes	Identify matching patterns of symbols.	44	2.7	45	3.6	43	3.6
L16	Yes	Simplify and solve linear equation for X .	2	0.8	1	0.9	2	1.2
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	9	2.5	5	1.9	11	4.1
O07	Yes	Solve linear equation for X .	38	2.1	40	3.4	37	2.4
P10	Yes	Identify equivalent algebraic expressions.	25	2.0	24	2.7	25	2.2
P15	Yes	Identify equivalent expression for a cubic relationship.	19	2.2	18	3.1	20	2.8
Q01	Yes	Identify linear expression based on word problem.	21	2.1	24	3.2	18	2.5
Q02	Yes	Subtract fractional expressions of X .	29	2.1	31	2.7	29	2.6
Q07	Yes	Solve $P=LW$ for W given values for P and L .	19	2.0	16	2.5	23	2.5
R09	Yes	Identify equivalent expressions from properties of real numbers.	15	1.7	16	2.5	13	2.2
R11	Yes	Solve algebra word problem: linear equation.	29	1.9	29	2.8	30	2.4
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	19	2.5	19	3.2	18	2.8
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	3	0.9	3	1.4	2	1.1
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	4	1.1	5	2.0	3	0.9
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	4	1.1	5	2.1	4	0.9

COUNTRY ID=South Africa SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	48	1.8	48	2.1	48	2.1
B07	No	Interpret line graph to find region of largest increase.	25	1.4	26	1.8	24	1.7
C02	No	Interpret pie graph to determine distribution.	32	1.7	31	2.4	32	2.1
E01	No	Interpret line graph to determine intersection point of two plots.	25	1.6	24	2.4	25	1.6
F08	No	Predict probability of occurrence for independent coin toss.	32	1.5	34	1.8	30	1.7
G01	No	Interpret frequency table to find number above a given level.	26	1.2	27	1.8	25	1.6
H07	No	Interpret bar chart histogram to find number above a given level.	23	1.7	25	2.4	22	1.8
H11	No	Predict number of total defective bulbs based on random sample.	28	1.3	29	2.2	26	1.6
I09	Yes	Predict most likely color of random card based on fraction of colors.	41	2.1	47	3.4	36	2.4
J13	Yes	Draw pictograph to represent number given in table.	17	2.5	19	3.2	15	3.2
K07	Yes	Determine the number of blue pens given probability of selection.	26	2.3	28	3.8	26	2.4
L10	Yes	Use data in a chart to identify time/day with highest temperature.	48	2.7	47	3.6	49	3.4
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	30	2.5	34	3.6	28	3.0
N18	Yes	Find probability of drawing an even number from 1 to 9.	23	2.4	23	3.0	24	4.3
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	17	1.9	19	2.6	15	2.2
O05	Yes	Calculate number of cube faces from probability of toss.	12	1.7	12	2.5	12	1.9
P17	Yes	Identify thermometer which shows temperature given in data table.	29	2.5	31	2.8	27	3.2
Q04	Yes	Interpret data in bar graph.	27	2.7	27	3.7	28	3.7
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	18	1.9	20	2.7	17	2.5
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	2	0.8	2	1.5	2	0.6

COUNTRY ID=South Africa SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	16	1.6	16	2.0	15	1.8
B09	No	Identify shaded figure which shows 2/5 = 4/10.	30	1.3	31	1.8	30	1.5
B10	No	Identify smallest of decimal fractions.	10	1.8	12	2.5	8	1.7
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	45	1.6	47	2.2	43	1.8
C06	No	Determine the worst estimate of: 848 + 677.	44	1.9	45	2.5	42	2.3
D09	No	Identify smallest fraction.	35	2.4	39	2.8	32	2.6
D12	No	Estimate rational number from point on number line.	40	1.8	44	2.2	37	2.4
E03	No	Find fraction of hour between two time points.	24	1.2	27	2.1	22	1.3
E04	No	Solve multi-step word problem: 4-digit whole numbers.	27	1.8	28	2.5	26	2.0
F09	No	Identify decimal fraction between 0.07 and 0.08.	33	1.5	34	2.2	33	1.7
F12	No	Identify fraction of circle which is shaded.	28	1.2	28	1.5	27	1.7
G05	No	Identify fraction represented in word problem.	24	1.7	26	2.6	23	1.7
H08	No	Identify figure showing 2/3 shaded.	26	2.2	25	2.7	28	2.5
H09	No	Identify sum which is closest to 691 + 208.	40	1.9	42	2.6	39	2.1
I02	Yes	Solve multi-step word problem: common fractions.	20	2.0	21	3.4	20	2.0
I05	Yes	Solve subtraction word problem: rational numbers.	33	2.7	34	3.7	31	2.9
I06	Yes	Write a fraction larger than a given number.	45	3.7	43	4.1	46	4.5
I07	Yes	Recognize when estimation is appropriate.	46	2.3	49	3.2	45	2.8
J12	Yes	Divide fractions.	10	2.1	12	3.0	8	2.2
J14	Yes	Divide rational numbers, fractional divisor.	27	2.5	32	3.2	23	2.8
J17	Yes	Use map and scale to find distance between two cities.	23	2.2	27	3.3	20	2.5
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	24	2.7	26	4.1	22	2.9
K02	Yes	Find total volume of mixture using rational number addition.	28	2.4	30	3.4	25	3.1
K06	Yes	Approximate amount increased by 15%.	11	1.6	13	2.9	11	1.8
K09	Yes	Compute sum of three fractions.	15	1.8	15	3.0	16	2.1
L08	Yes	Estimate actual height from diagram of relative heights.	23	1.9	23	2.8	22	2.3
L09	Yes	Identify 504.7 from its expression in words.	32	2.6	31	3.2	32	3.2
L17	Yes	Subtract three fractions.	17	1.8	16	2.5	18	2.1
M04	Yes	Identify the largest fraction.	10	1.7	10	2.7	10	2.0
M08	Yes	Multiply two decimal fractions.	19	2.8	19	3.1	19	3.8
N11	Yes	Identify number rounded to 18200.	40	3.1	43	3.4	38	4.5
N14	Yes	Identify list of equivalent fractions.	41	2.6	40	3.1	41	4.3
N16	Yes	Solve algebra word problem with fractions.	36	2.6	36	3.1	36	4.0
N17	Yes	Solve multi-step word problem: decimal fractions.	24	2.1	25	2.7	23	2.6
N19	Yes	Shade a given fraction of the squares in a grid.	7	2.4	7	2.0	8	4.0
O02	Yes	Calculate percent increase.	24	1.7	24	2.3	23	2.3
O04	Yes	Identify number rounded to the nearest 100th.	22	2.2	23	3.1	22	2.8
O09	Yes	Solve division word problem: common fractions.	7	1.5	6	2.3	7	1.6
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	34	1.8	34	2.7	34	2.8
P13	Yes	Use heart beats/min to find beats per hour.	28	2.1	29	3.2	27	2.9
P14	Yes	Solve subtraction word problem: common fractions.	40	2.6	36	3.4	43	3.0
P16	Yes	Reduce decimal to fraction in lowest terms.	7	1.8	8	2.4	6	1.8
Q06	Yes	Approximate water use/year from use/week.	13	1.6	15	2.8	11	2.0
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	16	2.0	18	3.0	14	2.1
Q09	Yes	Perform multiple operations of common fractions.	27	1.9	23	2.5	30	2.9
R06	Yes	Subtract two decimal numbers.	55	2.8	53	3.5	57	3.6
R07	Yes	Solve division word problem involving decimals.	36	2.4	35	2.9	37	3.3
R12	Yes	Subtract 4-digit whole numbers.	57	2.7	56	3.8	57	2.9
R13	Yes	Determine how much money left after spending 7/9.	4	1.5	6	2.5	2	1.0
U01A	Yes	Estimate the time required to record 5 songs.	4	0.8	7	1.4	2	0.6
U01B	Yes	Explain method of estimation.	4	0.8	6	1.5	3	0.9
V01	Yes	Determine actual weight from rounded value.	20	2.0	20	2.4	19	2.2

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=South Africa SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	29	1.1	29	1.2	30	1.4
B11	No	Identify cube made by folding 2-dimensional net.	15	1.3	19	1.9	12	1.4
C03	No	Identify properties of congruent trapezoids.	24	1.7	23	2.5	24	2.1
D07	No	Identify relationship of angles in symmetric polygon.	17	1.3	17	2.3	17	1.3
E02	No	Determine angle in congruent triangles.	19	1.3	20	2.2	17	1.3
G03	No	Find sum of vertical angles from diagram of intersecting lines.	18	1.3	19	1.8	17	1.5
I08	Yes	Identify point on a line defined by two other points.	28	2.2	27	3.0	28	2.8
J11	Yes	Identify properties of a parallelogram.	27	2.2	29	2.9	25	2.9
J15	Yes	Identify similar triangles of different size.	22	2.2	25	3.2	20	2.6
J16	Yes	Identify coordinates for point on a grid.	12	1.3	14	2.6	11	1.7
K03	Yes	Identify figure from rotation of 3-dimensional object.	30	2.2	35	3.5	27	2.6
K08	Yes	Determine unknown angle in rotated congruent triangles.	11	1.3	13	1.9	9	1.6
L15	Yes	Find fourth quadrilateral angle, given the other three.	11	1.6	11	2.3	11	2.0
M02	Yes	Identify all lines of symmetry for a rectangle.	31	2.6	34	3.6	27	3.0
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	11	1.4	10	1.9	11	2.0
M07	Yes	Find angle based on supplementary pairs.	37	2.5	45	4.0	31	2.7
N12	Yes	Identify point on number line from distance of other points.	35	2.0	32	2.9	38	3.1
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	20	1.9	21	2.9	18	2.3
O08	Yes	Find center point of rotation for symmetry-related figures.	29	2.1	29	3.1	30	2.9
P08	Yes	Know relationship between side and perimeter for square.	36	2.3	33	3.1	39	3.0
P09	Yes	Find length of side for similar triangles.	22	2.3	23	3.1	21	3.1
Q10	Yes	Perform calculation involving addition/subtraction of angles.	6	1.5	7	2.3	5	1.4
R10	Yes	Determine into how many triangles a trapezoid can be divided.	10	1.5	11	2.2	9	1.8

COUNTRY ID=South Africa SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	15	1.7	15	2.2	14	1.8
C01	No	Compare volumes of different stacks of blocks.	22	1.3	27	2.2	17	1.4
D11	No	Identify best unit to measure the mass of an egg.	46	2.0	50	2.6	43	2.0
E06	No	Solve word problem to find length of rectangle from width and perimeter.	16	1.3	18	2.1	15	1.5
F10	No	Determine measurement accuracy of ruler.	24	1.4	23	1.8	25	1.7
G02	No	Read meter scale to determine length of a pipe.	46	1.5	49	2.0	43	1.7
I03	Yes	Find number of 750 mL bottles filled by a large volume.	34	1.9	37	3.5	32	2.8
J10	Yes	Determine area of sheet not covered by rectangular picture.	14	1.7	16	2.7	12	2.0
K05	Yes	Calculate area of a rectangle given its length and perimeter.	4	1.3	6	2.3	3	1.0
L12	Yes	Find longest pace from chart showing number of paces to cross room.	18	2.1	19	2.5	18	2.9
M01	Yes	Read mass shown on scale.	49	2.8	54	3.4	45	4.0
N15	Yes	Identify drawing with angle closest to 30 degrees.	33	2.5	35	2.9	32	3.9
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	13	2.3	16	3.1	11	2.2
P11	Yes	Use ruler to determine approximate length of pencil.	20	1.9	20	2.8	21	2.5
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	12	1.6	12	2.4	12	2.2
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	12	2.2	16	3.1	9	2.6
S02B	Yes	Calculate length of side of square given area.	2	1.1	4	2.3	1	0.5
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	2	1.0	4	2.1	1	0.4
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	4	0.9	5	1.6	3	0.8
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	0	0.2	1	0.4	0	0.2
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	4	1.1	5	1.9	3	1.0

COUNTRY ID=South Africa SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	50	1.3	52	1.4	49	1.8
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	35	1.7	36	2.2	35	2.1
D08	No	Solve ratio problem for x: $7/13 = x/52$.	37	1.3	39	2.1	35	1.5
F07	No	Solve word problem to find average speed from distance and time.	14	1.2	16	1.8	13	1.3
G04	No	Solve simple proportionality equation.	29	1.9	30	2.7	29	1.9
L14	Yes	Identify missing numbers in table of proportional x and y values.	13	1.3	10	1.9	16	2.1
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	5	1.5	6	2.2	5	1.7
Q05	Yes	Solve word problem involving ratios.	32	2.8	33	3.2	31	3.5
R14	Yes	Solve multi-step word problem involving ratios.	2	1.0	3	1.3	2	0.9
T02A	Yes	Solve algebra word problem involving ratios.	2	0.8	3	1.5	2	0.6
T02B	Yes	Solve multi-step word problem computing fractions.	3	0.6	2	0.9	4	0.9
V03	Yes	Determine ratio of red paint in a mixture.	18	1.4	20	1.9	17	1.9

COUNTRY ID=Spain SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	63	1.3	64	1.6	61	1.6
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	55	1.6	55	1.9	55	2.1
C05	No	Determine number which continues pattern based on figures.	47	1.8	48	2.3	45	2.3
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	42	1.5	41	2.0	44	2.1
E05	No	Find relationship between numbers in a set of ordered pairs.	42	1.7	40	2.3	44	2.3
F11	No	Solve multi-step problem using linear equations.	24	1.1	26	1.6	23	1.5
G06	No	Find solution to $-3X$ for given value of X .	31	1.7	30	2.2	32	2.2
H10	No	Identify equation expressing xy relationship from table of values.	32	1.9	33	2.0	31	2.4
H12	No	Select symbolic linear equation which fits word problem.	63	1.2	61	1.8	66	1.5
I01	Yes	Identify meaning of symbol in word problem equation.	37	2.3	37	3.2	37	3.3
I04	Yes	Determine next number which occurs in two number sequences.	35	2.3	33	3.2	37	3.5
J18	Yes	Identify missing number in table showing xy relationship.	33	2.4	35	3.4	31	3.3
K04	Yes	Identify expression equivalent to linear inequality.	33	2.6	31	3.4	35	3.5
L11	Yes	Solve multi-step word problem using pattern.	28	2.4	27	3.0	30	3.2
L13	Yes	Identify matching patterns of symbols.	89	1.7	91	2.0	87	2.4
L16	Yes	Simplify and solve linear equation for X .	41	2.9	39	3.7	44	4.0
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	35	2.6	31	3.2	41	4.1
O07	Yes	Solve linear equation for X .	58	2.8	55	3.4	61	3.7
P10	Yes	Identify equivalent algebraic expressions.	42	2.5	43	3.5	42	3.3
P15	Yes	Identify equivalent expression for a cubic relationship.	54	2.5	60	3.2	48	4.0
Q01	Yes	Identify linear expression based on word problem.	46	2.4	44	3.2	47	3.5
Q02	Yes	Subtract fractional expressions of X .	28	2.3	28	3.4	28	3.4
Q07	Yes	Solve $P=LW$ for W given values for P and L .	46	2.5	46	3.4	45	3.5
R09	Yes	Identify equivalent expressions from properties of real numbers.	40	2.7	40	3.3	39	4.0
R11	Yes	Solve algebra word problem: linear equation.	33	2.1	34	3.2	32	3.3
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	71	2.4	73	3.5	68	3.5
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	17	2.2	20	3.4	14	2.3
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	16	1.4	17	2.0	15	1.7
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	15	1.3	15	2.0	16	1.9

COUNTRY ID=Spain SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	76	0.8	76	1.1	77	1.2
B07	No	Interpret line graph to find region of largest increase.	51	1.5	50	1.7	51	1.8
C02	No	Interpret pie graph to determine distribution.	67	1.5	69	1.8	66	2.1
E01	No	Interpret line graph to determine intersection point of two plots.	64	1.4	68	2.1	60	2.1
F08	No	Predict probability of occurrence for independent coin toss.	64	1.5	64	2.2	64	2.2
G01	No	Interpret frequency table to find number above a given level.	44	1.7	44	2.5	43	1.9
H07	No	Interpret bar chart histogram to find number above a given level.	49	1.4	49	1.8	49	2.2
H11	No	Predict number of total defective bulbs based on random sample.	56	1.3	58	2.0	53	2.1
I09	Yes	Predict most likely color of random card based on fraction of colors.	32	2.2	35	3.4	29	2.7
J13	Yes	Draw pictograph to represent number given in table.	77	2.5	80	3.3	74	3.7
K07	Yes	Determine the number of blue pens given probability of selection.	46	3.0	45	3.6	46	3.9
L10	Yes	Use data in a chart to identify time/day with highest temperature.	86	1.7	86	2.6	86	2.6
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	80	2.2	77	2.9	83	3.2
N18	Yes	Find probability of drawing an even number from 1 to 9.	46	2.6	47	3.0	45	4.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	39	2.7	38	3.5	41	3.7
O05	Yes	Calculate number of cube faces from probability of toss.	24	2.1	26	2.9	20	3.1
P17	Yes	Identify thermometer which shows temperature given in data table.	83	2.0	83	2.8	83	2.7
Q04	Yes	Interpret data in bar graph.	82	2.1	81	2.8	82	3.3
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	32	2.4	37	3.9	26	3.2
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	6	0.8	4	0.9	7	1.3

COUNTRY ID=Spain SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	32	1.3	33	1.7	30	1.7
B09	No	Identify shaded figure which shows 2/5 = 4/10.	46	1.5	45	1.9	47	2.1
B10	No	Identify smallest of decimal fractions.	28	1.5	34	1.9	22	1.6
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	47	1.5	49	2.4	46	1.9
C06	No	Determine the worst estimate of: 848 + 677.	58	1.5	58	2.2	58	1.7
D09	No	Identify smallest fraction.	32	1.9	35	2.5	30	2.2
D12	No	Estimate rational number from point on number line.	56	1.6	60	2.2	53	2.2
E03	No	Find fraction of hour between two time points.	31	1.6	33	2.2	29	1.9
E04	No	Solve multi-step word problem: 4-digit whole numbers.	63	1.6	60	2.2	66	2.1
F09	No	Identify decimal fraction between 0.07 and 0.08.	51	1.5	50	2.4	53	1.8
F12	No	Identify fraction of circle which is shaded.	37	1.4	37	2.1	38	2.2
G05	No	Identify fraction represented in word problem.	44	1.8	41	2.3	47	2.2
H08	No	Identify figure showing 2/3 shaded.	63	1.7	60	2.3	66	1.9
H09	No	Identify sum which is closest to 691 + 208.	81	1.3	83	1.6	79	1.9
I02	Yes	Solve multi-step word problem: common fractions.	40	2.6	39	3.3	41	3.7
I05	Yes	Solve subtraction word problem: rational numbers.	72	2.3	71	3.2	73	3.2
I06	Yes	Write a fraction larger than a given number.	71	2.2	77	2.8	65	3.2
I07	Yes	Recognize when estimation is appropriate.	46	2.1	42	2.9	49	3.1
J12	Yes	Divide fractions.	26	2.2	21	2.9	30	3.4
J14	Yes	Divide rational numbers, fractional divisor.	36	2.5	34	3.7	36	3.4
J17	Yes	Use map and scale to find distance between two cities.	53	2.7	58	3.7	49	3.0
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	66	2.6	66	3.4	66	3.5
K02	Yes	Find total volume of mixture using rational number addition.	67	2.4	65	2.8	69	3.6
K06	Yes	Approximate amount increased by 15%.	27	2.1	32	3.2	22	2.8
K09	Yes	Compute sum of three fractions.	18	2.3	14	3.0	22	3.1
L08	Yes	Estimate actual height from diagram of relative heights.	51	2.3	57	3.9	46	3.3
L09	Yes	Identify 504.7 from its expression in words.	93	1.3	91	1.9	94	1.6
L17	Yes	Subtract three fractions.	15	1.7	18	2.7	13	2.2
M04	Yes	Identify the largest fraction.	15	1.8	20	2.6	11	2.2
M08	Yes	Multiply two decimal fractions.	59	2.3	56	3.3	63	3.4
N11	Yes	Identify number rounded to 18200.	66	2.2	65	3.1	68	3.1
N14	Yes	Identify list of equivalent fractions.	50	2.9	49	3.6	51	3.9
N16	Yes	Solve algebra word problem with fractions.	33	2.2	34	3.3	32	3.6
N17	Yes	Solve multi-step word problem: decimal fractions.	30	2.5	29	3.0	31	4.4
N19	Yes	Shade a given fraction of the squares in a grid.	24	2.5	23	2.9	26	3.6
O02	Yes	Calculate percent increase.	11	1.6	13	2.4	9	2.1
O04	Yes	Identify number rounded to the nearest 100th.	31	2.4	30	2.8	33	3.4
O09	Yes	Solve division word problem: common fractions.	29	2.3	33	3.4	26	3.1
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	53	2.7	57	3.4	49	3.7
P13	Yes	Use heart beats/min to find beats per hour.	66	2.7	69	3.8	64	3.6
P14	Yes	Solve subtraction word problem: common fractions.	58	2.4	59	3.5	56	3.1
P16	Yes	Reduce decimal to fraction in lowest terms.	4	1.1	5	1.2	4	1.8
Q06	Yes	Approximate water use/year from use/week.	28	2.4	30	3.0	26	3.2
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	22	2.0	30	3.1	12	2.2
Q09	Yes	Perform multiple operations of common fractions.	35	2.4	35	3.1	34	3.9
R06	Yes	Subtract two decimal numbers.	82	2.1	78	3.1	87	2.5
R07	Yes	Solve division word problem involving decimals.	30	2.4	32	3.2	27	3.4
R12	Yes	Subtract 4-digit whole numbers.	94	1.5	92	1.9	95	1.6
R13	Yes	Determine how much money left after spending 7/9.	12	1.6	14	2.2	11	2.1
U01A	Yes	Estimate the time required to record 5 songs.	11	1.0	11	1.4	10	1.3
U01B	Yes	Explain method of estimation.	15	1.6	17	2.0	13	2.1
V01	Yes	Determine actual weight from rounded value.	17	1.4	19	2.1	16	2.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Spain SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	60	1.2	60	1.3	59	1.6
B11	No	Identify cube made by folding 2-dimensional net.	51	1.5	53	2.1	50	1.8
C03	No	Identify properties of congruent trapezoids.	57	1.7	53	2.1	60	2.4
D07	No	Identify relationship of angles in symmetric polygon.	47	1.7	47	1.8	47	2.6
E02	No	Determine angle in congruent triangles.	28	1.6	27	2.0	29	2.1
G03	No	Find sum of vertical angles from diagram of intersecting lines.	41	1.6	42	2.1	40	1.8
I08	Yes	Identify point on a line defined by two other points.	37	2.9	43	3.8	32	3.8
J11	Yes	Identify properties of a parallelogram.	39	2.6	41	3.6	37	3.3
J15	Yes	Identify similar triangles of different size.	58	2.6	62	3.9	54	3.2
J16	Yes	Identify coordinates for point on a grid.	28	2.3	26	2.9	30	3.3
K03	Yes	Identify figure from rotation of 3-dimensional object.	68	2.4	70	3.3	66	3.1
K08	Yes	Determine unknown angle in rotated congruent triangles.	17	2.0	18	2.8	16	2.7
L15	Yes	Find fourth quadrilateral angle, given the other three.	27	2.3	29	3.9	25	3.0
M02	Yes	Identify all lines of symmetry for a rectangle.	47	2.6	50	3.5	44	3.8
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	34	2.3	35	3.0	33	4.0
M07	Yes	Find angle based on supplementary pairs.	60	3.0	64	3.6	55	4.2
N12	Yes	Identify point on number line from distance of other points.	62	2.3	57	3.9	68	3.3
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	33	2.3	38	3.5	28	3.4
O08	Yes	Find center point of rotation for symmetry-related figures.	54	2.9	50	3.9	58	4.3
P08	Yes	Know relationship between side and perimeter for square.	48	2.7	49	3.9	47	4.0
P09	Yes	Find length of side for similar triangles.	28	2.1	28	3.0	28	3.2
Q10	Yes	Perform calculation involving addition/subtraction of angles.	30	2.8	36	3.4	24	3.3
R10	Yes	Determine into how many triangles a trapezoid can be divided.	42	2.7	44	3.6	40	3.4

COUNTRY ID=Spain SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	37	1.4	37	1.7	38	1.5
C01	No	Compare volumes of different stacks of blocks.	44	1.5	47	2.3	42	2.1
D11	No	Identify best unit to measure the mass of an egg.	84	1.1	86	1.6	82	1.7
E06	No	Solve word problem to find length of rectangle from width and perimeter.	22	1.5	24	2.3	20	1.8
F10	No	Determine measurement accuracy of ruler.	34	1.7	36	2.3	31	2.1
G02	No	Read meter scale to determine length of a pipe.	64	1.6	63	2.1	65	1.9
I03	Yes	Find number of 750 mL bottles filled by a large volume.	38	2.4	40	3.2	37	3.2
J10	Yes	Determine area of sheet not covered by rectangular picture.	31	2.3	32	3.1	31	3.3
K05	Yes	Calculate area of a rectangle given its length and perimeter.	20	2.1	21	3.3	18	2.6
L12	Yes	Find longest pace from chart showing number of paces to cross room.	74	2.1	72	3.1	77	2.7
M01	Yes	Read mass shown on scale.	73	2.4	80	2.7	65	3.5
N15	Yes	Identify drawing with angle closest to 30 degrees.	56	2.9	57	3.6	56	4.2
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	73	2.1	76	2.5	71	3.6
P11	Yes	Use ruler to determine approximate length of pencil.	43	3.0	47	3.7	39	3.7
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	31	2.1	34	3.5	27	2.8
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	44	2.4	48	3.5	40	3.3
S02B	Yes	Calculate length of side of square given area.	14	1.9	15	2.7	13	2.2
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	9	1.6	10	2.3	8	1.9
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	18	1.6	17	2.0	19	2.3
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	1	0.4	2	0.7	1	0.4
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	22	1.9	21	2.2	22	2.8

COUNTRY ID=Spain SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	33	1.0	39	1.2	26	1.3
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	74	1.2	73	1.7	75	1.5
D08	No	Solve ratio problem for x: $7/13 = x/52$.	58	1.4	59	1.9	58	2.1
F07	No	Solve word problem to find average speed from distance and time.	26	1.4	28	2.0	23	1.9
G04	No	Solve simple proportionality equation.	63	1.9	63	2.4	63	2.4
L14	Yes	Identify missing numbers in table of proportional x and y values.	16	1.7	18	2.6	15	2.3
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	14	1.7	16	2.3	12	2.2
Q05	Yes	Solve word problem involving ratios.	63	2.3	63	3.8	63	3.2
R14	Yes	Solve multi-step word problem involving ratios.	30	2.4	32	3.3	29	3.3
T02A	Yes	Solve algebra word problem involving ratios.	14	1.3	14	2.1	13	1.6
T02B	Yes	Solve multi-step word problem computing fractions.	5	0.7	5	1.2	5	1.0
V03	Yes	Determine ratio of red paint in a mixture.	24	1.6	23	2.1	25	2.3

COUNTRY ID=Sweden SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	81	1.0	83	1.2	80	1.4
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	58	1.4	57	1.9	59	2.0
C05	No	Determine number which continues pattern based on figures.	52	1.6	51	2.2	54	2.3
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	46	1.9	42	2.6	50	2.8
E05	No	Find relationship between numbers in a set of ordered pairs.	30	1.6	30	2.3	29	2.2
F11	No	Solve multi-step problem using linear equations.	33	1.6	35	2.2	31	2.1
G06	No	Find solution to $-3X$ for given value of X .	11	1.1	12	1.5	11	1.3
H10	No	Identify equation expressing xy relationship from table of values.	21	1.4	22	1.8	20	2.2
H12	No	Select symbolic linear equation which fits word problem.	66	1.6	65	2.1	68	2.2
I01	Yes	Identify meaning of symbol in word problem equation.	21	2.3	23	3.2	20	3.2
I04	Yes	Determine next number which occurs in two number sequences.	38	2.9	33	4.1	41	4.1
J18	Yes	Identify missing number in table showing xy relationship.	35	2.7	38	3.4	33	4.4
K04	Yes	Identify expression equivalent to linear inequality.	39	2.6	40	3.6	38	4.0
L11	Yes	Solve multi-step word problem using pattern.	28	2.5	27	3.3	28	3.2
L13	Yes	Identify matching patterns of symbols.	90	1.7	89	2.1	90	2.3
L16	Yes	Simplify and solve linear equation for X .	4	0.9	5	1.7	2	1.2
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	7	1.5	9	2.3	4	1.5
O07	Yes	Solve linear equation for X .	42	2.7	41	4.1	43	3.8
P10	Yes	Identify equivalent algebraic expressions.	37	2.5	38	3.1	36	4.2
P15	Yes	Identify equivalent expression for a cubic relationship.	29	2.4	24	3.0	35	4.2
Q01	Yes	Identify linear expression based on word problem.	16	2.3	16	3.2	16	3.1
Q02	Yes	Subtract fractional expressions of X .	26	2.5	28	3.3	23	3.5
Q07	Yes	Solve $P=LW$ for W given values for P and L .	43	2.6	38	3.5	50	4.2
R09	Yes	Identify equivalent expressions from properties of real numbers.	24	2.4	21	2.9	27	3.8
R11	Yes	Solve algebra word problem: linear equation.	40	2.6	41	3.4	39	3.9
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	75	2.5	78	3.5	72	3.4
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	8	1.6	8	2.4	8	2.5
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	20	1.5	19	2.2	21	2.6
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	17	1.4	16	2.1	18	2.4

COUNTRY ID=Sweden SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	72	1.0	71	1.3	74	1.3
B07	No	Interpret line graph to find region of largest increase.	64	1.4	62	1.8	67	2.1
C02	No	Interpret pie graph to determine distribution.	79	1.6	79	2.1	79	2.1
E01	No	Interpret line graph to determine intersection point of two plots.	75	1.8	80	2.1	70	2.5
F08	No	Predict probability of occurrence for independent coin toss.	74	1.5	74	1.9	74	2.3
G01	No	Interpret frequency table to find number above a given level.	48	1.7	49	2.2	47	2.3
H07	No	Interpret bar chart histogram to find number above a given level.	68	1.6	67	2.6	69	2.1
H11	No	Predict number of total defective bulbs based on random sample.	59	1.9	62	2.6	56	2.5
I09	Yes	Predict most likely color of random card based on fraction of colors.	67	3.0	67	4.0	66	3.8
J13	Yes	Draw pictograph to represent number given in table.	86	1.9	85	2.6	87	2.6
K07	Yes	Determine the number of blue pens given probability of selection.	40	2.8	43	3.8	38	4.1
L10	Yes	Use data in a chart to identify time/day with highest temperature.	93	1.5	94	2.0	92	2.0
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	84	1.7	84	2.7	85	2.5
N18	Yes	Find probability of drawing an even number from 1 to 9.	62	2.7	63	3.3	63	4.1
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	62	3.0	66	4.1	58	4.4
O05	Yes	Calculate number of cube faces from probability of toss.	45	3.1	49	4.1	42	4.0
P17	Yes	Identify thermometer which shows temperature given in data table.	94	1.5	93	2.2	96	2.2
Q04	Yes	Interpret data in bar graph.	89	1.6	88	2.2	92	2.8
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	57	2.6	59	3.5	53	3.8
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	18	1.9	16	2.2	19	2.7

COUNTRY ID=Sweden SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	52	1.5	55	1.5	49	2.1
B09	No	Identify shaded figure which shows 2/5 = 4/10.	53	1.4	48	2.0	58	2.1
B10	No	Identify smallest of decimal fractions.	42	1.8	48	2.1	35	2.3
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	51	1.4	51	1.9	51	2.1
C06	No	Determine the worst estimate of: 848 + 677.	64	1.8	65	2.2	63	2.8
D09	No	Identify smallest fraction.	74	1.9	78	1.9	70	2.6
D12	No	Estimate rational number from point on number line.	78	1.4	80	1.8	76	1.9
E03	No	Find fraction of hour between two time points.	57	1.8	57	2.6	58	2.6
E04	No	Solve multi-step word problem: 4-digit whole numbers.	66	1.6	63	2.3	69	2.2
F09	No	Identify decimal fraction between 0.07 and 0.08.	63	1.7	64	2.4	62	2.1
F12	No	Identify fraction of circle which is shaded.	57	1.8	58	2.6	56	2.3
G05	No	Identify fraction represented in word problem.	60	1.5	58	2.2	62	2.1
H08	No	Identify figure showing 2/3 shaded.	82	1.6	80	2.2	84	1.8
H09	No	Identify sum which is closest to 691 + 208.	88	1.1	88	1.5	87	1.5
I02	Yes	Solve multi-step word problem: common fractions.	54	2.8	53	4.1	55	3.6
I05	Yes	Solve subtraction word problem: rational numbers.	63	2.8	60	4.0	65	4.1
I06	Yes	Write a fraction larger than a given number.	74	2.6	71	3.9	76	3.7
I07	Yes	Recognize when estimation is appropriate.	70	2.4	60	4.0	79	3.0
J12	Yes	Divide fractions.	0	0.3	1	0.6	.	.
J14	Yes	Divide rational numbers, fractional divisor.	18	2.1	19	3.2	17	2.8
J17	Yes	Use map and scale to find distance between two cities.	76	2.2	73	3.0	79	3.3
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	71	2.4	74	3.0	68	3.4
K02	Yes	Find total volume of mixture using rational number addition.	50	2.9	45	4.1	55	4.3
K06	Yes	Approximate amount increased by 15%.	43	2.9	45	4.1	41	4.0
K09	Yes	Compute sum of three fractions.	3	1.0	4	1.5	3	1.2
L08	Yes	Estimate actual height from diagram of relative heights.	65	2.8	71	3.8	59	3.6
L09	Yes	Identify 504.7 from its expression in words.	91	1.6	90	2.3	91	2.0
L17	Yes	Subtract three fractions.	20	2.4	18	2.8	22	3.2
M04	Yes	Identify the largest fraction.	29	2.6	30	3.5	28	3.6
M08	Yes	Multiply two decimal fractions.	18	2.4	15	2.9	21	3.0
N11	Yes	Identify number rounded to 18200.	88	1.6	88	2.4	88	2.1
N14	Yes	Identify list of equivalent fractions.	47	2.7	49	4.0	45	3.7
N16	Yes	Solve algebra word problem with fractions.	47	2.6	47	3.8	47	4.0
N17	Yes	Solve multi-step word problem: decimal fractions.	34	2.8	34	4.0	33	3.5
N19	Yes	Shade a given fraction of the squares in a grid.	40	2.8	38	3.6	43	4.3
O02	Yes	Calculate percent increase.	19	2.3	22	3.6	16	3.2
O04	Yes	Identify number rounded to the nearest 100th.	33	2.9	34	4.1	33	3.9
O09	Yes	Solve division word problem: common fractions.	42	3.5	43	4.6	39	4.2
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	64	2.8	64	3.8	64	4.4
P13	Yes	Use heart beats/min to find beats per hour.	60	2.4	60	3.2	60	3.6
P14	Yes	Solve subtraction word problem: common fractions.	75	2.5	74	3.3	77	4.2
P16	Yes	Reduce decimal to fraction in lowest terms.	1	0.4	1	0.5	1	0.6
Q06	Yes	Approximate water use/year from use/week.	36	2.6	36	3.5	35	4.1
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	33	3.0	38	3.5	27	3.6
Q09	Yes	Perform multiple operations of common fractions.	18	2.0	18	2.7	19	3.0
R06	Yes	Subtract two decimal numbers.	73	2.5	67	3.5	81	3.2
R07	Yes	Solve division word problem involving decimals.	40	2.9	39	3.6	41	3.9
R12	Yes	Subtract 4-digit whole numbers.	84	2.2	83	2.9	86	3.1
R13	Yes	Determine how much money left after spending 7/9.	28	2.4	28	3.5	28	3.6
U01A	Yes	Estimate the time required to record 5 songs.	53	1.9	56	2.6	51	2.9
U01B	Yes	Explain method of estimation.	29	2.0	27	2.9	31	3.1
V01	Yes	Determine actual weight from rounded value.	80	1.7	83	2.0	76	2.5

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Sweden SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	45	1.1	46	1.3	44	1.6
B11	No	Identify cube made by folding 2-dimensional net.	60	1.7	57	2.0	63	2.5
C03	No	Identify properties of congruent trapezoids.	48	1.6	43	2.4	52	2.4
D07	No	Identify relationship of angles in symmetric polygon.	43	1.6	42	2.1	43	2.4
E02	No	Determine angle in congruent triangles.	29	1.6	29	2.2	29	2.5
G03	No	Find sum of vertical angles from diagram of intersecting lines.	38	1.6	39	2.3	37	2.3
I08	Yes	Identify point on a line defined by two other points.	38	2.5	40	3.6	36	3.7
J11	Yes	Identify properties of a parallelogram.	40	2.7	39	3.7	41	3.6
J15	Yes	Identify similar triangles of different size.	62	3.0	63	4.2	60	4.0
J16	Yes	Identify coordinates for point on a grid.	24	2.6	22	3.5	25	3.4
K03	Yes	Identify figure from rotation of 3-dimensional object.	49	3.0	56	3.3	43	4.5
K08	Yes	Determine unknown angle in rotated congruent triangles.	18	2.3	20	2.4	16	4.2
L15	Yes	Find fourth quadrilateral angle, given the other three.	26	2.3	26	3.5	27	3.0
M02	Yes	Identify all lines of symmetry for a rectangle.	51	2.7	56	4.3	47	4.2
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	51	2.8	56	3.8	46	4.0
M07	Yes	Find angle based on supplementary pairs.	68	2.0	70	3.5	66	3.9
N12	Yes	Identify point on number line from distance of other points.	61	2.5	69	3.7	53	3.5
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	31	2.9	37	4.1	24	3.8
O08	Yes	Find center point of rotation for symmetry-related figures.	47	2.8	51	4.2	44	3.6
P08	Yes	Know relationship between side and perimeter for square.	40	2.8	41	3.8	38	4.3
P09	Yes	Find length of side for similar triangles.	41	2.8	43	4.1	39	3.7
Q10	Yes	Perform calculation involving addition/subtraction of angles.	27	2.2	25	3.1	30	3.6
R10	Yes	Determine into how many triangles a trapezoid can be divided.	51	2.7	50	3.7	53	4.6

COUNTRY ID=Sweden SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	71	1.1	73	1.4	69	1.5
C01	No	Compare volumes of different stacks of blocks.	40	1.6	44	2.4	35	1.9
D11	No	Identify best unit to measure the mass of an egg.	91	1.1	91	1.4	92	1.5
E06	No	Solve word problem to find length of rectangle from width and perimeter.	40	1.8	39	2.0	41	2.7
F10	No	Determine measurement accuracy of ruler.	75	1.6	79	2.0	72	2.4
G02	No	Read meter scale to determine length of a pipe.	72	1.5	75	2.1	69	2.6
I03	Yes	Find number of 750 mL bottles filled by a large volume.	44	2.7	54	4.2	35	3.4
J10	Yes	Determine area of sheet not covered by rectangular picture.	32	2.4	32	3.5	31	3.4
K05	Yes	Calculate area of a rectangle given its length and perimeter.	31	3.0	31	4.1	32	4.4
L12	Yes	Find longest pace from chart showing number of paces to cross room.	82	2.0	81	3.4	84	2.6
M01	Yes	Read mass shown on scale.	87	1.6	88	2.2	86	2.3
N15	Yes	Identify drawing with angle closest to 30 degrees.	57	2.6	57	3.8	57	4.0
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	75	2.4	79	3.2	72	3.5
P11	Yes	Use ruler to determine approximate length of pencil.	61	2.9	61	4.0	61	4.1
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	30	2.8	30	3.4	31	4.6
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	44	3.5	39	4.2	49	4.6
S02B	Yes	Calculate length of side of square given area.	8	1.9	7	1.9	9	2.9
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	21	2.6	18	3.1	24	4.0
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	18	1.5	21	2.4	15	1.9
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	6	0.9	6	1.2	5	1.3
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	32	2.0	34	2.8	30	2.3

COUNTRY ID=Sweden SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	53	1.2	61	1.4	45	1.6
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	47	1.5	51	2.3	44	1.8
D08	No	Solve ratio problem for x: $7/13 = x/52$.	59	1.7	62	2.4	55	2.6
F07	No	Solve word problem to find average speed from distance and time.	22	1.3	23	2.2	22	1.7
G04	No	Solve simple proportionality equation.	40	1.8	40	2.5	41	2.4
L14	Yes	Identify missing numbers in table of proportional x and y values.	11	1.4	9	2.0	13	2.5
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	19	2.0	21	2.9	17	3.2
Q05	Yes	Solve word problem involving ratios.	68	2.5	70	3.2	67	4.0
R14	Yes	Solve multi-step word problem involving ratios.	21	2.2	20	3.1	22	2.9
T02A	Yes	Solve algebra word problem involving ratios.	30	2.0	27	2.3	32	2.9
T02B	Yes	Solve multi-step word problem computing fractions.	7	1.0	7	1.5	7	1.3
V03	Yes	Determine ratio of red paint in a mixture.	50	2.1	47	2.8	52	2.7

COUNTRY ID=Switzerland SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	81	1.0	83	1.3	79	1.1
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	42	1.4	42	1.8	43	1.9
C05	No	Determine number which continues pattern based on figures.	59	1.7	62	2.3	57	2.3
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	33	1.3	34	1.6	32	2.1
E05	No	Find relationship between numbers in a set of ordered pairs.	46	1.4	47	2.0	44	2.3
F11	No	Solve multi-step problem using linear equations.	52	1.7	55	2.5	49	2.3
G06	No	Find solution to $-3X$ for given value of X .	12	1.0	13	1.2	11	1.5
H10	No	Identify equation expressing xy relationship from table of values.	29	1.6	30	2.0	27	2.0
H12	No	Select symbolic linear equation which fits word problem.	70	1.7	68	2.0	72	2.2
I01	Yes	Identify meaning of symbol in word problem equation.	28	2.5	29	3.4	28	3.6
I04	Yes	Determine next number which occurs in two number sequences.	50	2.3	48	3.0	53	4.2
J18	Yes	Identify missing number in table showing xy relationship.	37	2.3	37	3.5	37	3.2
K04	Yes	Identify expression equivalent to linear inequality.	33	2.3	31	3.1	35	3.6
L11	Yes	Solve multi-step word problem using pattern.	35	2.5	37	3.7	32	3.6
L13	Yes	Identify matching patterns of symbols.	95	1.1	95	1.3	95	1.8
L16	Yes	Simplify and solve linear equation for X .	8	1.6	8	2.1	9	2.2
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	17	1.8	20	2.7	13	2.2
O07	Yes	Solve linear equation for X .	54	2.3	53	3.4	56	3.8
P10	Yes	Identify equivalent algebraic expressions.	38	2.5	38	3.6	38	3.9
P15	Yes	Identify equivalent expression for a cubic relationship.	49	2.3	45	3.7	53	3.5
Q01	Yes	Identify linear expression based on word problem.	28	2.4	28	3.6	27	3.7
Q02	Yes	Subtract fractional expressions of X .	29	2.0	27	3.4	31	3.1
Q07	Yes	Solve $P=LW$ for W given values for P and L .	34	2.7	33	3.6	34	3.1
R09	Yes	Identify equivalent expressions from properties of real numbers.	34	2.3	30	3.3	37	3.2
R11	Yes	Solve algebra word problem: linear equation.	49	2.1	49	3.6	49	3.2
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	80	2.1	80	3.0	80	2.4
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	27	2.6	25	3.3	29	3.7
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	27	1.7	28	2.6	25	2.2
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	25	1.5	25	2.0	26	2.3

COUNTRY ID=Switzerland SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	80	0.9	78	1.4	81	0.9
B07	No	Interpret line graph to find region of largest increase.	68	1.2	68	2.1	68	1.8
C02	No	Interpret pie graph to determine distribution.	81	1.3	81	1.8	81	1.6
E01	No	Interpret line graph to determine intersection point of two plots.	67	1.4	70	2.1	63	1.9
F08	No	Predict probability of occurrence for independent coin toss.	65	1.6	66	2.0	63	2.4
G01	No	Interpret frequency table to find number above a given level.	55	1.6	55	2.1	54	2.1
H07	No	Interpret bar chart histogram to find number above a given level.	70	1.5	72	2.0	69	2.2
H11	No	Predict number of total defective bulbs based on random sample.	70	1.3	76	2.0	63	2.0
I09	Yes	Predict most likely color of random card based on fraction of colors.	72	2.2	73	3.3	71	3.5
J13	Yes	Draw pictograph to represent number given in table.	86	2.3	87	3.0	85	3.1
K07	Yes	Determine the number of blue pens given probability of selection.	56	2.6	56	3.7	56	4.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	94	1.1	93	2.1	95	1.1
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	81	2.5	84	2.7	78	3.4
N18	Yes	Find probability of drawing an even number from 1 to 9.	57	2.9	62	4.4	52	4.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	67	2.9	71	3.5	62	4.3
O05	Yes	Calculate number of cube faces from probability of toss.	55	2.7	59	3.2	50	4.2
P17	Yes	Identify thermometer which shows temperature given in data table.	94	1.0	96	1.3	93	1.5
Q04	Yes	Interpret data in bar graph.	90	1.3	90	2.2	91	1.8
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	51	2.6	59	3.3	44	3.7
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	16	1.5	17	2.0	15	1.8

COUNTRY ID=Switzerland SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	66	1.1	69	1.5	63	1.5
B09	No	Identify shaded figure which shows 2/5 = 4/10.	59	1.4	58	1.8	60	2.1
B10	No	Identify smallest of decimal fractions.	72	1.7	75	1.8	69	2.3
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	49	1.6	48	2.1	50	2.6
C06	No	Determine the worst estimate of: 848 + 677.	80	1.5	81	2.1	78	1.7
D09	No	Identify smallest fraction.	75	1.7	74	2.2	75	2.1
D12	No	Estimate rational number from point on number line.	71	1.7	76	2.3	67	2.7
E03	No	Find fraction of hour between two time points.	55	1.5	59	1.9	51	2.2
E04	No	Solve multi-step word problem: 4-digit whole numbers.	79	1.6	76	2.1	82	1.6
F09	No	Identify decimal fraction between 0.07 and 0.08.	73	1.4	77	1.6	70	1.8
F12	No	Identify fraction of circle which is shaded.	65	1.6	65	2.3	65	2.1
G05	No	Identify fraction represented in word problem.	60	1.6	62	2.5	59	2.2
H08	No	Identify figure showing 2/3 shaded.	83	1.2	83	2.0	83	1.8
H09	No	Identify sum which is closest to 691 + 208.	89	1.2	92	1.3	87	1.8
I02	Yes	Solve multi-step word problem: common fractions.	67	2.1	67	3.0	67	3.2
I05	Yes	Solve subtraction word problem: rational numbers.	85	2.5	86	3.0	83	3.1
I06	Yes	Write a fraction larger than a given number.	81	2.0	82	2.6	79	2.9
I07	Yes	Recognize when estimation is appropriate.	63	2.5	58	3.8	68	3.3
J12	Yes	Divide fractions.	10	1.9	13	2.8	8	2.1
J14	Yes	Divide rational numbers, fractional divisor.	29	2.7	29	3.3	28	3.0
J17	Yes	Use map and scale to find distance between two cities.	76	2.5	77	3.6	75	3.5
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	68	2.2	69	3.5	66	3.2
K02	Yes	Find total volume of mixture using rational number addition.	60	2.6	56	3.8	64	3.9
K06	Yes	Approximate amount increased by 15%.	40	2.8	41	3.3	39	4.1
K09	Yes	Compute sum of three fractions.	49	2.5	43	3.4	56	3.7
L08	Yes	Estimate actual height from diagram of relative heights.	65	2.9	68	3.3	62	3.8
L09	Yes	Identify 504.7 from its expression in words.	89	1.5	88	2.6	91	2.1
L17	Yes	Subtract three fractions.	52	2.6	56	3.7	49	3.4
M04	Yes	Identify the largest fraction.	49	2.5	53	3.7	46	4.0
M08	Yes	Multiply two decimal fractions.	32	2.4	35	3.2	30	3.0
N11	Yes	Identify number rounded to 18200.	86	2.1	89	2.6	84	2.7
N14	Yes	Identify list of equivalent fractions.	69	2.5	68	2.8	69	3.7
N16	Yes	Solve algebra word problem with fractions.	36	2.5	36	3.9	36	3.7
N17	Yes	Solve multi-step word problem: decimal fractions.	34	2.1	40	3.9	28	2.8
N19	Yes	Shade a given fraction of the squares in a grid.	64	3.2	69	4.0	59	4.7
O02	Yes	Calculate percent increase.	16	2.1	20	3.4	11	2.3
O04	Yes	Identify number rounded to the nearest 100th.	49	2.9	52	3.9	47	4.1
O09	Yes	Solve division word problem: common fractions.	56	2.5	62	3.4	49	3.1
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	74	2.3	76	3.2	72	3.1
P13	Yes	Use heart beats/min to find beats per hour.	73	2.0	78	3.0	69	3.2
P14	Yes	Solve subtraction word problem: common fractions.	85	1.8	84	2.8	85	2.4
P16	Yes	Reduce decimal to fraction in lowest terms.	38	2.4	40	3.7	37	3.7
Q06	Yes	Approximate water use/year from use/week.	43	2.5	46	3.3	40	3.4
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	54	2.4	58	3.4	51	3.5
Q09	Yes	Perform multiple operations of common fractions.	38	2.6	33	3.6	42	3.9
R06	Yes	Subtract two decimal numbers.	81	1.9	79	2.9	83	2.3
R07	Yes	Solve division word problem involving decimals.	48	2.8	53	3.8	44	3.8
R12	Yes	Subtract 4-digit whole numbers.	96	0.9	96	1.5	96	1.5
R13	Yes	Determine how much money left after spending 7/9.	38	2.5	43	4.1	33	3.7
U01A	Yes	Estimate the time required to record 5 songs.	47	2.3	50	3.5	44	2.6
U01B	Yes	Explain method of estimation.	45	2.3	45	3.3	44	2.8
V01	Yes	Determine actual weight from rounded value.	49	2.0	54	2.4	45	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Switzerland SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	49	0.9	50	1.3	48	1.4
B11	No	Identify cube made by folding 2-dimensional net.	72	1.4	74	1.8	70	1.8
C03	No	Identify properties of congruent trapezoids.	40	1.7	39	2.2	41	2.3
D07	No	Identify relationship of angles in symmetric polygon.	53	1.5	55	2.0	50	2.0
E02	No	Determine angle in congruent triangles.	33	1.3	35	1.8	31	2.0
G03	No	Find sum of vertical angles from diagram of intersecting lines.	34	1.8	35	2.6	34	1.9
I08	Yes	Identify point on a line defined by two other points.	46	2.8	53	3.5	39	3.7
J11	Yes	Identify properties of a parallelogram.	39	3.1	37	3.9	42	3.7
J15	Yes	Identify similar triangles of different size.	64	2.5	63	3.6	65	4.2
J16	Yes	Identify coordinates for point on a grid.	28	2.4	30	3.2	25	3.3
K03	Yes	Identify figure from rotation of 3-dimensional object.	79	2.3	79	3.1	78	3.0
K08	Yes	Determine unknown angle in rotated congruent triangles.	25	2.1	28	3.4	21	3.0
L15	Yes	Find fourth quadrilateral angle, given the other three.	26	2.2	28	3.2	24	3.1
M02	Yes	Identify all lines of symmetry for a rectangle.	58	2.8	58	3.8	59	3.9
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	43	2.4	45	3.7	41	3.5
M07	Yes	Find angle based on supplementary pairs.	54	2.5	53	3.5	55	3.8
N12	Yes	Identify point on number line from distance of other points.	53	2.7	53	3.8	52	3.8
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	30	2.2	29	3.0	31	3.5
O08	Yes	Find center point of rotation for symmetry-related figures.	64	2.8	69	3.8	58	4.0
P08	Yes	Know relationship between side and perimeter for square.	44	2.6	50	4.5	39	3.8
P09	Yes	Find length of side for similar triangles.	39	2.6	41	3.3	38	3.7
Q10	Yes	Perform calculation involving addition/subtraction of angles.	39	2.7	40	3.7	38	3.6
R10	Yes	Determine into how many triangles a trapezoid can be divided.	51	2.5	58	3.8	45	3.5

COUNTRY ID=Switzerland SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	81	1.1	83	1.2	80	1.5
C01	No	Compare volumes of different stacks of blocks.	59	1.8	61	2.2	56	2.4
D11	No	Identify best unit to measure the mass of an egg.	83	1.2	81	1.6	86	1.6
E06	No	Solve word problem to find length of rectangle from width and perimeter.	46	1.6	47	2.3	45	2.0
F10	No	Determine measurement accuracy of ruler.	69	1.8	74	2.2	65	2.4
G02	No	Read meter scale to determine length of a pipe.	83	1.5	84	1.8	81	2.0
I03	Yes	Find number of 750 mL bottles filled by a large volume.	58	2.6	64	3.2	51	3.5
J10	Yes	Determine area of sheet not covered by rectangular picture.	41	2.5	44	3.6	39	3.5
K05	Yes	Calculate area of a rectangle given its length and perimeter.	40	2.7	40	3.9	39	3.6
L12	Yes	Find longest pace from chart showing number of paces to cross room.	90	1.5	91	2.2	89	1.9
M01	Yes	Read mass shown on scale.	92	1.6	91	2.0	94	2.0
N15	Yes	Identify drawing with angle closest to 30 degrees.	51	2.7	54	3.8	48	3.6
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	80	2.2	84	2.5	76	3.6
P11	Yes	Use ruler to determine approximate length of pencil.	70	2.5	72	3.0	69	3.4
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	34	2.8	37	3.9	31	3.5
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	61	2.5	63	3.9	59	3.5
S02B	Yes	Calculate length of side of square given area.	18	2.4	18	3.0	18	3.0
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	16	1.9	19	2.9	14	2.5
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	37	2.4	37	3.1	38	3.0
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	3	0.5	4	1.0	1	0.4
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	34	1.8	33	2.6	35	2.2

COUNTRY ID=Switzerland SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	65	1.0	73	1.1	57	1.3
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	73	1.3	72	1.9	73	1.8
D08	No	Solve ratio problem for x: $7/13 = x/52$.	66	1.7	66	2.5	67	2.3
F07	No	Solve word problem to find average speed from distance and time.	31	1.6	34	2.4	28	2.0
G04	No	Solve simple proportionality equation.	68	1.4	67	2.5	70	2.0
L14	Yes	Identify missing numbers in table of proportional x and y values.	20	2.1	21	3.0	19	3.1
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	26	2.4	29	3.4	23	3.0
Q05	Yes	Solve word problem involving ratios.	73	2.2	79	2.9	68	3.8
R14	Yes	Solve multi-step word problem involving ratios.	47	2.0	52	3.2	42	2.9
T02A	Yes	Solve algebra word problem involving ratios.	18	1.6	16	1.8	20	2.1
T02B	Yes	Solve multi-step word problem computing fractions.	7	0.9	8	1.3	5	1.3
V03	Yes	Determine ratio of red paint in a mixture.	39	2.1	39	3.0	40	3.0

COUNTRY ID=Thailand SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	58	1.6	59	1.6	57	1.9
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	73	1.6	71	1.8	74	2.0
C05	No	Determine number which continues pattern based on figures.	52	1.6	52	2.3	52	2.0
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	71	1.2	67	1.8	74	1.5
E05	No	Find relationship between numbers in a set of ordered pairs.	39	1.3	37	2.1	40	1.6
F11	No	Solve multi-step problem using linear equations.	37	2.5	34	2.9	39	2.8
G06	No	Find solution to $-3X$ for given value of X .	18	1.5	18	2.6	17	1.5
H10	No	Identify equation expressing xy relationship from table of values.	43	1.8	43	2.5	43	2.1
H12	No	Select symbolic linear equation which fits word problem.	70	2.1	70	2.4	70	2.5
I01	Yes	Identify meaning of symbol in word problem equation.	20	1.6	20	3.1	20	2.2
I04	Yes	Determine next number which occurs in two number sequences.	36	2.1	36	3.2	37	3.0
J18	Yes	Identify missing number in table showing xy relationship.	32	2.3	30	3.3	32	3.4
L11	Yes	Solve multi-step word problem using pattern.	36	2.0	33	3.0	39	2.7
L13	Yes	Identify matching patterns of symbols.	94	0.9	92	1.7	96	1.0
L16	Yes	Simplify and solve linear equation for X .	22	2.8	22	4.1	21	3.0
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	52	3.0	51	4.0	53	3.7
O07	Yes	Solve linear equation for X .	71	2.4	68	3.4	74	2.9
P10	Yes	Identify equivalent algebraic expressions.	40	2.6	37	3.4	42	3.3
P15	Yes	Identify equivalent expression for a cubic relationship.	53	2.5	50	3.6	55	3.5
Q01	Yes	Identify linear expression based on word problem.	40	2.6	40	3.7	40	3.4
Q02	Yes	Subtract fractional expressions of X .	27	2.5	24	3.4	29	3.5
Q07	Yes	Solve $P=LW$ for W given values for P and L .	61	2.9	55	4.0	66	3.3
R09	Yes	Identify equivalent expressions from properties of real numbers.	41	2.9	38	3.7	44	3.6
R11	Yes	Solve algebra word problem: linear equation.	63	2.6	65	3.3	62	3.5
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	78	1.9	78	3.0	77	2.4
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	19	1.6	18	2.4	19	2.4
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	21	2.0	19	2.2	22	2.4
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	20	2.0	19	2.2	22	2.3

COUNTRY ID=Thailand SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	79	0.9	78	1.3	80	0.9
B07	No	Interpret line graph to find region of largest increase.	55	1.4	55	2.1	55	1.6
C02	No	Interpret pie graph to determine distribution.	88	1.1	87	1.9	88	1.2
E01	No	Interpret line graph to determine intersection point of two plots.	50	1.7	51	2.2	50	2.1
F08	No	Predict probability of occurrence for independent coin toss.	16	1.0	16	1.6	15	1.2
G01	No	Interpret frequency table to find number above a given level.	49	2.0	48	2.5	50	2.4
H07	No	Interpret bar chart histogram to find number above a given level.	75	1.5	74	2.2	75	1.7
H11	No	Predict number of total defective bulbs based on random sample.	68	1.6	73	2.1	65	1.9
I09	Yes	Predict most likely color of random card based on fraction of colors.	62	2.7	64	3.6	61	3.4
J13	Yes	Draw pictograph to represent number given in table.	93	1.3	91	1.9	94	1.5
K07	Yes	Determine the number of blue pens given probability of selection.	62	2.1	61	3.5	63	2.9
L10	Yes	Use data in a chart to identify time/day with highest temperature.	83	1.8	80	3.1	85	2.0
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	74	2.0	73	3.1	75	2.6
N18	Yes	Find probability of drawing an even number from 1 to 9.	36	2.3	35	2.8	36	3.3
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	48	2.4	49	4.0	48	2.8
O05	Yes	Calculate number of cube faces from probability of toss.	40	2.7	43	4.3	38	3.2
P17	Yes	Identify thermometer which shows temperature given in data table.	89	1.5	88	2.4	89	2.0
Q04	Yes	Interpret data in bar graph.	86	1.9	87	2.6	86	2.3
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	33	2.9	35	3.5	32	3.9
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	13	1.7	14	2.3	13	2.0

COUNTRY ID=Thailand SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	58	2.0	58	2.0	58	2.5
B09	No	Identify shaded figure which shows 2/5 = 4/10.	70	1.3	69	1.7	71	1.6
B10	No	Identify smallest of decimal fractions.	55	2.0	54	2.3	56	2.3
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	69	1.5	69	1.9	69	1.6
C06	No	Determine the worst estimate of: 848 + 677.	70	1.5	66	2.2	73	1.6
D09	No	Identify smallest fraction.	52	2.1	53	2.5	52	2.5
D12	No	Estimate rational number from point on number line.	67	1.2	68	1.6	66	1.5
E03	No	Find fraction of hour between two time points.	52	2.0	53	2.5	51	2.3
E04	No	Solve multi-step word problem: 4-digit whole numbers.	66	1.7	62	2.2	69	2.3
F09	No	Identify decimal fraction between 0.07 and 0.08.	59	1.6	64	2.0	57	2.2
F12	No	Identify fraction of circle which is shaded.	33	1.4	33	1.9	33	1.8
G05	No	Identify fraction represented in word problem.	66	1.7	63	2.5	68	2.1
H08	No	Identify figure showing 2/3 shaded.	85	1.3	84	1.8	85	1.4
H09	No	Identify sum which is closest to 691 + 208.	82	1.2	84	1.5	80	1.5
I02	Yes	Solve multi-step word problem: common fractions.	60	2.6	60	3.7	60	3.5
I05	Yes	Solve subtraction word problem: rational numbers.	84	1.4	82	2.2	85	2.0
I06	Yes	Write a fraction larger than a given number.	68	2.3	70	3.6	66	2.8
I07	Yes	Recognize when estimation is appropriate.	59	2.5	57	3.4	60	3.2
J12	Yes	Divide fractions.	57	3.3	54	4.1	59	3.7
J14	Yes	Divide rational numbers, fractional divisor.	29	2.7	27	3.4	30	3.4
J17	Yes	Use map and scale to find distance between two cities.	66	2.4	65	3.5	67	3.0
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	64	2.2	66	3.4	62	3.0
K02	Yes	Find total volume of mixture using rational number addition.	74	2.2	72	3.6	75	2.4
K06	Yes	Approximate amount increased by 15%.	27	1.9	24	3.2	29	2.3
K09	Yes	Compute sum of three fractions.	38	3.0	39	3.7	39	3.6
L08	Yes	Estimate actual height from diagram of relative heights.	54	2.6	53	3.2	55	3.3
L09	Yes	Identify 504.7 from its expression in words.	88	1.3	86	1.9	89	1.7
L17	Yes	Subtract three fractions.	48	3.3	46	3.9	49	4.1
M04	Yes	Identify the largest fraction.	31	2.5	33	3.9	29	2.8
M08	Yes	Multiply two decimal fractions.	47	2.7	51	3.6	44	3.8
N11	Yes	Identify number rounded to 18200.	87	1.7	88	2.4	86	2.1
N14	Yes	Identify list of equivalent fractions.	66	2.2	70	3.6	64	2.8
N16	Yes	Solve algebra word problem with fractions.	61	2.5	65	3.9	59	2.9
N17	Yes	Solve multi-step word problem: decimal fractions.	38	2.9	39	4.0	37	3.2
N19	Yes	Shade a given fraction of the squares in a grid.	59	2.8	62	3.7	58	3.7
O02	Yes	Calculate percent increase.	26	2.3	29	3.6	24	2.8
O04	Yes	Identify number rounded to the nearest 100th.	64	2.4	65	3.8	64	2.9
O09	Yes	Solve division word problem: common fractions.	45	2.9	43	4.4	47	3.2
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	70	2.6	72	3.0	69	3.8
P13	Yes	Use heart beats/min to find beats per hour.	67	2.2	66	2.9	66	2.7
P14	Yes	Solve subtraction word problem: common fractions.	64	2.9	65	3.7	62	3.8
P16	Yes	Reduce decimal to fraction in lowest terms.	35	3.1	29	3.9	39	4.1
Q06	Yes	Approximate water use/year from use/week.	36	2.6	35	3.9	36	3.4
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	46	2.4	44	3.7	47	3.2
Q09	Yes	Perform multiple operations of common fractions.	53	2.8	51	4.1	56	3.3
R06	Yes	Subtract two decimal numbers.	86	1.6	83	2.6	88	1.9
R07	Yes	Solve division word problem involving decimals.	36	2.8	36	3.7	35	3.7
R12	Yes	Subtract 4-digit whole numbers.	87	1.6	83	2.8	89	1.7
R13	Yes	Determine how much money left after spending 7/9.	33	2.6	30	3.6	36	3.2
U01A	Yes	Estimate the time required to record 5 songs.	30	1.7	30	2.6	30	1.9
U01B	Yes	Explain method of estimation.	17	1.7	16	1.8	18	2.5
V01	Yes	Determine actual weight from rounded value.	40	2.4	41	2.7	39	2.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Thailand SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	70	1.2	69	1.3	72	1.5
B11	No	Identify cube made by folding 2-dimensional net.	56	1.5	58	2.1	55	1.9
C03	No	Identify properties of congruent trapezoids.	69	1.8	68	2.5	70	1.9
D07	No	Identify relationship of angles in symmetric polygon.	67	1.6	69	2.0	66	2.2
E02	No	Determine angle in congruent triangles.	53	2.0	55	2.4	52	2.6
G03	No	Find sum of vertical angles from diagram of intersecting lines.	60	1.8	61	2.4	60	2.0
I08	Yes	Identify point on a line defined by two other points.	47	2.3	43	3.2	51	3.1
J11	Yes	Identify properties of a parallelogram.	62	1.9	58	3.0	65	2.4
J15	Yes	Identify similar triangles of different size.	84	1.5	83	2.4	84	2.1
J16	Yes	Identify coordinates for point on a grid.	65	2.6	65	3.4	65	3.1
K03	Yes	Identify figure from rotation of 3-dimensional object.	43	2.2	44	3.7	41	2.5
K08	Yes	Determine unknown angle in rotated congruent triangles.	22	1.8	22	2.7	22	2.6
L15	Yes	Find fourth quadrilateral angle, given the other three.	33	2.7	32	3.5	34	3.3
M02	Yes	Identify all lines of symmetry for a rectangle.	79	1.8	80	2.4	79	2.4
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	39	2.2	38	2.8	40	2.9
M07	Yes	Find angle based on supplementary pairs.	77	1.6	75	2.5	78	2.3
N12	Yes	Identify point on number line from distance of other points.	66	2.0	66	3.3	66	2.5
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	63	2.4	65	3.0	60	3.2
O08	Yes	Find center point of rotation for symmetry-related figures.	71	2.1	74	3.1	69	3.0
P08	Yes	Know relationship between side and perimeter for square.	56	2.9	53	3.6	58	3.8
P09	Yes	Find length of side for similar triangles.	34	2.2	37	3.7	33	2.8
Q10	Yes	Perform calculation involving addition/subtraction of angles.	56	2.4	52	3.3	59	3.3
R10	Yes	Determine into how many triangles a trapezoid can be divided.	48	2.5	47	3.8	49	3.2

COUNTRY ID=Thailand SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	58	1.8	57	1.8	59	2.2
C01	No	Compare volumes of different stacks of blocks.	73	1.5	74	2.1	73	1.7
D11	No	Identify best unit to measure the mass of an egg.	78	1.4	77	1.5	79	1.7
E06	No	Solve word problem to find length of rectangle from width and perimeter.	31	1.9	33	2.4	29	2.6
F10	No	Determine measurement accuracy of ruler.	42	1.4	42	1.8	43	2.0
G02	No	Read meter scale to determine length of a pipe.	72	1.4	74	1.9	71	1.7
I03	Yes	Find number of 750 mL bottles filled by a large volume.	31	2.0	32	3.2	30	2.4
J10	Yes	Determine area of sheet not covered by rectangular picture.	46	2.7	45	3.2	47	3.6
K05	Yes	Calculate area of a rectangle given its length and perimeter.	23	3.0	22	3.5	25	4.1
L12	Yes	Find longest pace from chart showing number of paces to cross room.	72	2.5	68	3.4	74	2.9
M01	Yes	Read mass shown on scale.	90	1.4	92	1.6	89	1.8
N15	Yes	Identify drawing with angle closest to 30 degrees.	70	2.1	73	3.4	68	2.7
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	35	3.5	34	4.2	37	4.3
P11	Yes	Use ruler to determine approximate length of pencil.	49	2.2	53	3.2	47	2.5
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	40	2.8	37	4.0	42	3.3
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	75	2.1	73	2.5	75	2.7
S02B	Yes	Calculate length of side of square given area.	22	2.5	21	2.7	23	3.4
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	15	1.9	14	3.0	16	2.3
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	16	1.7	15	1.9	17	2.4
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	9	2.1	8	1.8	10	3.0
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	33	2.5	35	2.6	32	3.3

COUNTRY ID=Thailand SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	53	1.6	56	1.9	52	2.0
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	80	0.9	82	1.2	80	1.3
D08	No	Solve ratio problem for x: $7/13 = x/52$.	76	1.6	77	2.0	74	1.7
F07	No	Solve word problem to find average speed from distance and time.	32	2.0	32	2.3	33	2.6
G04	No	Solve simple proportionality equation.	74	1.7	76	2.2	73	2.2
L14	Yes	Identify missing numbers in table of proportional x and y values.	35	2.3	33	3.3	37	3.2
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	37	2.7	36	3.6	38	3.4
Q05	Yes	Solve word problem involving ratios.	55	2.4	53	2.8	57	3.6
R14	Yes	Solve multi-step word problem involving ratios.	37	2.9	36	3.8	38	3.6
T02A	Yes	Solve algebra word problem involving ratios.	18	1.8	17	2.0	20	2.2
T02B	Yes	Solve multi-step word problem computing fractions.	4	0.6	4	1.0	4	0.9
V03	Yes	Determine ratio of red paint in a mixture.	44	2.2	41	2.9	46	2.6

COUNTRY ID=England SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	74	1.2	79	1.7	69	1.8
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	54	1.9	51	2.9	57	2.6
C05	No	Determine number which continues pattern based on figures.	53	1.9	54	2.6	51	2.9
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	44	2.3	42	3.1	46	3.3
E05	No	Find relationship between numbers in a set of ordered pairs.	63	1.6	61	2.7	65	2.3
F11	No	Solve multi-step problem using linear equations.	35	1.8	39	2.8	30	2.9
G06	No	Find solution to $-3X$ for given value of X .	18	2.1	21	3.5	15	2.3
H10	No	Identify equation expressing xy relationship from table of values.	39	2.2	42	3.1	34	3.1
H12	No	Select symbolic linear equation which fits word problem.	69	2.0	69	2.6	68	3.0
I01	Yes	Identify meaning of symbol in word problem equation.	37	3.5	40	4.5	34	5.4
I04	Yes	Determine next number which occurs in two number sequences.	41	3.5	41	4.7	42	5.3
J18	Yes	Identify missing number in table showing xy relationship.	51	3.5	51	4.8	50	4.9
K04	Yes	Identify expression equivalent to linear inequality.	31	3.5	34	5.4	28	4.6
L11	Yes	Solve multi-step word problem using pattern.	28	3.0	32	4.0	22	4.2
L13	Yes	Identify matching patterns of symbols.	94	1.9	93	2.4	94	2.6
L16	Yes	Simplify and solve linear equation for X .	17	2.6	20	3.8	15	4.2
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	26	3.7	26	5.1	27	4.4
O07	Yes	Solve linear equation for X .	51	3.2	52	4.8	50	4.6
P10	Yes	Identify equivalent algebraic expressions.	46	3.6	46	4.3	47	5.3
P15	Yes	Identify equivalent expression for a cubic relationship.	42	3.8	44	5.1	40	5.7
Q01	Yes	Identify linear expression based on word problem.	25	3.2	21	3.8	30	4.8
Q02	Yes	Subtract fractional expressions of X .	32	3.3	38	4.2	24	3.9
Q07	Yes	Solve $P=LW$ for W given values for P and L .	40	3.1	41	4.6	37	4.7
R09	Yes	Identify equivalent expressions from properties of real numbers.	24	2.6	22	3.3	27	4.3
R11	Yes	Solve algebra word problem: linear equation.	34	2.9	31	3.7	37	4.1
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	84	2.6	83	3.5	86	3.3
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	20	2.6	19	3.4	20	4.7
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	21	2.2	24	2.9	16	2.9
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	20	2.2	23	3.0	17	3.0

COUNTRY ID=England SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	64	1.2	62	2.0	66	1.9
B07	No	Interpret line graph to find region of largest increase.	67	1.5	67	2.4	67	2.6
C02	No	Interpret pie graph to determine distribution.	74	1.7	72	2.6	75	2.3
E01	No	Interpret line graph to determine intersection point of two plots.	66	1.7	67	2.6	65	2.9
F08	No	Predict probability of occurrence for independent coin toss.	77	1.5	76	2.1	78	2.2
G01	No	Interpret frequency table to find number above a given level.	50	2.1	52	2.6	48	3.5
H07	No	Interpret bar chart histogram to find number above a given level.	78	2.0	79	2.8	75	2.6
H11	No	Predict number of total defective bulbs based on random sample.	51	2.0	55	2.5	47	3.0
I09	Yes	Predict most likely color of random card based on fraction of colors.	62	3.4	62	4.5	62	4.9
J13	Yes	Draw pictograph to represent number given in table.	87	2.7	89	3.5	85	4.3
K07	Yes	Determine the number of blue pens given probability of selection.	50	3.6	52	4.5	48	5.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	89	2.1	93	2.4	84	3.7
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	81	2.7	85	3.1	76	4.4
N18	Yes	Find probability of drawing an even number from 1 to 9.	62	3.1	62	4.6	62	5.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	66	2.8	71	4.0	62	4.6
O05	Yes	Calculate number of cube faces from probability of toss.	36	3.2	40	4.7	30	4.4
P17	Yes	Identify thermometer which shows temperature given in data table.	81	2.5	81	3.6	82	3.9
Q04	Yes	Interpret data in bar graph.	90	1.9	90	2.5	91	3.1
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	57	3.4	61	4.6	53	5.4
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	12	1.5	12	2.3	12	2.9

COUNTRY ID=England SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	50	1.3	54	1.8	45	2.1
B09	No	Identify shaded figure which shows 2/5 = 4/10.	50	2.0	49	2.7	51	3.2
B10	No	Identify smallest of decimal fractions.	32	2.0	38	3.1	25	2.1
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	44	2.2	47	2.8	41	3.1
C06	No	Determine the worst estimate of: 848 + 677.	76	1.8	80	2.2	72	3.0
D09	No	Identify smallest fraction.	68	1.8	74	2.2	61	3.0
D12	No	Estimate rational number from point on number line.	83	1.5	85	2.1	81	2.0
E03	No	Find fraction of hour between two time points.	62	2.3	64	3.4	59	2.8
E04	No	Solve multi-step word problem: 4-digit whole numbers.	49	2.3	48	2.9	51	3.1
F09	No	Identify decimal fraction between 0.07 and 0.08.	61	2.1	65	2.6	55	2.9
F12	No	Identify fraction of circle which is shaded.	68	1.8	71	2.1	65	2.7
G05	No	Identify fraction represented in word problem.	64	2.2	66	3.1	62	2.9
H08	No	Identify figure showing 2/3 shaded.	75	2.0	75	2.8	74	2.6
H09	No	Identify sum which is closest to 691 + 208.	84	1.6	84	2.0	85	2.0
I02	Yes	Solve multi-step word problem: common fractions.	52	3.5	52	4.8	52	5.0
I05	Yes	Solve subtraction word problem: rational numbers.	47	4.1	47	5.5	48	5.8
I06	Yes	Write a fraction larger than a given number.	79	3.1	77	4.3	81	4.1
I07	Yes	Recognize when estimation is appropriate.	75	3.4	72	4.4	80	4.3
J12	Yes	Divide fractions.	6	2.5	6	3.4	5	2.4
J14	Yes	Divide rational numbers, fractional divisor.	16	2.9	15	3.4	17	4.1
J17	Yes	Use map and scale to find distance between two cities.	61	3.4	61	4.4	61	5.5
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	76	3.3	72	4.6	80	4.0
K02	Yes	Find total volume of mixture using rational number addition.	42	3.2	42	5.3	43	5.0
K06	Yes	Approximate amount increased by 15%.	35	3.4	42	4.8	28	4.3
K09	Yes	Compute sum of three fractions.	11	2.8	14	4.8	8	2.6
L08	Yes	Estimate actual height from diagram of relative heights.	51	3.7	53	4.6	48	5.1
L09	Yes	Identify 504.7 from its expression in words.	74	3.2	72	3.9	77	4.8
L17	Yes	Subtract three fractions.	12	2.1	14	3.2	8	2.5
M04	Yes	Identify the largest fraction.	36	3.1	43	4.9	29	4.4
M08	Yes	Multiply two decimal fractions.	9	2.3	9	3.0	9	2.8
N11	Yes	Identify number rounded to 18200.	84	2.7	89	2.9	79	4.3
N14	Yes	Identify list of equivalent fractions.	49	2.5	49	4.0	50	4.6
N16	Yes	Solve algebra word problem with fractions.	35	3.3	39	4.0	32	5.5
N17	Yes	Solve multi-step word problem: decimal fractions.	30	2.7	27	3.9	34	4.7
N19	Yes	Shade a given fraction of the squares in a grid.	37	3.4	37	5.1	37	5.0
O02	Yes	Calculate percent increase.	18	2.4	23	4.1	13	3.4
O04	Yes	Identify number rounded to the nearest 100th.	32	3.5	38	5.4	25	3.9
O09	Yes	Solve division word problem: common fractions.	49	3.4	56	5.4	42	5.0
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	63	3.6	66	4.4	60	5.0
P13	Yes	Use heart beats/min to find beats per hour.	42	3.5	44	4.6	40	5.3
P14	Yes	Solve subtraction word problem: common fractions.	85	2.7	85	3.5	86	4.1
P16	Yes	Reduce decimal to fraction in lowest terms.	12	2.5	10	3.0	14	4.4
Q06	Yes	Approximate water use/year from use/week.	28	3.3	30	4.8	27	4.4
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	27	3.4	31	4.5	21	4.2
Q09	Yes	Perform multiple operations of common fractions.	19	2.9	21	3.6	15	4.0
R06	Yes	Subtract two decimal numbers.	47	3.8	43	5.3	53	4.8
R07	Yes	Solve division word problem involving decimals.	32	3.4	36	4.4	28	5.0
R12	Yes	Subtract 4-digit whole numbers.	59	3.2	58	4.4	59	5.3
R13	Yes	Determine how much money left after spending 7/9.	23	2.6	26	3.7	19	4.1
U01A	Yes	Estimate the time required to record 5 songs.	49	2.6	48	3.8	50	3.7
U01B	Yes	Explain method of estimation.	41	2.6	39	4.3	44	3.6
V01	Yes	Determine actual weight from rounded value.	62	2.5	69	3.2	55	3.9

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=England SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	34	1.4	37	2.2	31	2.0
B11	No	Identify cube made by folding 2-dimensional net.	63	1.7	66	2.1	60	2.8
C03	No	Identify properties of congruent trapezoids.	50	2.0	50	2.6	50	3.3
D07	No	Identify relationship of angles in symmetric polygon.	47	2.2	50	2.8	44	3.2
E02	No	Determine angle in congruent triangles.	30	2.1	30	2.9	30	2.5
G03	No	Find sum of vertical angles from diagram of intersecting lines.	41	2.0	42	3.2	41	3.0
I08	Yes	Identify point on a line defined by two other points.	58	3.6	62	4.5	51	6.3
J11	Yes	Identify properties of a parallelogram.	39	3.3	35	4.2	43	4.8
J15	Yes	Identify similar triangles of different size.	62	3.3	67	4.8	56	4.3
J16	Yes	Identify coordinates for point on a grid.	67	3.3	71	4.3	61	4.3
K03	Yes	Identify figure from rotation of 3-dimensional object.	72	3.0	75	4.4	69	4.1
K08	Yes	Determine unknown angle in rotated congruent triangles.	24	2.8	26	4.6	23	3.9
L15	Yes	Find fourth quadrilateral angle, given the other three.	33	3.3	39	4.6	25	4.9
M02	Yes	Identify all lines of symmetry for a rectangle.	79	2.7	81	3.6	77	4.2
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	40	2.8	45	4.1	34	5.0
M07	Yes	Find angle based on supplementary pairs.	64	3.1	67	4.3	61	4.9
N12	Yes	Identify point on number line from distance of other points.	66	3.7	70	4.6	61	5.2
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	34	2.6	35	4.0	33	3.5
O08	Yes	Find center point of rotation for symmetry-related figures.	58	3.4	61	4.9	54	4.2
P08	Yes	Know relationship between side and perimeter for square.	49	3.4	46	4.7	53	4.6
P09	Yes	Find length of side for similar triangles.	34	3.0	37	4.1	30	4.4
Q10	Yes	Perform calculation involving addition/subtraction of angles.	36	3.1	36	4.4	36	4.8
R10	Yes	Determine into how many triangles a trapezoid can be divided.	47	3.5	45	4.4	50	5.5

COUNTRY ID=England SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	61	1.7	64	2.4	58	2.2
C01	No	Compare volumes of different stacks of blocks.	56	2.0	60	2.5	51	3.2
D11	No	Identify best unit to measure the mass of an egg.	82	1.7	87	1.7	77	2.4
E06	No	Solve word problem to find length of rectangle from width and perimeter.	42	1.6	42	2.8	41	2.5
F10	No	Determine measurement accuracy of ruler.	51	2.0	58	2.9	44	2.8
G02	No	Read meter scale to determine length of a pipe.	68	1.7	72	2.6	65	2.8
I03	Yes	Find number of 750 mL bottles filled by a large volume.	37	3.5	43	4.2	28	5.0
J10	Yes	Determine area of sheet not covered by rectangular picture.	26	3.1	33	4.8	18	4.1
K05	Yes	Calculate area of a rectangle given its length and perimeter.	33	2.6	33	4.1	33	3.8
L12	Yes	Find longest pace from chart showing number of paces to cross room.	62	3.0	66	4.4	57	4.5
M01	Yes	Read mass shown on scale.	85	2.3	90	3.2	79	4.1
N15	Yes	Identify drawing with angle closest to 30 degrees.	63	3.1	62	4.8	63	5.0
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	82	2.5	83	3.6	81	3.9
P11	Yes	Use ruler to determine approximate length of pencil.	44	3.7	47	5.3	41	4.8
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	20	2.2	25	3.4	14	3.2
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	38	3.5	35	4.8	43	5.4
S02B	Yes	Calculate length of side of square given area.	12	2.0	13	2.8	10	2.2
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	17	2.6	19	3.7	14	2.8
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	21	1.9	22	3.1	19	3.0
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	8	1.1	8	1.8	8	1.6
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	32	2.3	32	3.0	31	3.3

COUNTRY ID=England SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	42	1.3	47	2.1	35	1.9
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	66	1.8	68	2.3	63	2.7
D08	No	Solve ratio problem for x: $7/13 = x/52$.	71	2.3	73	3.0	69	3.1
F07	No	Solve word problem to find average speed from distance and time.	25	1.9	31	2.8	18	1.9
G04	No	Solve simple proportionality equation.	56	2.0	60	2.9	51	2.8
L14	Yes	Identify missing numbers in table of proportional x and y values.	15	2.8	13	3.2	17	4.2
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	40	3.5	48	4.8	31	4.4
Q05	Yes	Solve word problem involving ratios.	66	3.4	67	4.5	64	5.2
R14	Yes	Solve multi-step word problem involving ratios.	14	1.9	17	3.1	11	3.1
T02A	Yes	Solve algebra word problem involving ratios.	21	2.0	20	3.1	21	3.2
T02B	Yes	Solve multi-step word problem computing fractions.	8	1.2	10	1.8	6	1.7
V03	Yes	Determine ratio of red paint in a mixture.	34	2.2	35	3.5	34	3.4

COUNTRY ID=Scotland SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	72	1.2	75	1.3	69	1.5
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	46	2.0	46	2.5	45	2.2
C05	No	Determine number which continues pattern based on figures.	47	1.6	46	2.3	48	2.2
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	37	1.8	36	2.7	38	2.4
E05	No	Find relationship between numbers in a set of ordered pairs.	58	2.1	58	2.7	58	2.4
F11	No	Solve multi-step problem using linear equations.	34	2.1	36	2.6	31	2.4
G06	No	Find solution to $-3X$ for given value of X .	10	1.0	10	1.3	10	1.2
H10	No	Identify equation expressing xy relationship from table of values.	39	2.6	38	3.5	40	2.7
H12	No	Select symbolic linear equation which fits word problem.	67	1.7	66	2.6	69	2.2
I01	Yes	Identify meaning of symbol in word problem equation.	26	2.6	24	3.4	28	3.5
I04	Yes	Determine next number which occurs in two number sequences.	33	2.3	30	3.3	37	3.9
J18	Yes	Identify missing number in table showing xy relationship.	45	2.6	39	3.9	51	3.4
K04	Yes	Identify expression equivalent to linear inequality.	22	2.1	24	3.1	20	2.6
L11	Yes	Solve multi-step word problem using pattern.	29	2.7	25	3.1	33	4.1
L13	Yes	Identify matching patterns of symbols.	89	1.7	88	2.6	91	2.3
L16	Yes	Simplify and solve linear equation for X .	13	2.7	18	4.6	9	2.5
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	13	2.1	12	3.2	13	2.5
O07	Yes	Solve linear equation for X .	40	2.7	38	4.0	42	4.0
P10	Yes	Identify equivalent algebraic expressions.	53	3.0	55	4.2	52	3.8
P15	Yes	Identify equivalent expression for a cubic relationship.	22	2.4	26	3.3	19	3.3
Q01	Yes	Identify linear expression based on word problem.	18	2.1	18	3.1	18	3.1
Q02	Yes	Subtract fractional expressions of X .	26	2.4	29	3.6	23	3.3
Q07	Yes	Solve $P=LW$ for W given values for P and L .	34	2.6	32	3.8	36	3.7
R09	Yes	Identify equivalent expressions from properties of real numbers.	21	2.5	22	3.1	21	3.2
R11	Yes	Solve algebra word problem: linear equation.	30	2.5	32	4.1	28	3.2
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	85	1.9	86	2.8	84	2.4
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	18	2.0	15	2.5	21	3.1
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	17	1.4	16	1.9	19	2.0
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	18	1.5	16	1.9	20	2.1

COUNTRY ID=Scotland SCALE=Data Rep., Analysis & Prob.

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	66	1.1	66	1.5	67	1.4
B07	No	Interpret line graph to find region of largest increase.	62	1.6	63	2.1	61	2.2
C02	No	Interpret pie graph to determine distribution.	71	1.6	69	2.3	73	1.9
E01	No	Interpret line graph to determine intersection point of two plots.	61	1.7	65	2.1	57	2.3
F08	No	Predict probability of occurrence for independent coin toss.	60	1.8	60	2.5	60	2.6
G01	No	Interpret frequency table to find number above a given level.	48	2.0	47	2.5	49	2.8
H07	No	Interpret bar chart histogram to find number above a given level.	73	1.5	71	2.1	76	1.8
H11	No	Predict number of total defective bulbs based on random sample.	49	1.9	49	2.7	48	2.5
I09	Yes	Predict most likely color of random card based on fraction of colors.	66	2.7	68	3.8	65	3.2
J13	Yes	Draw pictograph to represent number given in table.	83	1.8	83	2.6	82	2.7
K07	Yes	Determine the number of blue pens given probability of selection.	43	2.5	46	4.1	39	3.0
L10	Yes	Use data in a chart to identify time/day with highest temperature.	89	1.7	89	2.4	91	2.2
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	77	2.4	78	3.6	76	3.8
N18	Yes	Find probability of drawing an even number from 1 to 9.	45	2.8	46	3.7	45	3.9
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	60	3.2	61	4.5	60	3.9
O05	Yes	Calculate number of cube faces from probability of toss.	36	2.9	40	4.2	33	3.8
P17	Yes	Identify thermometer which shows temperature given in data table.	77	2.4	76	3.6	79	3.5
Q04	Yes	Interpret data in bar graph.	86	1.9	83	2.8	89	2.5
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	46	2.6	56	3.6	36	3.4
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	12	1.4	12	1.7	13	1.9

COUNTRY ID=Scotland SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	42	1.8	46	2.3	39	2.0
B09	No	Identify shaded figure which shows 2/5 = 4/10.	49	1.6	47	2.0	50	2.3
B10	No	Identify smallest of decimal fractions.	28	1.9	34	2.3	22	2.2
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	46	1.3	48	2.2	45	1.9
C06	No	Determine the worst estimate of: 848 + 677.	73	1.7	73	2.2	74	2.3
D09	No	Identify smallest fraction.	70	1.9	71	2.9	70	2.1
D12	No	Estimate rational number from point on number line.	83	1.4	84	1.6	82	1.8
E03	No	Find fraction of hour between two time points.	57	1.9	61	2.6	53	2.1
E04	No	Solve multi-step word problem: 4-digit whole numbers.	54	2.1	52	2.9	57	2.6
F09	No	Identify decimal fraction between 0.07 and 0.08.	55	1.8	57	2.4	53	2.2
F12	No	Identify fraction of circle which is shaded.	70	2.0	69	2.4	71	2.5
G05	No	Identify fraction represented in word problem.	66	1.8	63	2.4	68	2.3
H08	No	Identify figure showing 2/3 shaded.	74	1.6	72	2.2	76	1.9
H09	No	Identify sum which is closest to 691 + 208.	85	1.3	85	1.8	85	1.5
I02	Yes	Solve multi-step word problem: common fractions.	54	3.3	60	4.4	48	3.4
I05	Yes	Solve subtraction word problem: rational numbers.	61	2.7	63	3.4	59	4.3
I06	Yes	Write a fraction larger than a given number.	76	2.4	78	3.3	74	3.3
I07	Yes	Recognize when estimation is appropriate.	73	2.7	73	3.8	74	3.4
J12	Yes	Divide fractions.	1	0.7	2	1.3	.	.
J14	Yes	Divide rational numbers, fractional divisor.	12	1.9	14	2.5	11	2.5
J17	Yes	Use map and scale to find distance between two cities.	55	2.8	58	3.7	52	3.9
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	68	2.8	71	3.7	64	4.1
K02	Yes	Find total volume of mixture using rational number addition.	40	3.1	33	4.0	46	4.7
K06	Yes	Approximate amount increased by 15%.	31	2.7	34	4.1	29	3.7
K09	Yes	Compute sum of three fractions.	5	1.2	4	1.6	6	2.0
L08	Yes	Estimate actual height from diagram of relative heights.	49	2.8	51	4.3	48	3.3
L09	Yes	Identify 504.7 from its expression in words.	75	2.0	77	2.8	74	3.3
L17	Yes	Subtract three fractions.	16	2.2	19	3.6	12	2.5
M04	Yes	Identify the largest fraction.	24	2.6	27	3.8	21	3.0
M08	Yes	Multiply two decimal fractions.	5	1.4	7	2.1	3	1.4
N11	Yes	Identify number rounded to 18200.	82	2.1	78	3.0	86	2.6
N14	Yes	Identify list of equivalent fractions.	47	3.6	48	4.9	47	4.3
N16	Yes	Solve algebra word problem with fractions.	45	3.0	49	3.6	41	4.2
N17	Yes	Solve multi-step word problem: decimal fractions.	32	2.5	25	3.1	39	3.9
N19	Yes	Shade a given fraction of the squares in a grid.	35	3.3	38	4.4	31	4.1
O02	Yes	Calculate percent increase.	19	2.2	23	3.8	15	3.0
O04	Yes	Identify number rounded to the nearest 100th.	30	2.4	35	4.2	25	3.0
O09	Yes	Solve division word problem: common fractions.	48	3.7	50	5.1	47	4.1
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	68	2.4	67	3.2	68	3.5
P13	Yes	Use heart beats/min to find beats per hour.	45	2.9	42	4.0	48	3.7
P14	Yes	Solve subtraction word problem: common fractions.	80	2.6	77	3.6	83	3.4
P16	Yes	Reduce decimal to fraction in lowest terms.	10	1.9	9	2.4	12	2.5
Q06	Yes	Approximate water use/year from use/week.	29	2.6	30	3.2	29	3.6
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	21	2.5	25	3.3	18	3.5
Q09	Yes	Perform multiple operations of common fractions.	21	2.6	24	3.4	19	3.1
R06	Yes	Subtract two decimal numbers.	59	2.9	55	4.2	63	3.6
R07	Yes	Solve division word problem involving decimals.	32	2.6	34	3.6	30	3.6
R12	Yes	Subtract 4-digit whole numbers.	75	2.5	73	3.7	78	3.2
R13	Yes	Determine how much money left after spending 7/9.	21	2.3	18	3.5	23	3.2
U01A	Yes	Estimate the time required to record 5 songs.	43	2.0	43	2.8	44	3.0
U01B	Yes	Explain method of estimation.	38	2.3	36	2.7	40	3.1
V01	Yes	Determine actual weight from rounded value.	62	2.6	63	3.4	61	3.1

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Scotland SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	36	1.3	36	1.6	35	1.6
B11	No	Identify cube made by folding 2-dimensional net.	57	1.8	59	2.1	54	2.3
C03	No	Identify properties of congruent trapezoids.	47	2.3	48	3.0	47	2.8
D07	No	Identify relationship of angles in symmetric polygon.	48	2.2	48	2.6	47	2.6
E02	No	Determine angle in congruent triangles.	33	1.6	35	2.2	32	1.9
G03	No	Find sum of vertical angles from diagram of intersecting lines.	37	1.6	37	2.2	37	2.0
I08	Yes	Identify point on a line defined by two other points.	54	2.7	62	4.3	47	3.0
J11	Yes	Identify properties of a parallelogram.	40	3.1	39	3.9	41	4.2
J15	Yes	Identify similar triangles of different size.	57	2.8	58	3.8	56	3.5
J16	Yes	Identify coordinates for point on a grid.	63	3.0	59	3.9	68	3.7
K03	Yes	Identify figure from rotation of 3-dimensional object.	65	2.6	70	3.9	60	3.7
K08	Yes	Determine unknown angle in rotated congruent triangles.	25	2.2	22	3.6	27	3.1
L15	Yes	Find fourth quadrilateral angle, given the other three.	30	2.4	33	3.7	28	2.9
M02	Yes	Identify all lines of symmetry for a rectangle.	83	2.3	81	3.4	86	2.8
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	33	2.9	31	3.6	37	4.4
M07	Yes	Find angle based on supplementary pairs.	59	2.7	60	3.9	56	3.7
N12	Yes	Identify point on number line from distance of other points.	60	2.4	60	3.5	61	3.4
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	26	2.5	29	3.8	24	3.3
O08	Yes	Find center point of rotation for symmetry-related figures.	59	3.4	62	4.6	56	4.4
P08	Yes	Know relationship between side and perimeter for square.	47	2.8	43	4.0	52	3.4
P09	Yes	Find length of side for similar triangles.	30	2.2	32	3.5	29	3.5
Q10	Yes	Perform calculation involving addition/subtraction of angles.	28	2.6	28	3.5	29	3.6
R10	Yes	Determine into how many triangles a trapezoid can be divided.	40	2.8	36	3.6	44	3.6

COUNTRY ID=Scotland SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	64	1.5	66	1.8	63	1.8
C01	No	Compare volumes of different stacks of blocks.	67	1.6	69	2.3	66	2.2
D11	No	Identify best unit to measure the mass of an egg.	78	1.6	79	2.6	77	2.3
E06	No	Solve word problem to find length of rectangle from width and perimeter.	35	1.9	36	2.7	34	2.1
F10	No	Determine measurement accuracy of ruler.	47	1.7	50	2.6	45	2.2
G02	No	Read meter scale to determine length of a pipe.	66	1.9	68	2.1	64	2.5
I03	Yes	Find number of 750 mL bottles filled by a large volume.	30	2.3	34	3.8	27	3.4
J10	Yes	Determine area of sheet not covered by rectangular picture.	18	1.9	20	2.7	17	3.0
K05	Yes	Calculate area of a rectangle given its length and perimeter.	22	2.2	22	3.5	22	3.2
L12	Yes	Find longest pace from chart showing number of paces to cross room.	58	3.0	60	3.9	58	4.0
M01	Yes	Read mass shown on scale.	86	1.8	85	2.2	86	2.8
N15	Yes	Identify drawing with angle closest to 30 degrees.	53	2.7	58	3.6	48	4.1
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	77	3.0	79	4.0	75	3.7
P11	Yes	Use ruler to determine approximate length of pencil.	39	2.4	40	3.0	38	3.5
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	22	2.6	26	3.5	17	3.0
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	53	2.8	49	3.9	57	3.7
S02B	Yes	Calculate length of side of square given area.	5	1.5	5	2.1	6	2.1
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	13	1.9	16	2.7	10	2.6
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	19	1.7	20	2.5	17	2.3
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	3	0.7	4	1.1	3	0.9
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	28	2.1	29	2.4	28	2.8

COUNTRY ID=Scotland SCALE=Proportionality

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	32	1.4	39	1.5	25	1.8
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	64	1.2	66	2.0	63	1.7
D08	No	Solve ratio problem for x: $7/13 = x/52$.	62	1.6	64	2.5	60	2.1
F07	No	Solve word problem to find average speed from distance and time.	19	1.5	22	2.0	16	1.7
G04	No	Solve simple proportionality equation.	54	1.6	54	2.4	54	1.9
L14	Yes	Identify missing numbers in table of proportional x and y values.	14	2.2	14	2.8	15	3.0
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	26	2.6	27	3.5	26	3.5
Q05	Yes	Solve word problem involving ratios.	65	2.4	70	3.6	61	3.5
R14	Yes	Solve multi-step word problem involving ratios.	12	2.0	11	2.2	14	2.9
T02A	Yes	Solve algebra word problem involving ratios.	16	1.7	16	2.2	16	2.5
T02B	Yes	Solve multi-step word problem computing fractions.	5	0.9	5	1.3	5	1.2
V03	Yes	Determine ratio of red paint in a mixture.	38	2.2	39	2.7	37	3.1

COUNTRY ID=United States SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	68	1.3	69	1.6	66	1.4
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	64	2.2	60	2.3	67	2.7
C05	No	Determine number which continues pattern based on figures.	47	2.4	46	2.7	47	2.9
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	48	1.5	45	2.0	51	2.6
E05	No	Find relationship between numbers in a set of ordered pairs.	57	2.3	55	2.4	59	3.0
F11	No	Solve multi-step problem using linear equations.	38	2.3	38	2.6	38	3.0
G06	No	Find solution to $-3X$ for given value of X .	27	2.8	25	3.0	29	3.1
H10	No	Identify equation expressing xy relationship from table of values.	36	2.2	35	3.0	36	2.1
H12	No	Select symbolic linear equation which fits word problem.	77	1.6	76	2.2	79	1.9
I01	Yes	Identify meaning of symbol in word problem equation.	26	2.4	27	3.1	26	3.7
I04	Yes	Determine next number which occurs in two number sequences.	39	3.2	33	3.5	45	4.7
J18	Yes	Identify missing number in table showing xy relationship.	36	2.5	41	3.2	31	3.3
K04	Yes	Identify expression equivalent to linear inequality.	38	2.9	36	4.0	40	3.5
L11	Yes	Solve multi-step word problem using pattern.	29	2.1	25	3.0	33	3.0
L13	Yes	Identify matching patterns of symbols.	90	1.8	87	2.7	93	1.9
L16	Yes	Simplify and solve linear equation for X .	15	2.4	13	2.7	16	3.4
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	40	3.6	34	5.1	47	4.1
O07	Yes	Solve linear equation for X .	63	3.8	64	4.4	63	5.0
P10	Yes	Identify equivalent algebraic expressions.	40	2.8	40	4.2	40	3.6
P15	Yes	Identify equivalent expression for a cubic relationship.	66	2.9	65	4.0	67	3.3
Q01	Yes	Identify linear expression based on word problem.	39	2.9	37	3.5	41	4.0
Q02	Yes	Subtract fractional expressions of X .	41	3.0	38	3.4	45	4.6
Q07	Yes	Solve $P=LW$ for W given values for P and L .	65	2.8	63	3.5	66	4.0
R09	Yes	Identify equivalent expressions from properties of real numbers.	28	3.0	28	4.6	28	3.4
R11	Yes	Solve algebra word problem: linear equation.	36	2.8	39	3.1	34	4.0
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	73	2.2	76	2.8	70	3.1
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	18	2.4	18	3.1	17	2.7
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	20	2.2	18	2.4	21	3.1
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	20	2.0	18	2.3	23	3.3

COUNTRY ID=United States SCALE=Data Rep., Analysis & Prob.

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	72	1.3	69	1.4	74	1.5
B07	No	Interpret line graph to find region of largest increase.	66	1.5	65	2.1	67	1.7
C02	No	Interpret pie graph to determine distribution.	71	1.8	72	2.5	69	2.2
E01	No	Interpret line graph to determine intersection point of two plots.	64	1.7	67	2.0	60	2.5
F08	No	Predict probability of occurrence for independent coin toss.	56	1.6	55	2.4	56	2.0
G01	No	Interpret frequency table to find number above a given level.	47	1.6	47	2.0	48	2.2
H07	No	Interpret bar chart histogram to find number above a given level.	69	1.9	66	2.8	71	2.1
H11	No	Predict number of total defective bulbs based on random sample.	49	2.0	52	2.8	45	2.2
I09	Yes	Predict most likely color of random card based on fraction of colors.	66	2.7	66	3.6	66	4.0
J13	Yes	Draw pictograph to represent number given in table.	87	1.5	88	1.9	86	2.3
K07	Yes	Determine the number of blue pens given probability of selection.	47	2.4	49	4.3	45	3.4
L10	Yes	Use data in a chart to identify time/day with highest temperature.	89	1.7	86	2.8	92	1.7
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	82	1.9	85	2.6	78	2.6
N18	Yes	Find probability of drawing an even number from 1 to 9.	66	2.7	65	3.5	68	4.0
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	59	2.9	62	3.3	56	4.1
O05	Yes	Calculate number of cube faces from probability of toss.	37	3.3	39	4.2	35	4.3
P17	Yes	Identify thermometer which shows temperature given in data table.	81	2.1	84	3.2	78	2.8
Q04	Yes	Interpret data in bar graph.	88	2.1	86	2.5	90	2.6
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	43	3.0	44	4.0	42	3.8
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	15	2.2	12	2.4	17	2.7

COUNTRY ID=United States SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	44	2.0	48	2.3	40	2.4
B09	No	Identify shaded figure which shows 2/5 = 4/10.	59	1.9	57	2.0	61	2.6
B10	No	Identify smallest of decimal fractions.	43	2.4	48	2.9	39	2.6
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	51	1.6	52	2.2	51	2.3
C06	No	Determine the worst estimate of: 848 + 677.	69	1.8	66	2.1	73	2.3
D09	No	Identify smallest fraction.	66	2.6	70	2.8	63	3.1
D12	No	Estimate rational number from point on number line.	72	1.4	74	2.0	71	1.8
E03	No	Find fraction of hour between two time points.	55	1.6	57	2.1	53	2.5
E04	No	Solve multi-step word problem: 4-digit whole numbers.	65	1.8	66	1.9	64	2.6
F09	No	Identify decimal fraction between 0.07 and 0.08.	61	2.1	61	1.9	61	2.9
F12	No	Identify fraction of circle which is shaded.	56	1.8	58	2.1	53	2.5
G05	No	Identify fraction represented in word problem.	57	2.0	57	2.4	58	2.6
H08	No	Identify figure showing 2/3 shaded.	82	1.5	79	2.0	85	1.5
H09	No	Identify sum which is closest to 691 + 208.	91	0.9	90	1.3	92	1.1
I02	Yes	Solve multi-step word problem: common fractions.	48	3.0	48	3.5	47	4.4
I05	Yes	Solve subtraction word problem: rational numbers.	73	2.6	70	3.0	76	3.3
I06	Yes	Write a fraction larger than a given number.	79	2.2	81	2.7	77	3.3
I07	Yes	Recognize when estimation is appropriate.	82	2.1	75	3.3	89	2.6
J12	Yes	Divide fractions.	33	3.5	34	5.0	32	4.0
J14	Yes	Divide rational numbers, fractional divisor.	37	3.4	33	3.5	42	5.4
J17	Yes	Use map and scale to find distance between two cities.	52	3.4	60	4.4	44	3.7
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	63	2.7	67	4.2	59	3.1
K02	Yes	Find total volume of mixture using rational number addition.	61	3.1	59	4.3	62	3.2
K06	Yes	Approximate amount increased by 15%.	32	2.5	36	3.4	28	3.5
K09	Yes	Compute sum of three fractions.	36	3.0	31	3.2	40	4.3
L08	Yes	Estimate actual height from diagram of relative heights.	44	2.8	46	4.4	41	3.6
L09	Yes	Identify 504.7 from its expression in words.	93	1.3	91	2.0	94	1.5
L17	Yes	Subtract three fractions.	39	2.8	36	4.5	42	3.5
M04	Yes	Identify the largest fraction.	34	2.3	39	3.2	29	2.9
M08	Yes	Multiply two decimal fractions.	44	2.8	42	4.0	46	3.8
N11	Yes	Identify number rounded to 18200.	82	1.7	77	3.1	87	2.2
N14	Yes	Identify list of equivalent fractions.	65	2.4	65	3.5	65	4.1
N16	Yes	Solve algebra word problem with fractions.	42	2.7	40	3.8	44	2.8
N17	Yes	Solve multi-step word problem: decimal fractions.	32	2.1	32	3.4	31	3.4
N19	Yes	Shade a given fraction of the squares in a grid.	37	4.1	39	5.5	35	4.6
O02	Yes	Calculate percent increase.	14	2.1	16	3.2	12	2.4
O04	Yes	Identify number rounded to the nearest 100th.	63	2.8	60	3.9	65	3.2
O09	Yes	Solve division word problem: common fractions.	36	3.2	42	4.0	31	4.2
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	77	1.9	75	3.2	79	2.8
P13	Yes	Use heart beats/min to find beats per hour.	61	2.7	53	3.9	68	3.0
P14	Yes	Solve subtraction word problem: common fractions.	76	2.5	71	3.8	80	2.4
P16	Yes	Reduce decimal to fraction in lowest terms.	38	2.5	36	3.4	40	3.1
Q06	Yes	Approximate water use/year from use/week.	31	2.8	35	4.1	27	3.4
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	40	2.9	42	4.4	38	3.3
Q09	Yes	Perform multiple operations of common fractions.	43	3.5	37	4.2	48	3.7
R06	Yes	Subtract two decimal numbers.	75	2.9	68	4.0	81	3.0
R07	Yes	Solve division word problem involving decimals.	41	3.2	38	4.4	42	4.0
R12	Yes	Subtract 4-digit whole numbers.	88	2.1	89	2.4	87	2.8
R13	Yes	Determine how much money left after spending 7/9.	16	2.3	16	2.9	16	3.0
U01A	Yes	Estimate the time required to record 5 songs.	43	2.6	45	3.1	41	3.4
U01B	Yes	Explain method of estimation.	44	2.7	44	3.0	43	3.6
V01	Yes	Determine actual weight from rounded value.	57	2.1	60	2.6	54	2.7

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=United States SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	53	1.6	52	2.0	54	1.8
B11	No	Identify cube made by folding 2-dimensional net.	55	1.7	58	2.2	53	2.3
C03	No	Identify properties of congruent trapezoids.	58	2.4	58	2.8	59	2.9
D07	No	Identify relationship of angles in symmetric polygon.	41	2.1	42	2.2	41	3.1
E02	No	Determine angle in congruent triangles.	25	1.8	26	1.9	24	2.6
G03	No	Find sum of vertical angles from diagram of intersecting lines.	36	1.9	35	2.2	37	2.6
I08	Yes	Identify point on a line defined by two other points.	37	2.8	37	3.6	37	3.3
J11	Yes	Identify properties of a parallelogram.	39	2.8	37	3.5	42	3.8
J15	Yes	Identify similar triangles of different size.	65	2.7	64	4.0	66	3.3
J16	Yes	Identify coordinates for point on a grid.	49	3.4	47	4.4	50	3.8
K03	Yes	Identify figure from rotation of 3-dimensional object.	63	2.3	61	3.5	65	3.2
K08	Yes	Determine unknown angle in rotated congruent triangles.	15	1.8	16	2.5	13	2.7
L15	Yes	Find fourth quadrilateral angle, given the other three.	14	1.9	17	3.4	11	2.2
M02	Yes	Identify all lines of symmetry for a rectangle.	66	3.0	63	3.6	69	4.1
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	34	2.6	32	4.1	36	3.6
M07	Yes	Find angle based on supplementary pairs.	56	2.6	60	3.4	52	4.0
N12	Yes	Identify point on number line from distance of other points.	65	2.3	71	3.4	58	3.2
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	31	2.5	34	3.6	29	3.2
O08	Yes	Find center point of rotation for symmetry-related figures.	57	3.1	62	4.9	51	3.4
P08	Yes	Know relationship between side and perimeter for square.	45	3.0	44	3.7	47	4.2
P09	Yes	Find length of side for similar triangles.	27	2.5	28	3.2	27	3.4
Q10	Yes	Perform calculation involving addition/subtraction of angles.	28	2.4	30	4.2	26	2.4
R10	Yes	Determine into how many triangles a trapezoid can be divided.	41	2.8	40	4.2	42	3.5

COUNTRY ID=United States SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	53	1.9	53	2.1	53	2.2
C01	No	Compare volumes of different stacks of blocks.	44	2.0	49	2.5	39	2.9
D11	No	Identify best unit to measure the mass of an egg.	69	1.9	72	2.0	65	2.7
E06	No	Solve word problem to find length of rectangle from width and perimeter.	29	2.1	30	2.5	29	2.5
F10	No	Determine measurement accuracy of ruler.	33	2.0	35	2.4	30	2.1
G02	No	Read meter scale to determine length of a pipe.	68	1.7	70	2.0	67	2.1
I03	Yes	Find number of 750 mL bottles filled by a large volume.	30	2.6	32	3.4	28	3.8
J10	Yes	Determine area of sheet not covered by rectangular picture.	30	3.1	34	3.8	26	3.7
K05	Yes	Calculate area of a rectangle given its length and perimeter.	18	2.7	17	3.8	19	3.3
L12	Yes	Find longest pace from chart showing number of paces to cross room.	36	3.4	41	5.1	31	3.8
M01	Yes	Read mass shown on scale.	83	1.9	82	2.3	84	2.6
N15	Yes	Identify drawing with angle closest to 30 degrees.	55	1.9	54	3.3	56	3.8
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	49	2.9	51	3.7	47	4.3
P11	Yes	Use ruler to determine approximate length of pencil.	46	2.7	49	3.1	42	4.1
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	35	2.7	34	3.5	35	3.9
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	46	3.7	41	4.1	52	5.1
S02B	Yes	Calculate length of side of square given area.	13	2.1	11	2.2	15	3.1
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	13	2.5	13	3.5	13	3.6
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	11	1.4	12	2.4	11	1.6
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	10	1.6	9	1.6	10	2.1
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	21	2.1	25	2.9	17	2.3

COUNTRY ID=United States SCALE=Proportionality

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	41	1.8	48	2.1	34	2.1
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	67	1.2	68	1.6	66	2.2
D08	No	Solve ratio problem for x: $7/13 = x/52$.	71	1.7	73	2.2	70	2.1
F07	No	Solve word problem to find average speed from distance and time.	25	2.0	25	2.5	24	2.1
G04	No	Solve simple proportionality equation.	72	1.8	73	2.2	70	2.4
L14	Yes	Identify missing numbers in table of proportional x and y values.	19	2.2	19	2.8	20	2.6
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	27	2.6	27	3.6	27	3.2
Q05	Yes	Solve word problem involving ratios.	58	2.5	62	3.3	54	3.7
R14	Yes	Solve multi-step word problem involving ratios.	18	2.8	20	4.1	17	2.4
T02A	Yes	Solve algebra word problem involving ratios.	10	1.6	10	1.9	11	2.3
T02B	Yes	Solve multi-step word problem computing fractions.	4	0.9	4	0.9	4	1.2
V03	Yes	Determine ratio of red paint in a mixture.	45	2.0	40	2.3	50	2.6

COUNTRY ID=Slovenia SCALE=Algebra

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A02	No	Solve algebraic word problem equating masses on a scale.	80	1.2	82	1.2	79	1.6
B12	No	Identify algebraic equation to solve word problem: $7n+6=41$.	67	1.6	64	1.8	70	2.0
C05	No	Determine number which continues pattern based on figures.	49	2.0	49	2.7	49	2.2
D10	No	Identify equation which solves word problem: $C=(100+6n)$.	47	1.7	50	2.3	45	2.1
E05	No	Find relationship between numbers in a set of ordered pairs.	57	1.7	54	2.5	61	2.2
F11	No	Solve multi-step problem using linear equations.	36	1.7	35	2.4	37	2.1
G06	No	Find solution to $-3X$ for given value of X .	51	1.9	48	2.3	54	2.3
H10	No	Identify equation expressing xy relationship from table of values.	42	2.0	39	2.6	44	2.7
H12	No	Select symbolic linear equation which fits word problem.	74	1.5	72	2.1	75	1.9
I01	Yes	Identify meaning of symbol in word problem equation.	33	2.7	31	4.0	34	3.3
I04	Yes	Determine next number which occurs in two number sequences.	38	3.1	36	4.4	40	4.2
J18	Yes	Identify missing number in table showing xy relationship.	37	2.6	42	3.5	33	3.3
K04	Yes	Identify expression equivalent to linear inequality.	43	3.0	45	3.8	41	4.3
L11	Yes	Solve multi-step word problem using pattern.	38	3.4	35	4.0	42	4.6
L13	Yes	Identify matching patterns of symbols.	87	2.0	86	2.9	87	2.4
L16	Yes	Simplify and solve linear equation for X .	22	3.1	20	3.4	24	3.9
N13	Yes	Calculate $(7X+4)/(5X-4)$ for a given value of X .	52	3.3	48	4.1	56	4.3
O07	Yes	Solve linear equation for X .	74	2.5	71	3.9	76	3.7
P10	Yes	Identify equivalent algebraic expressions.	55	2.8	50	3.8	59	4.0
P15	Yes	Identify equivalent expression for a cubic relationship.	74	2.3	76	3.2	72	3.4
Q01	Yes	Identify linear expression based on word problem.	43	2.8	43	3.7	43	4.2
Q02	Yes	Subtract fractional expressions of X .	39	2.3	38	3.3	39	3.2
Q07	Yes	Solve $P=LW$ for W given values for P and L .	74	2.3	69	3.4	79	3.3
R09	Yes	Identify equivalent expressions from properties of real numbers.	39	2.9	38	4.0	41	4.1
R11	Yes	Solve algebra word problem: linear equation.	39	2.4	40	3.4	38	3.3
S01A	Yes	Complete chart by observing sequence of triangles in each of 3 figures.	76	2.2	72	3.4	80	2.4
S01B	Yes	Extend triangle pattern from 3 figures to 8th.	20	2.4	20	3.4	21	3.0
T01A	Yes	Solve multi-step algebra word problem of simultaneous equations.	17	1.6	21	2.6	12	1.9
T01B	Yes	Solve multi-step algebra word problem of simultaneous equations.	16	1.5	19	2.4	13	1.8

COUNTRY ID=Slovenia SCALE=Data Rep., Analysis & Prob.

ITEM	REL	LABEL	Seventh Grade					
			Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A06	No	Find difference between the means of two sets of data.	79	0.9	78	1.3	81	1.1
B07	No	Interpret line graph to find region of largest increase.	67	1.5	66	1.9	67	2.0
C02	No	Interpret pie graph to determine distribution.	78	1.5	77	2.0	79	1.9
E01	No	Interpret line graph to determine intersection point of two plots.	76	1.7	78	2.3	73	2.4
F08	No	Predict probability of occurrence for independent coin toss.	61	1.6	58	2.6	63	2.0
G01	No	Interpret frequency table to find number above a given level.	57	1.5	56	2.2	59	2.2
H07	No	Interpret bar chart histogram to find number above a given level.	63	1.6	64	2.3	63	2.0
H11	No	Predict number of total defective bulbs based on random sample.	63	1.8	66	2.4	60	2.2
I09	Yes	Predict most likely color of random card based on fraction of colors.	67	2.4	72	3.5	62	4.0
J13	Yes	Draw pictograph to represent number given in table.	82	1.8	82	2.8	82	2.7
K07	Yes	Determine the number of blue pens given probability of selection.	46	2.9	51	3.5	41	4.2
L10	Yes	Use data in a chart to identify time/day with highest temperature.	93	1.3	91	1.9	94	1.8
M03	Yes	Compare chance of picking a red marble from 3 sizes of marble bags.	81	2.1	84	2.8	78	3.0
N18	Yes	Find probability of drawing an even number from 1 to 9.	40	2.5	40	3.7	39	3.7
O01	Yes	Interpret distance/speed line graph to determine speed at given distance.	57	2.8	57	4.0	57	3.4
O05	Yes	Calculate number of cube faces from probability of toss.	33	2.7	33	4.0	34	3.5
P17	Yes	Identify thermometer which shows temperature given in data table.	92	1.3	91	2.1	93	1.6
Q04	Yes	Interpret data in bar graph.	87	1.4	86	2.6	88	2.4
R08	Yes	Interpret distance/speed line graph to determine distance at given speed.	37	2.6	43	3.8	30	3.2
V02	Yes	Solve word problem: determine cheaper rental rate by unit comparison.	12	1.5	13	1.9	11	1.9

COUNTRY ID=Slovenia SCALE=Fractions and number sense

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A01	No	Determine shaded squares in rectangle = 4/5.	58	1.4	61	1.7	56	1.8
B09	No	Identify shaded figure which shows 2/5 = 4/10.	60	1.7	58	2.1	61	2.2
B10	No	Identify smallest of decimal fractions.	40	1.8	46	2.2	35	2.0
C04	No	Select correct pair of numbers: # 1 < 2.25 < # 2.	48	2.0	48	2.6	48	2.4
C06	No	Determine the worst estimate of: 848 + 677.	71	1.6	72	2.1	70	2.2
D09	No	Identify smallest fraction.	68	1.8	70	2.4	66	2.0
D12	No	Estimate rational number from point on number line.	64	1.7	66	2.1	63	2.2
E03	No	Find fraction of hour between two time points.	56	1.6	59	2.4	54	2.2
E04	No	Solve multi-step word problem: 4-digit whole numbers.	77	1.4	73	2.2	80	1.5
F09	No	Identify decimal fraction between 0.07 and 0.08.	56	1.7	61	2.2	52	2.4
F12	No	Identify fraction of circle which is shaded.	51	1.8	48	2.2	54	2.6
G05	No	Identify fraction represented in word problem.	53	1.9	51	2.3	55	2.5
H08	No	Identify figure showing 2/3 shaded.	70	1.8	73	2.4	68	2.3
H09	No	Identify sum which is closest to 691 + 208.	87	1.2	89	1.3	85	1.7
I02	Yes	Solve multi-step word problem: common fractions.	49	2.5	53	3.9	46	3.7
I05	Yes	Solve subtraction word problem: rational numbers.	72	2.2	70	3.9	74	3.0
I06	Yes	Write a fraction larger than a given number.	77	2.7	75	3.8	78	3.2
I07	Yes	Recognize when estimation is appropriate.	42	2.9	34	3.1	49	4.2
J12	Yes	Divide fractions.	62	2.7	62	3.8	63	3.4
J14	Yes	Divide rational numbers, fractional divisor.	58	2.7	61	4.2	55	3.3
J17	Yes	Use map and scale to find distance between two cities.	71	2.4	77	3.5	66	3.7
K01	Yes	Identify circle with same fraction shaded as rectangular figure.	69	2.7	73	3.2	66	3.8
K02	Yes	Find total volume of mixture using rational number addition.	67	2.8	65	3.7	69	3.7
K06	Yes	Approximate amount increased by 15%.	35	2.5	35	4.0	34	3.2
K09	Yes	Compute sum of three fractions.	67	2.6	59	3.7	74	3.3
L08	Yes	Estimate actual height from diagram of relative heights.	67	2.9	72	3.8	63	4.2
L09	Yes	Identify 504.7 from its expression in words.	91	1.8	88	3.0	94	1.8
L17	Yes	Subtract three fractions.	57	3.2	51	4.1	63	4.3
M04	Yes	Identify the largest fraction.	33	3.0	36	4.0	30	3.5
M08	Yes	Multiply two decimal fractions.	66	2.6	58	3.8	74	3.5
N11	Yes	Identify number rounded to 18200.	85	1.8	86	2.7	84	2.7
N14	Yes	Identify list of equivalent fractions.	61	2.8	63	3.8	59	3.5
N16	Yes	Solve algebra word problem with fractions.	38	2.9	39	4.0	37	4.2
N17	Yes	Solve multi-step word problem: decimal fractions.	32	2.4	31	3.2	33	3.6
N19	Yes	Shade a given fraction of the squares in a grid.	49	3.5	52	4.4	47	4.3
O02	Yes	Calculate percent increase.	21	2.4	22	3.6	21	3.2
O04	Yes	Identify number rounded to the nearest 100th.	43	2.9	35	3.8	49	3.3
O09	Yes	Solve division word problem: common fractions.	43	3.2	47	4.6	40	3.8
P12	Yes	Solve word problem: identify best estimate of 84 x 57.	74	2.8	78	3.3	70	4.0
P13	Yes	Use heart beats/min to find beats per hour.	74	2.7	74	3.3	73	3.7
P14	Yes	Solve subtraction word problem: common fractions.	77	2.6	75	3.5	79	3.0
P16	Yes	Reduce decimal to fraction in lowest terms.	39	3.2	30	3.5	48	4.0
Q06	Yes	Approximate water use/year from use/week.	34	2.3	36	3.7	31	3.6
Q08	Yes	Identify fractions and decimals ranked smallest to largest.	32	2.3	39	3.8	24	3.5
Q09	Yes	Perform multiple operations of common fractions.	63	2.9	58	3.7	68	4.2
R06	Yes	Subtract two decimal numbers.	87	2.0	81	3.0	94	2.0
R07	Yes	Solve division word problem involving decimals.	41	2.4	42	3.3	39	3.9
R12	Yes	Subtract 4-digit whole numbers.	95	1.2	95	1.7	96	1.7
R13	Yes	Determine how much money left after spending 7/9.	18	2.1	20	2.9	15	2.8
U01A	Yes	Estimate the time required to record 5 songs.	19	1.7	22	2.3	15	1.9
U01B	Yes	Explain method of estimation.	25	1.9	24	2.5	27	2.1
V01	Yes	Determine actual weight from rounded value.	27	1.8	29	2.7	25	2.6

REL: Release Status (Yes= Item in Released Item Set)

COUNTRY ID=Slovenia SCALE=Geometry

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A05	No	Identify congruent triangles in a rectangle.	64	1.2	62	1.6	67	1.3
B11	No	Identify cube made by folding 2-dimensional net.	58	1.8	59	2.0	56	2.3
C03	No	Identify properties of congruent trapezoids.	68	1.5	64	2.5	72	1.7
D07	No	Identify relationship of angles in symmetric polygon.	67	1.9	68	2.4	67	2.3
E02	No	Determine angle in congruent triangles.	33	1.7	38	2.7	28	2.0
G03	No	Find sum of vertical angles from diagram of intersecting lines.	49	2.1	49	2.9	49	2.4
I08	Yes	Identify point on a line defined by two other points.	37	2.8	35	4.4	38	3.6
J11	Yes	Identify properties of a parallelogram.	34	2.9	34	3.8	35	3.8
J15	Yes	Identify similar triangles of different size.	58	3.2	53	5.0	62	3.7
J16	Yes	Identify coordinates for point on a grid.	58	3.1	58	4.6	59	4.1
K03	Yes	Identify figure from rotation of 3-dimensional object.	72	2.3	75	3.2	69	3.4
K08	Yes	Determine unknown angle in rotated congruent triangles.	26	2.7	27	3.6	26	3.8
L15	Yes	Find fourth quadrilateral angle, given the other three.	39	2.9	41	4.3	37	3.7
M02	Yes	Identify all lines of symmetry for a rectangle.	51	2.8	50	3.6	53	3.8
M05	Yes	Find diagram resulting from rotation of a 2-dimensional figure.	52	3.0	52	4.1	51	4.1
M07	Yes	Find angle based on supplementary pairs.	80	2.4	82	3.2	78	3.8
N12	Yes	Identify point on number line from distance of other points.	55	3.3	58	4.3	53	4.1
O03	Yes	Identify supplementary angles formed by parallel and intersecting lines.	40	2.6	39	3.7	41	4.2
O08	Yes	Find center point of rotation for symmetry-related figures.	74	2.4	71	3.1	77	3.3
P08	Yes	Know relationship between side and perimeter for square.	53	2.4	52	3.4	54	3.8
P09	Yes	Find length of side for similar triangles.	38	3.0	39	3.9	37	4.2
Q10	Yes	Perform calculation involving addition/subtraction of angles.	49	3.1	48	4.1	51	4.1
R10	Yes	Determine into how many triangles a trapezoid can be divided.	50	3.2	47	4.3	52	3.7

COUNTRY ID=Slovenia SCALE=Measurement

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A03	No	Determine actual length of box which is rounded to 9 cm.	52	1.4	54	1.8	51	1.8
C01	No	Compare volumes of different stacks of blocks.	55	1.8	58	2.3	52	2.4
D11	No	Identify best unit to measure the mass of an egg.	92	0.8	92	1.1	92	1.2
E06	No	Solve word problem to find length of rectangle from width and perimeter.	34	1.9	34	2.0	34	2.6
F10	No	Determine measurement accuracy of ruler.	74	1.3	78	1.9	70	1.9
G02	No	Read meter scale to determine length of a pipe.	79	1.4	79	2.2	80	1.7
I03	Yes	Find number of 750 mL bottles filled by a large volume.	34	2.5	39	3.6	30	3.1
J10	Yes	Determine area of sheet not covered by rectangular picture.	39	2.8	42	4.3	37	3.7
K05	Yes	Calculate area of a rectangle given its length and perimeter.	29	2.6	28	3.7	30	3.1
L12	Yes	Find longest pace from chart showing number of paces to cross room.	87	2.0	88	2.7	85	2.5
M01	Yes	Read mass shown on scale.	89	1.6	93	2.1	85	3.0
N15	Yes	Identify drawing with angle closest to 30 degrees.	80	2.4	80	3.4	79	2.9
O06	Yes	Calculate time to remove cake after baking 3/4 hour.	71	2.9	72	3.6	71	3.6
P11	Yes	Use ruler to determine approximate length of pencil.	60	2.6	62	3.0	58	4.0
Q03	Yes	Use day/hours/minutes/seconds conversions to calculate longest time.	36	2.7	43	3.8	28	3.9
S02A	Yes	Calculate area square given area of rectangle containing 5 squares.	65	2.8	68	3.5	63	4.0
S02B	Yes	Calculate length of side of square given area.	25	2.6	28	3.8	23	3.1
S02C	Yes	Find perimeter of rectangle containing 5 squares of known size.	17	2.1	18	3.4	17	2.6
U02A	Yes	Draw new rectangle based length/width ratios of another rectangle.	26	2.0	25	2.7	28	2.6
U02B	Yes	Calculate ratio of rectangle areas given relationship between sides.	5	1.3	5	1.5	5	1.4
V04	Yes	Calculate area of parallelogram inscribed in a rectangle.	36	2.3	36	3.1	36	2.8

COUNTRY ID=Slovenia SCALE=Proportionality

			Seventh Grade					
ITEM	REL	LABEL	Overall		Boys		Girls	
			%	(se)	%	(se)	%	(se)
A04	No	Solve word problem using proportions: $4/3 = 12/?$	48	1.4	55	1.8	41	1.8
B08	No	Solve word problem using proportions: 300 calories/100g = ?/30g.	72	1.5	72	2.4	71	1.9
D08	No	Solve ratio problem for x: $7/13 = x/52$.	65	1.7	66	2.1	64	2.4
F07	No	Solve word problem to find average speed from distance and time.	28	1.8	29	2.5	28	2.1
G04	No	Solve simple proportionality equation.	65	1.7	68	2.5	62	2.1
L14	Yes	Identify missing numbers in table of proportional x and y values.	17	2.5	21	3.7	14	2.9
M06	Yes	Compute number of girls, given total students and girl:boy ratio.	19	2.1	21	3.2	16	2.7
Q05	Yes	Solve word problem involving ratios.	62	2.7	69	3.5	55	3.5
R14	Yes	Solve multi-step word problem involving ratios.	39	2.6	37	3.5	41	4.1
T02A	Yes	Solve algebra word problem involving ratios.	23	2.0	21	2.3	24	2.8
T02B	Yes	Solve multi-step word problem computing fractions.	6	1.1	6	1.5	7	1.4
V03	Yes	Determine ratio of red paint in a mixture.	29	2.3	30	3.0	29	2.6