COUNTRY ID=Australia SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	erall	Bo	ys	Gi	rls
ITEM	REL	LABEL	%	(se)	%	(se)	00	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	73	1.2	70	1.7	76	1.3
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	93	0.7	93	1.0	94	0.9
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	87	0.9	85	1.2	88	1.1
F05	No	Shown temperature chart, when was the highest temperature recorded?	81	1.2	81	1.7	82	1.5
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	81	1.6	79	3.0	83	2.5
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	55	2.6	55	3.7	54	3.2
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	51	2.7	50	3.0	51	3.7
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	59	2.4	60	2.9	59	3.3
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	80	1.9	81	2.4	78	2.8
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	56	2.6	51	3.5	61	3.2
S01	Yes	Given table of frequencies, complete bar graph for same information.	50	1.8	48	2.3	53	2.5
T01A	Yes	Read simple information from bar graph.	87	0.9	87	1.4	88	1.5
TO1B	Yes	Read information from bar graph and add to find a total.	34	1.8	35	2.6	34	2.4

COUNTRY ID=Australia SCALE=Fractions and Proportionality

Fourth	Grade
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			Ove	rall	rall Boys		Gi	irls	
ITEM	REL	LABEL	%	(se)	98	(se)	8	(se)	
A01	No	In which figure are one-half of the dots black?	83	0.7	84	0.8	83	1.0	
A02	No	Determine total number from ratio and one number.	64	0.9	64	1.3	64	1.3	
B09	No	What is the sum of 2.5 and 3.8?	63	1.4	63	1.7	63	2.0	
C03	No	Which figure shows 2/3 of the square shaded?	59	1.9	59	2.6	59	2.2	
D08	No	Subtract: 4.03 - 1.15.	48	1.9	45	2.3	52	2.3	
D09	No	Which of the following diagram has three out of every four squares shaded?	53	1.4	53	2.0	53	2.0	
E04	No	Which of the following numbers means 7/10?	47	1.9	49	2.4	45	2.3	
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	71	1.3	69	1.6	72	2.0	
G01	No	Given map and legend, how far apart are two cities?	43	1.3	46	1.8	40	1.9	
I02	Yes	Which of the following word expressions is the same as .4?	49	2.4	51	3.3	46	3.1	
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	59	2.7	61	3.5	57	3.6	
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	44	2.1	45	3.5	43	3.0	
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	72	2.2	70	2.9	74	3.0	
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	38	2.5	38	3.3	38	3.6	
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	40	2.6	41	3.1	39	3.7	
S03	Yes	Solve word problem: 96.4-33.2	23	1.4	23	1.9	23	2.1	
S04	Yes	Solve word problem: 10/30 = ?/90.	56	1.7	55	2.2	57	2.5	
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	34	1.6	31	2.2	38	2.2	
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	21	1.6	20	2.1	23	1.9	
U02	Yes	Write a fraction that is larger than 2/7.	59	1.9	56	2.5	62	2.5	
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	67	1.7	71	2.4	64	2.1	
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	49	2.0	51	2.7	47	2.3	
U03C	Yes		79	1.3	79	1.8	79	1.8	
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	24	1.4	21	1.7	27	2.5	

COUNTRY ID=Australia SCALE=Geometry

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Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	olo	(se)	olo	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	78	1.3	76	1.6	79	1.4
D07	No	Which two figures are congruent?	89	1.0	87	1.4	90	1.1
F09	No	Which of the following must be true of a triangle?	76	1.3	76	1.9	76	1.8
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	46	1.5	45	2.1	47	2.1
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	59	2.1	63	3.0	55	2.8
I06	Yes	Which of the following figures is made with straight sides only?	86	1.5	87	1.9	85	2.5
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	94	0.9	94	1.4	94	1.4
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	76	2.3	78	3.1	75	3.1
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	76	1.8	74	2.9	78	2.3
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	84	1.2	81	2.1	87	2.0
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	94	1.0	93	1.6	95	1.3
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	54	2.7	50	2.7	58	4.0
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	56	2.9	54	3.6	58	3.4
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	72	1.5	68	1.8	76	2.1

COUNTRY ID=Australia SCALE=Measurement, Estimation, & Number Sense

Fourth G	frade
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			0ve	erall Boys		Gi	rls	
ITEM	REL	LABEL	8	(se)	ø	(se)	%	(se)
A05	No	Which of these figures has the largest area?	87	0.7	88	0.8	86	0.9
в07	No	Word problem: best estimate of 84 x 57.	48	1.3	49	2.0	47	1.9
C02	No	Find volume of a stack of 5 cubes.	69	1.5	71	1.9	67	2.1
D06	No	How many degrees did temperature rise from minus 3 to 5?	54	1.0	55	1.9	52	1.6
E01	No	Shown calendar, what date is three weeks after December 2?	76	1.2	74	1.9	78	1.6
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	80	1.6	81	2.0	79	1.7
F08	No	Which units would be best to measure the weight (mass) of an egg?	68	1.3	70	1.6	66	1.9
G02	No	Which of the following could be the weight (mass) of an adult?	79	1.1	81	1.6	76	2.1
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	57	1.8	56	2.3	58	2.1
J06	Yes	Which of the following weight (mass) measures is the largest?	73	2.3	78	2.6	68	3.2
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	58	2.1	60	3.0	56	3.1
K05	Yes	About how many centimeters is this picture of a pencil?	77	1.9	77	3.5	76	3.1
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	23	2.2	22	2.7	25	3.3
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	53	2.3	54	2.9	51	3.1
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	21	2.0	23	2.6	18	3.5
M07	Yes	Which of the following would most likely be measured in milliliters?	45	2.3	40	3.2	50	3.4
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	58	1.7	57	2.6	59	2.4
т03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	62	2.2	65	2.9	58	2.8
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	49	1.9	46	2.6	53	2.7
V05	Yes	How many millimeters are in a meter?	57	2.1	61	2.4	53	2.9

COUNTRY ID=Australia SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	rall	Boys		Gir	rls
ITEM	REL	LABEL	8	(se)	8	(se)	90	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	55	1.6	57	2.2	53	2.1
H08	No	Given number pattern, what are the next three numbers?	84	1.4	83	1.8	84	1.7
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	59	2.6	59	3.6	60	3.4
J05	Yes	Determine common operation between four pairs of numbers.	37	1.8	38	2.5	35	2.8
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	54	2.7	54	3.1	54	3.5
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	65	2.5	66	3.3	64	3.8
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	78	1.8	76	2.4	81	2.8
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	70	2.0	72	2.4	68	3.2
M09	Yes	$4 \text{ x} \leq 17$: Which number could go in the blank to make the sentence true?	65	2.1	65	3.3	65	3.6
U04	Yes	Explain operation used to find next number in a pattern.	72	1.5	77	2.2	67	2.2

COUNTRY ID=Australia SCALE=Whole Numbers

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	98	(se)	9	(se)
A03 A04	No No	Find number of pencils given pencils/box and number of boxes. Find number of small squares given groupings of hundreds, tens, and ones.	56 88	1.0 0.6	53 89	1.3 0.9	58 86	1.3 0.9
B08	No	Which addition expression has the same value as 342?	84	0.8	86	1.3	83	1.0
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	80	1.2	81	1.6	80	1.5
E02	No	Which digit is in the hundreds place in 2345?	83	1.5	83	1.7	84	1.8
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	66	1.6	69	1.9	63	2.6
G03	No	Which of the following is a name for 9740?	94	0.8	93	1.2	94	0.8
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	54	1.9	56	2.3	53	2.7
H09	No	Which number is equal to eight tens plus nine tens?	68	1.3	70	1.9	66	1.5
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	51	2.7	48	3.4	54	3.7
I04	Yes	What is 3 times 23?	86	2.0	87	2.6	84	2.8
I09	Yes	Subtract: 6000-2369.	47	2.3	45	2.8	49	3.3
J04	Yes	25 x 18 is more than 24 x 18. How much more?	41	2.6	47	3.0	35	3.2
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	85	1.8	81	2.7	88	1.7
K02	Yes	Add: 6971 + 5291	76	2.6	69	3.4	83	3.0
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	45	2.6	48	3.8	42	3.7
M03	Yes	Recognize symmetric property of multiplication: 7 x _ is the same as what?	69	2.0	68	3.1	69	3.0
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	78	1.8	83	2.2	74	2.6
M08	Yes	Which of the following four-digit numbers is the largest?	91	1.5	90	1.6	92	1.9
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	61	2.0	64	2.6	58	3.1
T02	Yes	Arrange four digits to make the smallest possible whole number.	66	1.7	65	2.5	67 73	2.2
U05 V02	Yes	Write addition fact as a multiplication fact.	71 51	1.7 1.7	69 57	2.3 2.6	45	2.1 2.4
V02 V03	Yes	Write the number that is 1000 more than 56,821. What is 5 less than 203?				2.6 2.6	45 67	2.4
V03 V04A	Yes		71 22	1.7	75 18	2.6	25	2.3
V04A V04B	Yes Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know? Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	22 54	$1.4 \\ 1.7$	18 52	2.4	⊿5 57	2.1
VU4B	res	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	54	1./	52	2.4	57	2.0

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

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Fourth Grade

COUNTRY ID=Austria SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	0/0	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	76	1.6	76	1.9	76	2.0
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	88	1.3	88	1.7	88	1.7
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	80	1.8	78	2.2	82	2.5
F05	No	Shown temperature chart, when was the highest temperature recorded?	82	1.5	84	1.8	80	2.1
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	88	1.7	89	1.9	89	2.5
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	66	3.0	71	4.2	63	4.1
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	45	3.5	46	4.8	42	4.7
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	54	3.6	52	5.7	55	4.6
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	81	2.7	84	3.6	77	4.2
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	75	3.0	75	4.3	77	4.1
S01	Yes	Given table of frequencies, complete bar graph for same information.	39	3.2	39	3.5	38	4.1
T01A		Read simple information from bar graph.	78	1.8	79	2.7	79	2.8
T01B	Yes	Read information from bar graph and add to find a total.	38	3.0	35	3.9	42	4.1

COUNTRY ID=Austria SCALE=Fractions and Proportionality

Fourth	Grade

			0ve	rall	all Boys		Gi	irls	
ITEM	REL	LABEL	90	(se)	%	(se)	8	(se)	
A01	No	In which figure are one-half of the dots black?	96	0.5	96	0.6	96	0.8	
A02	No	Determine total number from ratio and one number.	62	1.4	64	1.8	61	1.8	
B09	No	What is the sum of 2.5 and 3.8?	67	1.9	69	2.1	65	3.2	
C03	No	Which figure shows 2/3 of the square shaded?	50	2.5	49	3.3	50	3.4	
D08	No	Subtract: 4.03 - 1.15.	83	1.4	80	2.1	85	1.8	
D09	No	Which of the following diagram has three out of every four squares shaded?	52	2.2	56	2.8	48	3.1	
E04	No	Which of the following numbers means 7/10?	14	1.8	16	2.2	12	2.9	
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	80	1.6	80	2.6	81	2.2	
G01	No	Given map and legend, how far apart are two cities?	55	2.2	60	2.8	49	2.7	
I02	Yes	Which of the following word expressions is the same as .4?	24	3.8	29	5.4	15	3.8	
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	51	3.0	59	4.5	41	4.9	
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	71	3.7	72	4.3	71	5.5	
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	45	3.5	45	5.0	45	5.7	
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	59	3.2	62	4.7	57	4.9	
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	34	3.2	37	4.6	30	4.6	
S03	Yes	Solve word problem: 96.4-33.2	31	2.2	31	3.0	32	3.5	
S04	Yes	Solve word problem: 10/30 = ?/90.	53	2.7	53	3.6	54	3.3	
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	13	1.5	11	1.9	15	2.7	
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	5	1.0	4	1.1	7	1.7	
U02	Yes	Write a fraction that is larger than 2/7.	55	2.3	52	3.5	58	3.0	
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	67	2.3	71	2.8	63	3.1	
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	61	2.7	65	3.6	57	3.4	
U03C	Yes	Solve two proportions and compare results.	81	1.8	82	2.6	80	2.9	
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	27	2.6	26	3.0	26	3.7	

COUNTRY ID=Austria SCALE=Geometry

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Fourth Grade

			0ve	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	olo	(se)	olo	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	22	1.3	21	1.9	22	2.3
D07	No	Which two figures are congruent?	91	0.8	93	1.0	90	1.5
F09	No	Which of the following must be true of a triangle?	71	2.1	73	2.4	69	3.3
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	58	2.4	59	3.0	57	2.9
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	70	3.5	77	3.9	63	5.1
I06	Yes	Which of the following figures is made with straight sides only?	74	2.7	78	3.8	69	4.1
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	89	2.1	88	2.9	91	2.6
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	74	2.6	70	4.1	79	3.6
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	68	3.2	70	4.1	68	4.5
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	83	2.6	84	3.2	83	3.8
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	90	2.2	88	2.9	91	3.3
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	50	3.4	50	4.8	48	5.1
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	37	3.4	35	3.4	39	4.8
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	66	2.2	67	3.0	66	3.1

COUNTRY ID=Austria SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			0ve	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	8	(se)
A05	No	Which of these figures has the largest area?	94	0.5	95	0.8	94	0.7
B07	No	Word problem: best estimate of 84 x 57.	56	2.0	57	2.5	55	
C02	No	Find volume of a stack of 5 cubes.	81	1.8	84	2.1	77	2.3
D06	No	How many degrees did temperature rise from minus 3 to 5?	72	1.8	77	2.1	65	3.0
E01	No	Shown calendar, what date is three weeks after December 2?	80	1.1	83	1.8	77	2.2
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	70	1.8	74	2.8	65	2.6
F08	No	Which units would be best to measure the weight (mass) of an egg?	67	1.9	67	3.1	68	2.2
G02	No	Which of the following could be the weight (mass) of an adult?	94	0.9	95	1.2	94	1.2
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	58	2.7	59	3.4	56	3.3
J06 J08	Yes Yes	Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59.	89 61	2.0	91 62	2.2	85 63	3.5
K05 K07	Yes	About how many centimeters is this picture of a pencil?	89	2.0	87 22	2.8	91 25	2.5
L06	Yes Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	23 65	2.9	61	4.7	67	4.2
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	55	3.1	58	5.2	50	5.2
M07	Yes	Which of the following would most likely be measured in milliliters?	51	3.0	52	4.1	50	4.8
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	65	2.0	68	3.4	62	3.2
T03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	64	2.2	70	2.8	60	3.1
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	73	2.4	73	3.3	73	3.0
V05	Yes	How many millimeters are in a meter?	67	2.5	66	3.6	68	3.3

COUNTRY ID=Austria SCALE=Patterns, Relations and Functions

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	olo	(se)	olo	(se)	olo	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	65	2.1	65	3.1	64	2.6
H08	No	Given number pattern, what are the next three numbers?	59	1.9	55	3.1	64	2.8
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	83	2.4	83	3.7	83	3.8
J05	Yes	Determine common operation between four pairs of numbers.	41	3.8	46	4.5	38	5.9
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	47	3.3	45	4.6	49	4.7
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	68	3.4	77	3.5	59	4.8
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	85	1.8	84	3.1	85	3.4
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	57	3.1	54	4.4	59	5.3
M09	Yes	$4 \text{ x} \leq 17$: Which number could go in the blank to make the sentence true?	74	2.8	71	4.4	77	4.6
U04	Yes	Explain operation used to find next number in a pattern.	64	2.5	67	3.2	61	3.1

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

May 11, 1998 11

COUNTRY ID=Austria SCALE=Whole Numbers

		Ove	erall	Bo	ys	Gi	rls
REL	LABEL	0/0	(se)	90	(se)	8	(se)
No	Find number of pencils given pencils/box and number of boxes.	86	0.9	86	1.2	85	1.3
No	Find number of small squares given groupings of hundreds, tens, and ones.	83	1.6	85	1.7	81	1.9
No	Which addition expression has the same value as 342?	89	1.0	89	1.7	89	1.4
No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	78	1.7	79	2.7	77	2.7
No	Which digit is in the hundreds place in 2345?	85	1.3	86	1.7	85	1.9
No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	82	1.5	83	1.8	80	2.2
No	Which of the following is a name for 9740?	95	0.9	94	1.4	97	0.9
No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	79	1.5	79	2.1	80	1.9
No	Which number is equal to eight tens plus nine tens?	76					2.2
Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	65		65	3.6	63	4.6
Yes	What is 3 times 23?						2.5
Yes	Subtract: 6000-2369.	92		91		93	2.5
Yes	25 x 18 is more than 24 x 18. How much more?	58	3.6	58	4.7	59	5.2
Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	81	2.8	81	3.1	80	4.2
Yes	Add: 6971 + 5291	91	1.8	93	2.6	88	2.9
Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	68	2.8	72	4.5	63	3.9
Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	65	2.5	64	4.2	66	5.2
Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	60	3.2	59	4.9	62	4.3
Yes	Which of the following four-digit numbers is the largest?	95	1.3	94	2.2	96	1.6
Yes	Complete number sentence: 2000+?+30+9=2739.	61	2.2	58	2.7	64	3.2
Yes	Arrange four digits to make the smallest possible whole number.	41	2.5	43	3.7	41	3.5
Yes	Write addition fact as a multiplication fact.	82	1.7	77	2.6	87	2.2
Yes	Write the number that is 1000 more than 56,821.	59	2.6	65	3.4	51	3.4
Yes	What is 5 less than 203?	84	2.1	84	2.8	83	2.7
Yes		23	1.9	22	2.4	25	2.7
	No No No No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	No Find number of small squares given groupings of hundreds, tens, and ones. No Which addition expression has the same value as 342? No Which digit is in the hundreds place in 2345? No What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands? No Which of the following is a name for 9740? No Determine the relative magnitude of three-digit numbers when digits are rearranged. No Which of the numbers below, when subtracted from 900, yields an answer greater than 300? Yes Which of the numbers below, when subtracted from 900, yields an answer greater than 300? Yes Subtract: 6000-2369. Yes Subtract: 6000-2369. Yes Given chart with consecutive numbers in rows, extend pattern to find the number in square. Yes In which of the following pairs of numbers is the 2nd number 100 more than the 1st? Yes Recognize symmetric property of multiplication: 7 x is the same as what? Yes Which of the following four-digit numbers is the largest? Yes Which of the following four-digit numbers is the largest? Yes Muich of the following four-digit numbers is the largest? Yes Muich of the following four-digit numbers is the largest? Yes Which of the following four-digit numbers is the largest? Yes Which of the following four-digit numbers is the largest? Yes Which of the following four-digit numbers is the largest? Yes Arrange four digits to make the smallest possible whole number. Yes Write addition fact as a multiplication fact. Yes What is 5 less than 203?	REL LABEL % No Find number of pencils given pencils/box and number of boxes. 86 No Find number of small squares given groupings of hundreds, tens, and ones. 83 No Which addition expression has the same value as 342? 89 No Which digit is in the hundreds place in 2345? 85 No Which digit is on the hundreds place in 2345? 82 No Which of the following is a name for 9740? 85 No Determine the relative magnitude of three-digit numbers when digits are rearranged. 76 No Which of the numbers below, when subtracted from 900, yields an answer greater than 300? 95 Yes Which of the numbers is plus nine tens? 94 Yes Subtract: 6000-2369. 92 Yes Subtract: 6000-2369. 92 Yes Sole on chart with consecutive numbers in rows, extend pattern to find the number in square. 81 Yes Recognize symmetric property of multiplication: 7 x _ is the same as what? 91 Yes Yes to hunder to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake? 60 Yes No hunder to add 1463 + 19, but entered 1263 + 319. How could he fix his mistake? <td>NoFind number of pencils given pencils/box and number of boxes.86NoFind number of small squares given groupings of hundreds, tens, and ones.83NoWhich addition expression has the same value as 342?89NoWhich addition expression shows how long it will take to wash 8 windows at 4 minutes/window?81NoWhich digit is in the hundreds place in 2345?85NoWhich of the following is a name for 9740?82NoWhich number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?82NoWhich number is equal to eight tens plus nine tens?76YesWhich of the numbers below, when subtracted from 900, yields an answer greater than 300?76YesWhat is is more than 24 x 18. 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No860.9861.2NoFind number of small squares given groupings of hundreds, tens, and ones.831.6851.7NoWhich addition expression shows how long it will take to wash 8 windows at 4 minutes/window?781.7792.7NoWhich expression shows how long it will take to wash 8 windows at 4 minutes/window?781.7792.7NoWhich of the following is a name for 9740?821.5831.8861.7NoWhich of the following is a name for 9740?950.9941.4NoWhich of the numbers below, when subtracted from 900, yields an answer greater than 300?761.9762.5YesWhat is 3 times 23?941.5961.7761.9761.5YesSubtract:600-2369.941.5961.7741.5961.7YesSubtract:6010-xing pairs of numbers is the 2nd number 100 more than the 1st?883.6684.7YesYesJohn wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?603.2564.2YesYesComplete number sentence:200+2+30+30+32739.612.2583.37455YesComplete number sentence:200+2+30+32739.612.2583.774552.5<td>RELLABEL$\begin{tabular}{lllllllllllllllllllllllllllllllllll$</td></td>	NoFind number of pencils given pencils/box and number of boxes.86NoFind number of small squares given groupings of hundreds, tens, and ones.83NoWhich addition expression has the same value as 342?89NoWhich addition expression shows how long it will take to wash 8 windows at 4 minutes/window?81NoWhich digit is in the hundreds place in 2345?85NoWhich of the following is a name for 9740?82NoWhich number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?82NoWhich number is equal to eight tens plus nine tens?76YesWhich of the numbers below, when subtracted from 900, yields an answer greater than 300?76YesWhat is is more than 24 x 18. 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How could he fix his mistake?603.2564.2YesYesComplete number sentence:200+2+30+30+32739.612.2583.37455YesComplete number sentence:200+2+30+32739.612.2583.774552.5 <td>RELLABEL$\begin{tabular}{lllllllllllllllllllllllllllllllllll$</td>	RELLABEL $\begin{tabular}{lllllllllllllllllllllllllllllllllll$

V04B Yes Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above. 53 3.0 51 4.0 53 3.3

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

Fourth Grade

COUNTRY ID=Canada SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	00	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	73	1.6	69	2.1	77	1.9
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	93	0.7	92	1.7	93	1.4
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	85	1.1	82	1.8	88	1.3
F05	No	Shown temperature chart, when was the highest temperature recorded?	79	1.4	78	1.9	80	2.1
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	75	3.8	74	4.5	81	2.7
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	47	3.1	50	3.9	44	4.2
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	49	4.9	52	3.7	50	5.4
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	63	3.0	62	4.7	60	5.6
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	83	1.9	85	2.3	82	2.6
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	54	4.0	53	3.5	55	5.5
S01	Yes	Given table of frequencies, complete bar graph for same information.	46	2.6	42	3.5	48	3.2
T01A	Yes	Read simple information from bar graph.	93	0.8	95	0.9	92	1.5
T01B	Yes	Read information from bar graph and add to find a total.	46	2.8	45	3.3	49	3.1

COUNTRY ID=Canada SCALE=Fractions and Proportionality

Fourth	Grade

			Ove	rall	1		Gi	rls
ITEM	REL	LABEL	8	(se)	98	(se)	90	(se)
A01	No	In which figure are one-half of the dots black?	82	1.0	82	0.9	82	1.2
A02	No	Determine total number from ratio and one number.	56	1.0	54	1.3	59	1.2
B09	No	What is the sum of 2.5 and 3.8?	55	2.3	54	2.9	55	2.8
C03	No	Which figure shows 2/3 of the square shaded?	63	2.4	61	2.6	64	3.2
D08	No	Subtract: 4.03 - 1.15.	61	1.8	60	2.4	62	1.9
D09	No	Which of the following diagram has three out of every four squares shaded?	52	1.9	52	2.5	52	2.6
E04	No	Which of the following numbers means 7/10?	43	2.1	41	2.4	45	2.3
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	56	1.6	56	2.2	55	2.6
G01	No	Given map and legend, how far apart are two cities?	41	1.4	46	2.2	36	2.6
I02	Yes	Which of the following word expressions is the same as .4?	31	3.1	35	3.7	26	3.3
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	41	2.3	43	4.4	39	3.7
I08	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	52	2.3	56	4.5	49	3.6
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	79	2.6	77	4.2	80	3.1
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	29	2.7	25	2.9	32	4.0
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	40	4.4	35	4.4	43	5.5
S03	Yes	Solve word problem: 96.4-33.2	25	2.2	23	2.3	26	2.7
S04	Yes	Solve word problem: 10/30 = ?/90.	44	2.1	43	3.1	47	3.1
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	22	1.7	17	2.0	25	2.9
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	12	1.5	11	1.9	13	2.0
U02	Yes	Write a fraction that is larger than 2/7.	62	3.1	61	2.7	65	3.0
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	61	3.3	66	3.1	55	4.2
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	42	2.5	46	2.7	37	3.7
U03C	Yes	Solve two proportions and compare results.	79	1.5	77	3.1	81	2.1
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	20	2.2	21	2.3	18	3.1

COUNTRY ID=Canada SCALE=Geometry

May 11, 1998 15

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	olo	(se)	00	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	68	2.0	68	2.1	69	3.8
D07	No	Which two figures are congruent?	91	0.9	91	1.2	92	1.1
F09	No	Which of the following must be true of a triangle?	68	1.5	70	2.4	65	2.0
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	45	1.5	44	2.3	46	2.6
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	59	2.6	61	3.7	57	3.8
I06	Yes	Which of the following figures is made with straight sides only?	81	2.5	81	2.8	80	2.9
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	93	1.3	94	1.6	92	2.1
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	72	2.5	70	4.4	73	3.1
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	78	2.3	78	3.0	79	2.9
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	78	3.7	77	3.8	78	4.7
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	93	2.0	95	1.8	93	2.1
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	59	5.3	64	3.1	58	5.8
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	51	4.0	49	4.3	53	5.5
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	68	1.8	67	2.5	69	2.6

COUNTRY ID=Canada SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			0ve	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	8	(se)	%	(se)
A05 B07 C02 D06 E01 E03 F08 G02 H06 J06 J06 J08	No No No No No No No Yes Yes	<pre>Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which of the following could be the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59. When the measure service of the rectangle?</pre>	80 53 66 46 73 78 51 55 54 68 65	1.4 1.7 1.6 1.7 1.5 1.5 1.5 1.4 1.6 2.2 2.7	83 53 67 49 73 82 51 52 54 72 62	1.3 2.7 2.0 2.6 1.7 1.8 2.3 2.0 2.3 3.1 4.1	64 42 73 75 50 57 53 64 66	1.4 2.6 1.6 2.4 2.5 2.6 2.2 2.4 2.5 3.6
K05 K07 L06 L08 M07 S05 T03 U01 V05	Yes Yes Yes Yes Yes Yes Yes Yes	About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters? Given picture of a paper clip, about how many lengths of the clip is the length of this line? Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	72 23 50 19 31 54 45 49 41	3.0 2.4 2.3 2.6 2.7 1.9 2.4 3.1 3.6	70 23 47 24 36 51 48 46 48	4.5 3.0 3.6 3.2 3.9 2.6 3.2 2.8 2.3	74 22 53 16 26 56 42 53 36	4.0 3.2 2.8 3.1 3.0 2.3 2.2 3.5 4.1

COUNTRY ID=Canada SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	%	(se)	8	(se)	90	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	51	1.7	52	2.2	49	1.9
H08	No	Given number pattern, what are the next three numbers?	83	1.1	83	1.6	83	2.2
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	63	2.7	62	3.8	64	3.3
J05	Yes	Determine common operation between four pairs of numbers.	38	2.6	37	4.2	38	3.8
к03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	50	3.0	50	3.5	50	3.9
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	60	2.1	60	3.8	61	3.8
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	78	3.3	82	3.3	72	6.5
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	68	2.9	66	3.6	70	3.8
M09	Yes	4 x = <17: Which number could go in the blank to make the sentence true?	69	2.5	75	2.7	62	3.9
U04	Yes	Explain operation used to find next number in a pattern.	57	2.5	58	3.8	54	4.0

COUNTRY ID=Canada SCALE=Whole Numbers

			Ove	erall	Bo	ys	Gi	rls
ITEM	REL	LABEL	90	(se)	8	(se)	90	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	64	1.2	62	1.3	67	1.9
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	89	0.7	92	0.7	87	1.2
B08	No	Which addition expression has the same value as 342?	83	2.3	85	1.6	80	4.0
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	80	1.4	80	2.1	79	1.7
E02	No	Which digit is in the hundreds place in 2345?	80	1.2	80	2.0	81	1.5
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	67	1.4	69	2.2	64	2.1
G03	No	Which of the following is a name for 9740?	89	0.9	90	1.1	88	2.0
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	71	1.3	73	2.3	70	2.2
Н09	No	Which number is equal to eight tens plus nine tens?	64	1.5	65	2.0	63	2.5
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	53	2.9	58	4.4	48	4.3
I04	Yes	What is 3 times 23?	85	2.2	88	2.6	81	3.1
I09	Yes	Subtract: 6000-2369.	61	3.1	62	3.5	60	4.9
J04	Yes	25 x 18 is more than 24 x 18. How much more?	41	3.0	46	4.1	38	3.0
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	84	1.7	83	2.7	82	2.5
K02	Yes	Add: 6971 + 5291	87	1.4	85	1.8	89	1.9
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	42	2.9	48	3.5	36	4.6
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	60	2.8	65	3.4	56	5.7
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	71	2.3	80	2.7	62	3.6
M08	Yes	Which of the following four-digit numbers is the largest?	88	2.0	90	2.5	85	3.7
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	65	2.2	65	3.4	66	2.8
T02	Yes	Arrange four digits to make the smallest possible whole number.	49	2.8	47	3.2	51	3.0
U05	Yes	Write addition fact as a multiplication fact.	76	1.7	73	2.5	77	2.1
V02	Yes	Write the number that is 1000 more than 56,821.	47	2.0	50	2.8	42	2.8
V03	Yes	What is 5 less than 203?	60	1.8	63	2.3	60	4.1
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	38	2.6	36	2.8	41	2.9
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	55	2.3	55	3.0	54	3.3

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

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Fourth Grade

COUNTRY ID=Cyprus SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	00	(se)	olo	(se)	8	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	48	1.7	45	2.1	52	2.1
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	86	1.3	87	1.6	85	1.8
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	82	1.3	78	2.0	87	1.4
F05	No	Shown temperature chart, when was the highest temperature recorded?	68	1.5	64	2.1	71	2.1
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	63	2.7	65	3.6	61	3.8
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	25	2.7	30	3.3	20	3.7
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	50	2.9	48	3.9	52	4.5
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	32	2.8	32	3.7	31	3.6
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	68	2.5	72	3.2	63	3.7
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	50	2.3	55	3.6	43	3.8
S01	Yes	Given table of frequencies, complete bar graph for same information.	30	2.3	29	2.4	33	3.4
T01A	Yes	Read simple information from bar graph.	79	1.3	80	1.9	78	2.2
T01B	Yes	Read information from bar graph and add to find a total.	18	1.7	16	1.9	21	2.5

COUNTRY ID=Cyprus SCALE=Fractions and Proportionality

Fourth Grade

			Ove	erall	Во	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	%	(se)
A01 A02 B09 C03 D09 E04 F06 G01 I02 I05 I08 J07 K09 M05 S03 S04 T04B	No No No No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	<pre>In which figure are one-half of the dots black? Determine total number from ratio and one number. What is the sum of 2.5 and 3.8? Which figure shows 2/3 of the square shaded? Subtract: 4.03 - 1.15. Which of the following diagram has three out of every four squares shaded? Which of the following numbers means 7/10? Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains? Given map and legend, how far apart are two cities? Which of the following word expressions is the same as .4? If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make? Shown four diagrams with various fractions shaded, which two represent the same fraction? Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded? 54 marbles are equally divided into 6 bags. How many marbles in 2 bags? Given partly shaded figure, which of the following numbers represents the shaded part? Solve word problem: 10/30 = ?/90. Does 10 girls and 20 boys mean one girl for every two boys? Explain. Does 10 girls and 20 boys mean one girl for all students are girls? Explain.</pre>	55 57 50 63 78 58 56 51 51 51 51 51 51 51 51 51 51 51 51 23 41 16 37 21 21	1.5 1.3 1.9 1.6 2.2 1.6 2.2 1.6 2.5 3.3 3.0 2.7 2.6 2.5 1.4 2.0 1.6 1.2		1.7 1.8 2.2 2.1 2.3 2.8 2.5 3.4 4.4 3.8 3.5 3.2 2.0 2.6 2.0 2.6 2.4 1.8	50 58 49 68 79 59 60 52 25 63 45 57 78 23 38 16 33 19 10	1.6 1.3 2.6 2.3 1.9 2.3 2.6 2.1 2.3 4.6 3.8 4.6 3.0 3.7 3.5 2.1 2.7 1.7
U02 U03A U03B U03C V01	Yes Yes Yes Yes Yes	<pre>Write a fraction that is larger than 2/7. Solve word problem using proportions: 3/10 = 9/? Solve word problem using proportions: 1/3 = 9/? Solve two proportions and compare results. Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.</pre>	69 61 29 70 20	1.9 1.8 2.0 1.8 1.5	71 63 32 74 21	2.5 2.9 2.8 2.3 2.1	68 59 25 67 19	2.6 3.0 2.9 2.6 1.8

COUNTRY ID=Cyprus SCALE=Geometry

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Fourth Grade

			Ove	rall	Во	ys	Gi	rls
ITEM	REL	LABEL	%	(se)	olo	(se)	\$	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	30	1.8	27	1.9	33	2.5
D07	No	Which two figures are congruent?	80	1.3	79	1.9	81	1.7
F09	No	Which of the following must be true of a triangle?	60	1.8	65	2.2	56	2.7
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	34	1.8	31	2.7	38	2.4
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	41	3.1	47	3.8	35	3.9
I06	Yes	Which of the following figures is made with straight sides only?	46	3.1	48	3.7	44	4.6
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	88	2.1	87	2.6	92	2.3
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	65	2.8	62	4.2	70	3.5
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	60	2.8	59	3.6	60	4.6
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	66	2.5	66	3.7	67	3.5
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	83	1.9	82	3.3	84	2.7
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	25	2.4	26	3.4	25	3.4
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	22	2.5	21	2.8	23	3.3
т05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	35	2.2	32	2.8	37	2.7

COUNTRY ID=Cyprus SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			0ve	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	8	(se)	8	(se)
A05 B07 C02 D06 E03 F08 G02 H06 J06 J06 J08 K05 K07 L06 L08 M07 S05 T03	No No No No No No No Yes Yes Yes Yes Yes Yes Yes Yes	<pre>Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which units would be best to measure the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59. About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters? Given picture of a paper clip, about how many lengths of the clip is the length of this line? Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?</pre>	81 38 62 48 58 41 76 66 62 21 38 86 28 44 21 20 37 41	1.1 1.7 1.6 1.8 2.0 1.5 1.5 1.5 1.5 1.8 2.2 2.8 1.9 2.5 2.7 2.6 2.9 1.8 2.3	82 42 61 53 60 43 75 64 61 25 88 31 45 25 20 37 50	1.4 2.1 2.6 2.2 2.6 2.7 2.2 2.3 2.4 3.9 2.6 3.5 3.6 3.6 3.4 3.6 2.6 3.2	80 34 64 42 56 40 77 67 64 17 30 85 25 44 18 20 38 30	1.6 2.0 2.2 2.2 2.3 2.6 2.0 2.6 3.0 2.6 3.0 3.6 2.9 3.8 4.3 2.9 3.8 4.3 2.5
U01 V05	Yes Yes	Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	44 41	2.4 2.4	43 37	3.4 3.7	45 44	3.0

COUNTRY ID=Cyprus SCALE=Patterns, Relations and Functions

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	90	(se)	olo	(se)	%	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	58	1.8	58	2.3	59	2.3
H08	No	Given number pattern, what are the next three numbers?	63	1.7	65	2.2	62	2.1
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	57	2.7	57	3.4	58	4.2
J05	Yes	Determine common operation between four pairs of numbers.	29	2.3	33	3.4	24	3.4
к03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	48	3.6	47	4.7	48	4.4
К0б	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	56	3.1	58	3.8	53	4.7
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	52	2.6	49	3.4	56	3.7
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	56	2.9	62	4.3	52	4.1
M09	Yes	$4 \times < 17$: Which number could go in the blank to make the sentence true?	67	2.3	65	3.6	70	3.5
U04		Explain operation used to find next number in a pattern.	67	2.1	72	2.7	61	2.8

COUNTRY ID=Cyprus SCALE=Whole Numbers

			Ove	erall	Bo	ys	Gi	rls
ITEM	REL	LABEL	90	(se)	8	(se)	8	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	70	1.1	68	1.3	73	1.6
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	78	1.2	80	1.3	77	1.6
B08	No	Which addition expression has the same value as 342?	86	1.0	87	1.3	84	1.4
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	86	1.2	86	1.8	85	1.5
E02	No	Which digit is in the hundreds place in 2345?	67	1.8	68	2.4	66	2.3
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	63	1.9	67	2.6	60	2.1
G03	No	Which of the following is a name for 9740?	89	1.1	88	1.5	90	1.1
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	70	1.3	73	2.2	68	2.0
н09	No	Which number is equal to eight tens plus nine tens?	53	1.7	55	2.4	51	2.3
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	52	2.7	55	3.6	49	3.6
I04	Yes	What is 3 times 23?	82	2.3	85	2.8	80	3.0
I09	Yes	Subtract: 6000-2369.	79	2.4	83	3.2	75	3.6
J04	Yes	25 x 18 is more than 24 x 18. How much more?	38	3.1	42	4.2	33	4.0
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	72	2.6	72	3.7	71	3.9
K02	Yes	Add: 6971 + 5291	93	1.2	92	1.7	94	1.6
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	53	2.7	55	4.4	51	3.3
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	67	2.1	69	3.1	65	3.5
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	73	2.7	78	3.1	68	4.7
M08	Yes	Which of the following four-digit numbers is the largest?	82	1.8	81	2.5	83	2.3
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	61	1.9	63	2.5	59	3.2
T02	Yes	Arrange four digits to make the smallest possible whole number.	33	2.3	32	3.0	34	2.8
U05	Yes	Write addition fact as a multiplication fact.	83	1.5	82	2.2	84	1.9
V02	Yes	Write the number that is 1000 more than 56,821.	45	2.5	48	3.1	42	3.3
V03	Yes	What is 5 less than 203?	57	2.3	61	3.0	52	2.7
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	27	2.0	22	2.7	33	2.3
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	34	2.0	34	2.9	33	2.6

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

Fourth Grade

COUNTRY ID=Czech Republic SCALE=Data Rep., Analysis and Probability

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Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	8	(se)	90	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	67	1.6	65	1.9	70	2.1
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	88	1.3	89	1.6	88	1.6
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	85	1.4	85	1.9	85	1.7
F05	No	Shown temperature chart, when was the highest temperature recorded?	77	1.3	76	1.6	77	1.9
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	78	2.2	75	3.4	79	2.7
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	70	2.5	69	3.6	71	3.4
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	51	3.4	56	4.5	46	4.5
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	56	2.5	61	3.4	52	3.7
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	82	1.9	86	3.0	78	2.6
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	71	2.4	70	3.6	72	3.2
S01	Yes	Given table of frequencies, complete bar graph for same information.	33	2.1	31	3.0	34	2.4
T01A	Yes	Read simple information from bar graph.	85	1.4	86	1.9	84	1.9
T01B	Yes	Read information from bar graph and add to find a total.	51	2.0	49	2.9	53	2.5

COUNTRY ID=Czech Republic SCALE=Fractions and Proportionality

Fourth Grade	Four	th	Grade
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			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	98	(se)	8	(se)
A01	No	In which figure are one-half of the dots black?	93	0.5	94	0.6	93	0.7
A02	No	Determine total number from ratio and one number.	77	0.9	79	1.1	74	1.3
в09	No	What is the sum of 2.5 and 3.8?	59	1.5	58	2.1	59	1.8
C03	No	Which figure shows 2/3 of the square shaded?	47	1.7	49	2.4	46	2.0
D08	No	Subtract: 4.03 - 1.15.	69	1.5	64	2.0	73	2.0
D09	No	Which of the following diagram has three out of every four squares shaded?	48	2.1	46	2.6	51	2.7
E04	No	Which of the following numbers means 7/10?	13	1.5	13	1.6	14	2.0
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	76	1.6	76	2.1	77	1.8
G01	No	Given map and legend, how far apart are two cities?	64	1.5	67	2.1	61	2.2
102	Yes	Which of the following word expressions is the same as .4?	22	2.1	21	3.1	24	3.1
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	64	2.9	68	3.4	60	4.1
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	47	2.4	47	3.6	46	3.9
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	43	2.9	42	4.0	44	4.0
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	60	2.6	60	4.1	59	3.3
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	31	2.1	33	3.4	29	2.9
S03	Yes	Solve word problem: 96.4-33.2	38	1.9	40	2.8	36	2.4
S04	Yes	Solve word problem: 10/30 = ?/90.	57	2.2	58	3.1	55	2.6
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	25	1.5	22	2.0	27	1.8
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	18	1.7	16	2.1	19	2.1
U02	Yes	Write a fraction that is larger than 2/7.	60	1.9	57	2.8	62	2.4
UO3A	Yes	Solve word problem using proportions: 3/10 = 9/?	75	1.9	80	2.6	70	2.5
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	62	2.1	65	2.7	58	2.9
U03C	Yes	Solve two proportions and compare results.	84	1.5	86	2.0	82	2.1
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	31	2.3	33	3.1	29	2.5

COUNTRY ID=Czech Republic SCALE=Geometry

May 11, 1998 27

Fourth Grade

			Ove	rall	Во	ys	Gi	rls
ITEM	REL	LABEL	\$	(se)	%	(se)	olo	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	35	1.3	35	2.0	35	1.7
D07	No	Which two figures are congruent?	93	0.9	93	1.2	94	1.0
F09	No	Which of the following must be true of a triangle?	71	1.7	71	2.3	72	2.2
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	57	1.3	61	1.9	54	2.0
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	68	2.5	69	3.4	66	3.5
I06	Yes	Which of the following figures is made with straight sides only?	83	1.7	78	3.1	88	2.1
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	97	1.0	97	1.8	98	0.9
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	74	2.1	71	3.5	76	2.7
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	87	2.1	85	3.0	88	2.7
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	82	2.3	84	3.2	79	2.9
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	96	1.2	95	1.7	97	1.3
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	47	3.0	50	3.9	45	4.0
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	37	2.8	37	3.8	37	3.4
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	63	1.7	64	2.7	63	2.3

COUNTRY ID=Czech Republic SCALE=Measurement, Estimation, & Number Sense

Fourth Grade	Four	th	Grade
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			0ve	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	8	(se)
A05	No	Which of these figures has the largest area?	95	0.4	96	0.6	95	0.5
B07	No	Word problem: best estimate of 84 x 57.	59	1.7	59	2.1	59	2.0
C02	No	Find volume of a stack of 5 cubes.	86	1.0	89	1.3	83	1.3
D06	No	How many degrees did temperature rise from minus 3 to 5?	71	1.6	77	1.8	66	2.0
E01	No	Shown calendar, what date is three weeks after December 2?	75	1.4	74	1.9	76	1.9
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	80	1.4	82	1.7	78	1.9
F08	No	Which units would be best to measure the weight (mass) of an egg?	70	1.7	74	2.2	66	2.4
G02	No	Which of the following could be the weight (mass) of an adult?	93	0.7	93	1.2	94	1.1
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	63	1.6	65	2.1	62	2.1
J06	Yes	Which of the following weight (mass) measures is the largest?	81	2.3	83	3.2	81	3.1
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	61	2.5	62	3.8	60	3.3
K05	Yes	About how many centimeters is this picture of a pencil?	91	1.8	92	1.8	90	2.5
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	16	1.8	19	2.3	14	2.6
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	74	2.5	72	3.7	76	3.4
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	46	3.1	51	3.8	41	3.9
M07	Yes	Which of the following would most likely be measured in milliliters?	32	2.5	27	3.4	37	3.3
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	56	2.2	58	3.1	55	2.8
T03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	63	1.8	67	2.6	61	2.5
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	60	2.3	60	2.8	60	2.7
V05	Yes	How many millimeters are in a meter?	72	1.9	75	2.8	69	2.2
VU3	res	now many millimeters are in a meter:	12	1.9	15	4.8	09	4.2

COUNTRY ID=Czech Republic SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	8	(se)	olo	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	58	1.7	58	2.3	58	2.0
H08	No	Given number pattern, what are the next three numbers?	68	1.7	67	2.3	68	2.0
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	78	2.2	81	3.0	76	3.3
J05	Yes	Determine common operation between four pairs of numbers.	57	3.0	56	3.7	58	3.6
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	56	2.6	57	3.6	55	3.7
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	72	2.5	72	3.5	72	3.2
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	80	2.3	77	3.2	83	3.0
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	62	2.4	72	3.4	53	3.7
M09	Yes	4 x = <17: Which number could go in the blank to make the sentence true?	72	2.6	68	3.7	76	3.5
U04	Yes	Explain operation used to find next number in a pattern.	65	2.2	68	2.8	63	3.0

COUNTRY ID=Czech Republic SCALE=Whole Numbers

			Ove	rall	Во	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	90	(se)	8	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	82	0.9	79	1.2	84	1.0
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	87	0.8	88	1.1	86	1.0
B08	No	Which addition expression has the same value as 342?	94	0.6	95	0.9	94	1.0
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	92	0.9	92	1.2	93	1.0
E02	No	Which digit is in the hundreds place in 2345?	87	1.0	88	1.4	87	1.4
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	81	1.3	82	1.8	80	1.6
G03	No	Which of the following is a name for 9740?	96	0.6	96	0.9	96	0.8
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	84	1.1	84	1.3	84	1.5
Н09	No	Which number is equal to eight tens plus nine tens?	79	1.3	81	1.6	77	1.9
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	74	2.3	75	3.1	73	3.3
104	Yes	What is 3 times 23?	97	0.9	97	1.1	97	1.3
109	Yes	Subtract: 6000-2369.	83	1.8	79	3.0	87	2.4
J04	Yes	25 x 18 is more than 24 x 18. How much more?	50	2.6	47	3.9	53	3.4
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	75	1.9	79	2.8	72	2.7
K02	Yes	Add: 6971 + 5291	93	1.4	91	2.6	94	1.8
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	67	2.7	71	3.6	64	4.0
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	41	2.5	38	3.6	42	3.3
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	82	2.0	81	2.9	83	2.6
M08	Yes	Which of the following four-digit numbers is the largest?	93	1.3	92	2.0	94	1.7
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	77	1.7	80	2.1	75	2.3
т02	Yes	Arrange four digits to make the smallest possible whole number.	40	2.0	40	2.9	40	2.9
U05	Yes	Write addition fact as a multiplication fact.	83	1.6	80	2.3	85	1.9
V02	Yes	Write the number that is 1000 more than 56,821.	70	1.7	76	2.1	65	2.2
V03	Yes	What is 5 less than 203?	77	1.6	80	2.1	74	2.0
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	22	2.0	20	2.3	23	2.3
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	43	2.3	42	3.1	44	2.5

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

Fourth Grade

COUNTRY ID=Greece SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	%	(se)	00	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	48	1.9	45	2.5	50	2.3
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	74	2.0	74	2.5	74	2.5
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	71	2.0	70	3.0	73	2.2
F05	No	Shown temperature chart, when was the highest temperature recorded?	54	2.0	57	2.8	52	2.8
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	65	3.4	63	4.3	66	4.6
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	39	3.5	32	4.9	46	4.2
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	25	2.6	28	3.8	22	3.0
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	30	3.0	35	5.1	26	3.4
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	84	2.0	84	3.0	84	3.0
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	51	3.3	47	4.7	55	4.1
S01	Yes	Given table of frequencies, complete bar graph for same information.	28	2.0	27	2.6	29	3.0
TO1A	Yes	Read simple information from bar graph.	62	2.7	55	4.7	68	2.7
T01B	Yes	Read information from bar graph and add to find a total.	33	2.2	30	3.1	37	3.1

COUNTRY ID=Greece SCALE=Fractions and Proportionality

Fourth	Grade

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	99	(se)	Ŷ	(se)	8	(se)
A01	No	In which figure are one-half of the dots black?	90	0.9	89	1.4	91	1.0
A02	No	Determine total number from ratio and one number.	59	1.3	57	2.1	61	1.5
в09	No	What is the sum of 2.5 and 3.8?	47	2.1	47	2.7	48	2.4
C03	No	Which figure shows 2/3 of the square shaded?	50	2.2	50	2.7	51	3.2
D08	No	Subtract: 4.03 - 1.15.	74	2.1	70	3.0	77	2.5
D09	No	Which of the following diagram has three out of every four squares shaded?	43	2.1	43	3.4	43	2.6
E04	No	Which of the following numbers means 7/10?	27	3.3	29	5.8	26	3.2
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	48	2.2	45	3.0	51	2.8
G01	No	Given map and legend, how far apart are two cities?	39	2.1	40	3.1	38	2.4
I02	Yes	Which of the following word expressions is the same as .4?	29	3.2	28	3.9	31	4.1
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	50	3.2	54	4.1	44	4.6
I08	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	50	3.1	48	3.9	51	4.2
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	58	3.9	59	4.9	57	4.6
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	23	2.9	22	4.2	25	4.3
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	30	2.9	29	4.0	31	3.6
S03	Yes	Solve word problem: 96.4-33.2	21	2.0	21	2.5	21	2.9
S04	Yes	Solve word problem: 10/30 = ?/90.	31	2.2	32	3.0	30	3.3
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	11	1.4	9	2.1	13	2.1
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	8	1.2	б	1.3	9	1.9
U02	Yes	Write a fraction that is larger than 2/7.	56	2.8	58	4.0	54	3.3
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	53	2.7	56	4.5	51	3.1
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	29	2.9	35	4.8	23	2.8
U03C	Yes	Solve two proportions and compare results.	63	2.3	66	3.9	59	2.7
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	14	1.7	13	2.5	15	2.1

COUNTRY ID=Greece SCALE=Geometry

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Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	\$	(se)	8	(se)	olo	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	45	2.1	44	2.5	46	2.5
D07	No	Which two figures are congruent?	86	1.4	85	1.9	87	1.5
F09	No	Which of the following must be true of a triangle?	63	2.1	60	3.3	65	2.3
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	60	2.3	58	3.1	62	2.7
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	36	3.3	41	4.2	30	3.9
I06	Yes	Which of the following figures is made with straight sides only?	41	3.1	48	3.9	33	4.4
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	90	2.0	87	3.2	93	1.9
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	41	3.2	45	4.4	38	4.3
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	54	4.0	45	6.4	63	3.6
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	52	3.7	49	7.2	55	3.9
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	86	2.0	89	2.9	82	3.1
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	33	3.0	33	4.6	34	3.8
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	30	2.7	26	4.1	35	3.5
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	28	2.7	25	3.7	30	2.9

COUNTRY ID=Greece SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			0ve	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05 B07 C02 D06 E01 E03 F08 G02 H06 J06 J08 K05 K07 L06 L08 M07 S05	No No No No No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes	<pre>Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which of the following could be the weight (mass) of an edg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59. About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters? Given picture of a paper clip, about how many lengths of the clip is the length of this line?</pre>	69 30 67 54 59 40 66 81 40 63 16 55 25 27 36	1.5 1.6 1.6 2.2 2.4 2.3 2.1 1.6 2.4 2.9 3.0 4.8 2.6 2.9 2.6 3.6 2.1	69 30 71 53 60 39 69 82 48 73 29 56 17 60 26 26 39	$\begin{array}{c} 2.0\\ 2.3\\ 3.3\\ 3.9\\ 3.9\\ 2.7\\ 2.1\\ 3.5\\ 3.8\\ 4.0\\ 7.8\\ 3.6\\ 3.9\\ 3.4\\ 4.7\\ 2.7\end{array}$	63 55 40 63 80 47 69 35 51 25 27 33	$\begin{array}{c} 1.8\\ 2.2\\ 2.4\\ 2.7\\ 2.6\\ 2.7\\ 1.9\\ 2.5\\ 4.7\\ 4.2\\ 3.9\\ 2.9\\ 3.6\\ 3.7\\ 4.1\\ 3.2 \end{array}$
T03 U01 V05	Yes Yes Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	29 41 53	3.3 2.8 2.1	33 40 54	5.3 4.8 3.6	26 41 51	3.3 2.9 2.6

COUNTRY ID=Greece SCALE=Patterns, Relations and Functions

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	%	(se)	8	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	45	2.0	44	3.1	46	2.6
H08	No	Given number pattern, what are the next three numbers?	44	2.2	42	2.9	46	2.7
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	50	3.1	51	3.8	48	4.6
J05	Yes	Determine common operation between four pairs of numbers.	24	2.9	22	4.3	26	3.7
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	41	3.4	36	5.3	47	4.3
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	50	4.2	51	7.6	50	4.2
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	51	3.2	51	4.9	51	3.5
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	54	3.0	54	4.5	55	3.7
M09	Yes	4 x = <17: Which number could go in the blank to make the sentence true?	66	2.7	62	4.5	70	3.1
U04	Yes	Explain operation used to find next number in a pattern.	42	2.6	43	4.3	40	2.9

COUNTRY ID=Greece SCALE=Whole Numbers

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	8	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	73	1.2	73	1.9	73	1.4
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	72	1.6	73	1.9	70	1.9
B08	No	Which addition expression has the same value as 342?	80	1.6	79	2.5	81	1.5
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	81	1.7	82	2.1	81	2.5
E02	No	Which digit is in the hundreds place in 2345?	74	2.1	75	3.1	74	2.6
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	55	1.8	56	2.7	54	2.4
G03	No	Which of the following is a name for 9740?	92	1.0	92	1.1	93	1.6
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	66	1.7	67	2.7	66	2.2
н09	No	Which number is equal to eight tens plus nine tens?	46	1.9	45	2.8	47	2.6
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	52	3.4	55	4.3	49	4.8
I04	Yes	What is 3 times 23?	86	2.1	85	3.0	87	2.7
I09	Yes	Subtract: 6000-2369.	82	2.2	80	3.4	85	3.1
J04	Yes	25 x 18 is more than 24 x 18. How much more?	29	3.1	28	4.1	29	4.3
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	59	2.8	50	4.8	67	4.0
K02	Yes	Add: 6971 + 5291	81	5.1	75	9.5	87	3.2
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	42	2.9	42	4.8	42	3.3
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	54	3.6	49	5.1	59	4.1
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	60	2.7	62	5.0	57	3.6
M08	Yes	Which of the following four-digit numbers is the largest?	87	2.6	85	4.9	89	2.4
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	52	2.3	53	3.0	50	3.3
T02	Yes	Arrange four digits to make the smallest possible whole number.	31	2.4	28	3.3	35	2.8
U05	Yes	Write addition fact as a multiplication fact.	79	1.9	79	2.7	80	2.4
V02	Yes	Write the number that is 1000 more than 56,821.	41	2.1	47	3.5	35	2.5
V03	Yes	What is 5 less than 203?	48	2.3	52	3.7	44	2.8
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	27	2.1	22	2.3	32	2.9
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	46	2.2	41	3.4	50	2.8

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

Fourth Grade

COUNTRY ID=Hong Kong SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	90	(se)	olo	(se)	00	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	78	1.3	74	1.6	82	1.4
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	96	0.6	95	1.0	97	0.7
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	94	0.8	93	1.1	95	1.0
F05	No	Shown temperature chart, when was the highest temperature recorded?	78	1.5	77	2.2	80	1.9
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	86	1.7	85	2.7	87	2.5
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	62	2.7	63	2.7	62	4.3
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	83	2.1	83	2.7	82	2.6
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	69	3.1	68	3.4	71	3.9
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	84	1.9	87	2.5	81	2.8
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	57	3.2	58	3.6	57	4.6
S01	Yes	Given table of frequencies, complete bar graph for same information.	75	1.9	73	2.6	78	2.5
T01A	Yes	Read simple information from bar graph.	74	1.7	74	2.2	75	2.0
T01B	Yes	Read information from bar graph and add to find a total.	38	2.1	35	2.9	43	2.8

COUNTRY ID=Hong Kong SCALE=Fractions and Proportionality

Fourth Grade

			0ve	Overall Boys		ys G		rls
ITEM	REL	LABEL	8	(se)	olo	(se)	olo	(se)
A01 A02 B09 C03 D09 E04 F06 G01 I02 I05 I08 J07 K09 M05 S03 S04 T04B	No No No No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	<pre>In which figure are one-half of the dots black? Determine total number from ratio and one number. What is the sum of 2.5 and 3.8? Which figure shows 2/3 of the square shaded? Subtract: 4.03 - 1.15. Which of the following diagram has three out of every four squares shaded? Which of the following numbers means 7/10? Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains? Given map and legend, how far apart are two cities? Which of the following word expressions is the same as .4? If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make? Shown four diagrams with various fractions shaded, which two represent the same fraction? Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded? 54 marbles are equally divided into 6 bags. How many marbles in 2 bags? Given partly shaded figure, which of the following numbers represents the shaded part? Solve word problem: 10/30 = ?/90. Does 10 girls and 20 boys mean one girl for every two boys? Explain. Does 10 girls and 20 boys mean half of all students are girls? Explain.</pre>	91 43 88 84 85 77 51 78 73 67 96 47 73 32 55 11 13 84	0.6 1.1 1.0 1.2 2.0 1.5 1.4 1.5 1.4 1.5 2.7 3.1 0.9 2.7 1.8 2.1 2.3 2.0 2.0 2.0 2.0 1.3	91 42 87 88 64 85 77 53 87 53 87 75 94 87 72 86 11 156	0.8 1.3 1.5 1.4 1.6 2.2 2.0 1.6 2.1 3.0 3.1 5 3.6 3.0 2.6 3.0 3.3	92 45 90 85 90 60 86 77 49 70 71 97 45 88 55 11 12 81	0.7 1.5 1.3 1.7 1.7 2.1 2.4 1.7 2.1 2.4 3.7 3.8 3.6 1.2 4.0 3.5 3.5 3.5 2.6 1.8 2.0 2.2
U02 U03A U03B U03C	Yes Yes Yes Yes	Write a fraction that is larger than 2/7. Solve word problem using proportions: 3/10 = 9/? Solve word problem using proportions: 1/3 = 9/? Solve two proportions and compare results.	79 70 81	1.8 2.0 1.8	80 72 78	1.6 2.0 2.6 2.4	79 68 84	2.4 2.4 2.0
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	47	2.0	50	3.4	44	2.9

COUNTRY ID=Hong Kong SCALE=Geometry

Fourth	Charles and a
rourun	Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	90	(se)	olo	(se)	olo	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	 53	1.1	54	2.1	 52	1.8
D07	No	Which two figures are congruent?	93	0.7	92	1.2	94	1.1
F09	No	Which of the following must be true of a triangle?	75	1.3	73	1.8	77	1.8
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	44	1.8	51	2.3	36	2.3
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	66	2.3	74	3.2	57	3.6
I06	Yes	Which of the following figures is made with straight sides only?	89	1.4	91	1.5	88	2.3
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	97	1.1	97	1.4	96	1.9
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	89	1.7	88	2.6	90	2.5
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	70	2.4	70	2.7	70	3.7
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	78	3.1	79	3.0	77	4.7
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	93	1.4	93	2.0	93	1.9
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	72	2.0	71	3.2	74	2.8
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	43	2.2	43	3.6	43	3.2
т05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	81	1.6	79	1.9	84	2.3

COUNTRY ID=Hong Kong SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	%	(se)	8	(se)
A05 B07 C02 D06 E01 E03 F08 G02 H06 J06 J06 J08 K05	No No No No No No No Yes Yes	<pre>Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which units would be best to measure the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59. About how many centimeters is this picture of a pencil?</pre>	90 72 87 61 67 83 77 79 69 89 72 91	0.6 1.3 1.1 1.7 1.5 1.0 1.5 1.1 2.0 1.6 2.4 1.8	92 72 85 66 67 84 79 79 69 89 71 90	0.6 1.7 1.9 2.3 2.2 1.4 1.9 1.5 2.2 2.0 3.2 2.1	89 73 89 55 66 83 76 79 68 89 73 93	1.1 2.0 1.2 2.8 2.0 1.4 1.9 1.5 2.6 2.2 3.3 2.3
K05 K07 L06 L08 M07 S05 T03 U01 V05	Yes Yes Yes Yes Yes Yes Yes Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters? Given picture of a paper clip, about how many lengths of the clip is the length of this line? Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	29 71 42 73 52 32 63 72	1.9 2.6 2.6 2.3 2.4 2.0 2.3 1.8	30 72 43 71 47 36 63 73	2.9 3.2 2.9 3.8 3.6 3.1 3.0 2.5	27 71 42 77 57 28 63 72	2.9 4.1 4.4 2.5 2.9 2.4 2.9 2.6

COUNTRY ID=Hong Kong SCALE=Patterns, Relations and Functions

Fourth Grade

		0ve	Overall		Boys		rls
ITEM REI	LABEL	00	(se)	8	(se)	%	(se)
K06 Yes L04 Yes L09 Yes M09 Yes	Which pair of numbers follows the rule 'multiply by 5'?	67 81 75 71 76 82 74 83 65	1.8 1.5 2.3 2.6 2.3 1.9 2.0 1.9 1.9	63 79 72 67 76 82 75 81 68	2.2 2.0 4.0 4.4 2.6 2.8 3.6 2.6 2.6	72 83 80 77 77 83 73 85 62	2.1 1.7 2.8 3.2 2.9 2.4 2.5 2.1 2.8

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

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COUNTRY ID=Hong Kong SCALE=Whole Numbers

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	%	(se)	8	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	80	0.9	79	1.2	82	1.0
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	90	0.8	92	0.8	89	1.1
B08	No	Which addition expression has the same value as 342?	95	0.6	95	0.8	97	0.6
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	88	1.1	87	1.3	89	1.4
E02	No	Which digit is in the hundreds place in 2345?	68	1.3	66	1.8	71	1.7
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	54	2.0	58	2.4	50	3.1
G03	No	Which of the following is a name for 9740?	96	0.5	96	0.7	97	0.7
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	79	1.5	79	2.0	80	1.9
Н09	No	Which number is equal to eight tens plus nine tens?	81	1.5	81	1.8	81	2.1
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	74	2.5	76	2.9	73	4.0
I04	Yes	What is 3 times 23?	95	1.1	96	1.3	94	1.8
I09	Yes	Subtract: 6000-2369.	89	1.5	88	1.9	89	2.3
J04	Yes	25 x 18 is more than 24 x 18. How much more?	63	2.6	65	3.6	59	3.6
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	84	2.9	81	3.7	87	2.8
K02	Yes	Add: 6971 + 5291	90	1.7	88	3.1	93	1.8
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	70	2.7	72	3.5	68	3.2
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	75	2.1	76	3.4	74	2.8
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	82	2.2	82	3.2	83	2.1
M08	Yes	Which of the following four-digit numbers is the largest?	95	1.1	93	1.8	97	1.2
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	82	1.4	83	1.9	81	2.0
T02	Yes	Arrange four digits to make the smallest possible whole number.	66	2.1	68	2.4	64	3.2
U05	Yes	Write addition fact as a multiplication fact.	95	0.9	95	1.0	95	1.2
V02	Yes	Write the number that is 1000 more than 56,821.	60	2.3	62	2.7	58	3.1
V03	Yes	What is 5 less than 203?	74	1.7	76	2.1	73	2.4
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	21	1.5	18	1.9	24	2.5
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	82	1.9	83	2.1	80	2.9

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

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Fourth Grade

COUNTRY ID=Hungary SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
B05 C01	No No	Multi-step graph problem: determine Sarah's relative height, then her height from graph. Shown graph (20 unit increments), which class collected 45 bottles?	73 84	1.4	68 86	2.1	77 83	1.7
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	80	1.6	79	2.3	82	2.1
F05 J03	No Yes	Shown temperature chart, when was the highest temperature recorded? Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	81 73	1.2 3.1	77 71	1.7 4.6	84 75	1.7 3.7
K04 L01	Yes	Add points from various rounds of a game to determine who won game and by how much. Given graph showing numbers of trees, how many trees does each symbol represent?	37 44	2.8	37 48	4.0	38 41	3.7 3.4
L02		Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	61	3.1	62	4.0	60	4.1
M01 M02	Yes Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area. Multi-step word problem: add 6 one-digit numbers and subtract from 60.	76 71	2.3 2.5	72 66	3.3 3.4	80 75	3.5 3.7
S01 T01A	Yes Yes	Given table of frequencies, complete bar graph for same information. Read simple information from bar graph.	31 70	2.0	30 74	2.6	32 67	2.9
T01B	Yes	Read information from bar graph and add to find a total.	28	1.0	29	2.3	28	2.9

COUNTRY ID=Hungary SCALE=Fractions and Proportionality

			0ve	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	%	(se)	%	(se)
A01	No	In which figure are one-half of the dots black?	94	0.6	94	0.7	94	0.8
A02	No	Determine total number from ratio and one number.	64	1.3	65	1.5	63	1.6
B09	No	What is the sum of 2.5 and 3.8?	59	1.9	59	2.2	60	2.6
C03	No	Which figure shows 2/3 of the square shaded?	55	2.3	55	3.1	53	2.5
D08	No	Subtract: 4.03 - 1.15.	69	1.5	68	2.1	71	1.9
D09	No	Which of the following diagram has three out of every four squares shaded?	50	1.8	47	2.5	53	2.3
E04	No	Which of the following numbers means 7/10?	16	1.2	16	1.7	16	1.8
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	65	1.5	67	2.1	63	2.1
G01	No	Given map and legend, how far apart are two cities?	50	2.2	53	3.1	46	2.5
I02	Yes	Which of the following word expressions is the same as .4?	31	2.7	32	3.5	31	4.2
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	60	2.5	69	3.9	51	3.4
I08	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	51	2.6	48	4.1	54	3.8
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	58	3.2	60	4.1	55	4.6
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	44	2.4	49	3.8	40	3.7
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	31	2.7	28	4.0	33	3.1
S03	Yes	Solve word problem: 96.4-33.2	13	1.5	11	2.0	16	2.2
S04	Yes	Solve word problem: 10/30 = ?/90.	42	1.9	45	2.4	39	3.1
U02	Yes	Write a fraction that is larger than 2/7.	63	1.9	63	2.8	64	2.6
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	63	1.8	67	2.4	59	2.7
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	49	2.5	50	3.1	48	3.4
U03C	Yes	Solve two proportions and compare results.	79	1.5	80	2.0	78	2.0
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	33	2.3	32	3.0	35	2.9

COUNTRY ID=Hungary SCALE=Geometry

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Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	olo	(se)	%	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	 54	1.5	57	2.1	51	2.3
D07	No	Which two figures are congruent?	85	1.2	87	1.6	84	1.6
F09	No	Which of the following must be true of a triangle?	56	1.7	56	2.2	55	2.7
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	45	2.0	48	2.5	41	2.8
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	59	3.1	62	4.0	57	4.3
I06	Yes	Which of the following figures is made with straight sides only?	84	1.9	87	2.7	81	3.3
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	82	1.9	82	2.6	81	3.1
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	70	2.8	71	3.2	70	3.8
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	83	2.3	83	3.0	82	3.0
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	78	2.2	75	3.2	80	2.9
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	88	1.8	89	2.3	88	2.6
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	42	2.7	43	4.0	41	3.7
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	30	2.7	31	3.7	31	3.4
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	62	2.0	63	2.6	62	3.2

COUNTRY ID=Hungary SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05 B07 C02 D06 E01 E03 F08 G02 H06 J06 J06 J08 K05 K07 L06 L08	No No No No No No Yes Yes Yes Yes Yes	<pre>Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which of the following could be the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59. About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace?</pre>	 83 59 66 55 67 84 73 91 52 91 60 78 15 71 27	1.0 1.7 2.0 1.5 1.3 1.5 1.1 2.1 1.7 2.4 2.8 2.0 2.4 2.8	84 58 69 59 86 75 93 53 94 62 76 18 70 30	1.4 2.4 2.1 2.6 2.0 1.7 2.0 1.7 2.0 1.2 2.8 1.9 3.5 3.6 3.3 3.6 3.8	50 88 58 80 12 72 25	1.3 2.5 2.4 2.1 1.6 2.0 1.5 2.8 3.5 3.6 2.8 3.5 3.6 2.4 3.7
M07 S05 T03 U01 V05	Yes Yes Yes Yes Yes	Which of the following would most likely be measured in milliliters? Given picture of a paper clip, about how many lengths of the clip is the length of this line? Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	55 57 53 69 67	2.6 2.0 2.1 2.1 2.2	53 58 58 66 69	4.2 2.5 2.9 2.8 2.9	56 56 48 72 67	3.5 3.2 2.9 2.3 2.6

COUNTRY ID=Hungary SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	8	(se)	00	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	 58	1.8	57	2.3	60	2.3
H08	No	Given number pattern, what are the next three numbers?	67	1.5	64	2.0	70	2.2
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	78	2.3	79	3.8	76	3.8
J05	Yes	Determine common operation between four pairs of numbers.	56	2.7	53	3.5	59	4.1
к03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	68	2.3	67	3.6	71	3.0
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	65	2.6	66	3.9	66	3.6
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	80	2.1	78	3.3	82	2.9
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	64	2.7	64	3.2	63	4.4
M09	Yes	$4 \text{ x} \leq 17$: Which number could go in the blank to make the sentence true?	79	2.2	76	3.1	82	3.1
U04	Yes	Explain operation used to find next number in a pattern.	79	1.7	81	2.1	78	2.2

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

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COUNTRY ID=Hungary SCALE=Whole Numbers

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	%	(se)	8	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	79	1.0	78	1.2	80	1.5
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	70	1.1	72	1.6	68	1.4
B08	No	Which addition expression has the same value as 342?	92	0.9	93	1.0	92	1.3
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	85	1.1	85	1.9	85	1.6
E02	No	Which digit is in the hundreds place in 2345?	85	1.2	85	1.6	85	1.7
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	80	1.4	79	1.6	82	1.9
G03	No	Which of the following is a name for 9740?	95	0.8	94	1.3	96	1.0
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	83	1.2	81	2.0	84	1.5
Н09	No	Which number is equal to eight tens plus nine tens?	78	1.3	79	2.1	78	2.1
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	74	2.1	79	3.2	70	3.5
I04	Yes	What is 3 times 23?	96	1.0	100	0.5	94	2.1
I09	Yes	Subtract: 6000-2369.	91	1.5	88	2.4	93	2.0
J04	Yes	25 x 18 is more than 24 x 18. How much more?	52	2.9	53	3.8	50	4.2
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	77	2.2	77	2.7	78	3.8
K02	Yes	Add: 6971 + 5291	86	2.1	82	3.5	89	2.4
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	62	2.8	66	4.1	59	4.3
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	69	2.9	70	4.2	69	3.9
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	84	2.1	83	3.4	85	2.9
M08	Yes	Which of the following four-digit numbers is the largest?	91	1.5	92	2.1	92	2.2
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	76	1.9	78	2.2	74	3.0
T02	Yes	Arrange four digits to make the smallest possible whole number.	58	2.2	56	2.8	60	3.1
U05	Yes	Write addition fact as a multiplication fact.	80	1.4	82	2.0	77	2.2
V02	Yes	Write the number that is 1000 more than 56,821.	53	2.2	57	3.0	51	2.8
V03	Yes	What is 5 less than 203?	78	1.7	81	2.2	76	2.7
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	41	2.1	40	2.6	44	2.8
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	59	1.9	58	3.0	61	2.9

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

Fourth Grade

COUNTRY ID=Iceland SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	00	(se)	8	(se)	%	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	70	1.8	65	2.8	75	2.2
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	87	1.5	88	2.0	86	2.1
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	84	1.5	86	1.9	82	2.9
F05	No	Shown temperature chart, when was the highest temperature recorded?	69	1.6	66	2.7	72	2.4
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	75	2.8	70	4.1	79	4.1
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	36	4.8	36	7.1	35	5.2
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	54	3.9	55	5.3	53	4.6
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	47	3.7	49	4.8	45	4.9
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	76	3.2	80	3.6	72	5.2
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	45	3.2	49	5.1	41	5.1
S01	Yes	Given table of frequencies, complete bar graph for same information.	36	2.9	36	4.0	36	3.9
TO1A	Yes	Read simple information from bar graph.	77	2.0	80	3.3	74	2.8
T01B	Yes	Read information from bar graph and add to find a total.	20	1.8	21	2.8	19	2.7

COUNTRY ID=Iceland SCALE=Fractions and Proportionality

Fourth	Grade

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	98	(se)	8	(se)
A01	No	In which figure are one-half of the dots black?	94	0.6	94	0.7	93	0.8
A02	No	Determine total number from ratio and one number.	42	1.2	42	1.7	42	1.6
в09	No	What is the sum of 2.5 and 3.8?	41	1.7	43	3.0	39	2.8
C03	No	Which figure shows 2/3 of the square shaded?	22	2.0	22	2.9	23	2.3
D08	No	Subtract: 4.03 - 1.15.	46	3.2	44	3.5	47	4.0
D09	No	Which of the following diagram has three out of every four squares shaded?	49	1.9	49	2.9	49	2.8
E04	No	Which of the following numbers means 7/10?	16	2.1	18	2.9	14	2.8
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	55	2.2	53	3.3	58	2.4
G01	No	Given map and legend, how far apart are two cities?	36	1.9	37	3.5	35	2.7
I02	Yes	Which of the following word expressions is the same as .4?	9	2.1	12	3.1	6	2.3
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	44	3.8	44	5.1	43	5.2
I08	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	69	3.4	67	3.7	71	4.5
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	20	3.1	18	4.2	22	4.3
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	19	3.7	19	5.2	18	4.5
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	23	3.5	23	4.9	23	3.6
S03	Yes	Solve word problem: 96.4-33.2	6	1.1	б	1.4	7	1.5
S04	Yes	Solve word problem: 10/30 = ?/90.	37	2.7	37	4.1	37	3.4
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	5	1.2	2	1.5	7	1.9
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	5	1.1	4	1.0	б	1.7
U02	Yes	Write a fraction that is larger than 2/7.	27	2.1	25	2.6	30	3.2
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	58	2.3	62	3.2	54	3.7
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	33	3.8	40	4.7	26	4.6
U03C	Yes	Solve two proportions and compare results.	66	2.9	65	4.3	66	3.7
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	22	2.4	25	3.9	19	2.8

COUNTRY ID=Iceland SCALE=Geometry

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Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	8	(se)	olo	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	45	2.3	47	3.2	43	2.6
D07	No	Which two figures are congruent?	91	1.0	91	1.8	91	1.5
F09	No	Which of the following must be true of a triangle?	70	2.6	67	3.7	73	2.6
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	55	2.4	56	3.7	54	2.3
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	48	3.3	54	6.0	40	5.7
I06	Yes	Which of the following figures is made with straight sides only?	70	2.5	70	3.7	70	4.2
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	91	1.8	92	2.1	91	2.6
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	52	3.5	44	5.3	58	4.8
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	59	3.2	58	5.1	60	4.3
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	75	3.6	75	5.1	75	4.6
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	93	1.9	93	2.3	92	2.9
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	25	4.1	24	5.6	26	4.7
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	47	4.5	48	6.1	45	5.5
т05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	57	2.7	56	3.5	58	3.5

COUNTRY ID=Iceland SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	8	(se)	%	(se)
A05 B07 C02 D06 E01 E03 F08 G02 H06 J06 J06 J08 K05 K07 L06 L08 M07 S05	No No No No No No No Yes Yes Yes Yes Yes Yes Yes Yes	Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which of the following could be the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59. About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters? Given 0 f a paper clip, about how many lengths of the clip is the length of this line?	44 30 35 30 73 39 53 80 23 71 35 68 12 44 35 68 12 44 35 29 46	1.6 1.7 1.8 2.0 1.7 2.3 2.2 3.3 3.9 3.7 1.9 2.9 3.7 1.9 2.9 3.5 3.1	42 32 34 72 39 55 78 23 61 11 49 36 11 49 36 44	1.6 2.1 2.8 2.5 3.1 3.4 4.9 5.2 6.1 3.5 4.9 5.9 4.2 5.9 4.3	46 28 36 23 73 38 50 82 23 74 36 76 14 38 34 25 48	2.4 3.1 2.9 2.1 2.4 3.6 2.3 2.8 3.1 4.5 4.5 4.5 4.7 2.9 4.6 4.8 5.3 3.7
T03 U01 V05	Yes Yes Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	43 46 29	2.8 2.7 2.7	43 43 34	3.0 4.1 4.3	44 48 23	3.9 3.4 2.9

COUNTRY ID=Iceland SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	8	(se)	0/0	(se)
G04 H08 I07 J05 K03 K06 L04	Yes Yes Yes Yes	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks. Given number pattern, what are the next three numbers? Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining? Determine common operation between four pairs of numbers. Which pair of numbers follows the rule 'multiply by 5'? Extend pattern of figures to determine number of tiles in the sixth figure. Shown pattern of shapes, which of the following is arranged in the same pattern?	35 52 49 24 50 52 67	2.4 2.1 3.1 2.9 4.9 3.8 3.6	36 51 49 21 46 57 66	3.3 3.3 4.9 5.2 6.5 5.0 4.6	34 54 48 26 53 47 68	3.0 3.3 5.0 4.0 5.6 5.1 5.1
L04 L09 M09 U04	Yes Yes	Given statements about the relative ages of three children, which statement must also be true? $4 \times - \langle 17 \rangle$: Which number could go in the blank to make the sentence true? Explain operation used to find next number in a pattern.	61 67 27	4.3 3.2 3.0	64 71 27	4.0 5.2 5.0 3.9	58 64 27	6.4 5.8 3.6

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

May 11, 1998 53

COUNTRY ID=Iceland SCALE=Whole Numbers

			Overal		all Boys		Gi	rls
ITEM	REL	LABEL	%	(se)	90	(se)	8	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	36	1.5	35	2.2	37	1.5
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	79	1.1	80	1.4	78	1.5
B08	No	Which addition expression has the same value as 342?	84	1.5	86	2.0	81	2.1
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	69	2.0	71	3.3	67	3.2
E02	No	Which digit is in the hundreds place in 2345?	74	1.5	75	2.8	73	2.0
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	65	2.3	69	2.6	61	2.9
G03	No	Which of the following is a name for 9740?	86	1.3	88	2.0	85	1.9
Н07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	71	2.0	75	2.9	68	2.2
Н09	No	Which number is equal to eight tens plus nine tens?	57	1.7	60	2.5	54	2.1
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	47	3.5	45	3.9	49	5.2
I04	Yes	What is 3 times 23?	80	2.2	88	3.0	71	5.3
I09	Yes	Subtract: 6000-2369.	47	3.4	45	4.2	48	5.1
J04	Yes	25 x 18 is more than 24 x 18. How much more?	33	3.8	37	6.3	30	4.2
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	60	3.7	60	5.2	59	5.3
K02	Yes	Add: 6971 + 5291	79	2.8	76	4.8	82	3.0
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	28	3.7	26	4.9	29	5.0
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	54	4.3	50	6.1	58	5.5
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	59	4.1	66	4.3	51	6.2
M08	Yes	Which of the following four-digit numbers is the largest?	80	3.0	84	3.3	76	4.4
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	45	2.6	46	3.7	44	4.1
T02	Yes	Arrange four digits to make the smallest possible whole number.	27	2.8	28	3.2	26	3.4
U05	Yes	Write addition fact as a multiplication fact.	63	3.0	61	4.4	66	3.3
V02	Yes	Write the number that is 1000 more than 56,821.	27	2.5	34	3.4	20	2.5
V03	Yes	What is 5 less than 203?	50	2.5	55	3.9	45	2.8
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	21	2.6	20	3.2	21	3.2
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	35	2.5	33	3.5	38	3.1

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

May 11, 1998 54

Fourth Grade

COUNTRY ID=Iran, Islamic Rep. SCALE=Data Rep., Analysis and Probability

May 11, 1998 55

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	90	(se)	olo	(se)	olo	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	33	1.6	35	2.2	32	2.2
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	34	2.0	41	2.5	26	2.7
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	40	2.0	40	2.9	39	2.7
F05	No	Shown temperature chart, when was the highest temperature recorded?	34	1.5	35	2.3	33	2.0
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	40	3.2	41	4.9	39	4.2
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	16	2.3	18	3.5	15	2.8
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	17	2.5	15	3.8	20	2.9
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	70	2.7	72	3.8	69	3.7
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	23	2.0	23	2.8	23	3.3
S01	Yes	Given table of frequencies, complete bar graph for same information.	1	0.5	1	0.5	1	0.8
T01A	Yes	Read simple information from bar graph.	12	1.8	16	2.9	7	1.4
T01B	Yes	Read information from bar graph and add to find a total.	4	1.0	5	1.8	2	0.8

COUNTRY ID=Iran, Islamic Rep. SCALE=Fractions and Proportionality

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	olo	(se)	8	(se)	8	(se)
A01	No	In which figure are one-half of the dots black?	69	1.5	73	1.7	64	2.4
A02	No	Determine total number from ratio and one number.	24	1.0	26	1.6	22	1.0
B09	No	What is the sum of 2.5 and 3.8?	55	2.4	48	3.6	62	2.8
C03	No	Which figure shows 2/3 of the square shaded?	44	2.2	44	3.3	43	2.9
D08	No	Subtract: 4.03 - 1.15.	42	2.2	41	3.0	44	3.3
D09	No	Which of the following diagram has three out of every four squares shaded?	32	1.4	30	1.7	34	2.2
E04	No	Which of the following numbers means 7/10?	60	2.5	61	2.8	59	3.7
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	43	1.8	42	2.5	44	2.2
G01	No	Given map and legend, how far apart are two cities?	17	1.4	20	2.0	13	2.0
I02	Yes	Which of the following word expressions is the same as .4?	54	2.6	50	4.1	58	3.5
105	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	44	2.7	44	3.7	44	4.3
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	40	2.9	39	3.7	42	5.0
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	68	2.7	64	4.2	72	3.6
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	14	2.0	15	2.7	12	3.0
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	35	3.3	37	4.6	33	4.6
S03	Yes	Solve word problem: 96.4-33.2	9	2.3	11	3.8	8	2.4
S04	Yes	Solve word problem: 10/30 = ?/90.	18	2.0	22	3.1	14	2.2
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	7	1.2	7	1.4	8	2.1
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	1	0.4	1	0.4	1	0.8
U02	Yes	Write a fraction that is larger than 2/7.	41	2.4	38	2.8	44	3.8
UO3A	Yes	Solve word problem using proportions: 3/10 = 9/?	24	2.0	29	2.3	18	2.9
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	11	1.4	13	2.3	9	1.5
U03C	Yes	Solve two proportions and compare results.	33	1.7	35	2.5	30	2.2
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	3	1.2	2	0.7	5	2.5

COUNTRY ID=Iran, Islamic Rep. SCALE=Geometry

Fourth	Granda
rourun	Grade

			Ove	rall	Boy	<i>y</i> s	Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	olo	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	31	1.6	28	2.2	33	2.3
D07	No	Which two figures are congruent?	61	1.6	60	2.3	63	2.2
F09	No	Which of the following must be true of a triangle?	66	1.8	64	2.3	68	2.8
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	38	1.6	39	2.1	37	2.4
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	18	1.9	18	2.8	18	2.4
I06	Yes	Which of the following figures is made with straight sides only?	27	2.4	29	3.5	25	3.5
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	75	3.1	73	4.4	76	4.0
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	66	3.2	65	4.3	67	4.4
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	59	2.7	53	3.9	64	3.6
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	38	2.4	38	3.7	38	3.3
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	70	2.6	70	3.6	69	3.4
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	17	2.5	17	2.8	18	4.2
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	14	2.0	15	2.8	13	2.7
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	15	1.4	15	2.3	16	1.8

J06

J08

K05

K07

T-06

L08

M07

S05 т03

U01

V05

COUNTRY ID=Iran, Islamic Rep. SCALE=Measurement, Estimation, & Number Sense

Yes Word problem: best estimate of 57 + 62 + 59.

Yes How many millimeters are in a meter?

Yes Which of the following weight (mass) measures is the largest?

Yes A 20 cm wire is formed into a rectangle with width 4cm. What is the length?

Yes Which of the following would most likely be measured in milliliters?

Yes Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?

Yes Given a triangle and large irregular figure, how many triangles will cover the figure?

Yes Given number of paces in which each of several children cross the room, who had the longest pace?

Yes Given picture of a paper clip, about how many lengths of the clip is the length of this line? Yes Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?

Yes About how many centimeters is this picture of a pencil?

			0ve	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	00	(se)	olo	(se)	%	(se)
A05	No	Which of these figures has the largest area?	76	1.1	75	1.7	77	1.3
B07	No	Word problem: best estimate of 84 \times 57.	26	1.5	29	2.4	23	1.7
C02	No	Find volume of a stack of 5 cubes.	50	1.7	53	2.7	47	2.2
D06	No	How many degrees did temperature rise from minus 3 to 5?	41	2.2	40	3.5	43	2.3
E01	No	Shown calendar, what date is three weeks after December 2?	30	1.5	32	1.8	28	2.4
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	12	1.3	13	1.9	10	1.6
F08	No	Which units would be best to measure the weight (mass) of an egg?	44	1.7	50	2.5	38	3.0
G02	No	Which of the following could be the weight (mass) of an adult?	51	1.9	56	2.6	47	2.6
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	38	2.2	42	2.3	34	3.3

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

May 11, 1998 58

4.1

4.0

4.5

2.1

4.5

23

67

Fourth Grade

53 3.6 63 4.6 42 5.3

16 2.2 20 3.9 12 2.5
 38
 2.8
 35
 3.5
 41

 8
 1.6
 10
 2.4
 6

19 1.8 21 3.0 17 2.1

9 1.3 12 1.9 5 1.5 41 2.3 39 3.1 43 3.5

38 2.4 41 3.6 35 3.0

26 3.1 25 4.2 28

 23
 2.5
 24
 3.1

 66
 2.9
 66
 3.9

COUNTRY ID=Iran, Islamic Rep. SCALE=Patterns, Relations and Functions

Fourth	Granda
Fourth	Grade

			0ve	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	%	(se)	90	(se)	0/0	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	36	2.2	37	3.2	34	2.8
H08	No	Given number pattern, what are the next three numbers?	30	1.6	28	1.9	33	2.6
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	47	3.3	50	5.1	44	4.2
J05	Yes	Determine common operation between four pairs of numbers.	29	3.2	29	3.8	28	5.1
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	38	3.3	40	4.9	36	4.6
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	39	2.8	42	4.2	35	3.4
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	54	3.2	49	4.6	58	3.8
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	41	2.7	41	3.6	42	4.0
M09	Yes	$4 \text{ x} \leq 17$: Which number could go in the blank to make the sentence true?	62	2.7	58	4.4	66	3.8
U04	Yes	Explain operation used to find next number in a pattern.	22	1.9	26	3.1	18	2.7

COUNTRY ID=Iran, Islamic Rep. SCALE=Whole Numbers

Mav	11,	1998	60
may	±±,	1))0	00

Fourth	Chan die
rourun	Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	90	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	63	1.5	64	2.0	63	1.9
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	71	1.8	77	2.4	64	2.2
B08	No	Which addition expression has the same value as 342?	55	1.9	58	2.8	53	3.2
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	62	1.8	63	2.7	60	2.6
E02	No	Which digit is in the hundreds place in 2345?	70	2.0	70	2.6	70	3.0
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	59	1.8	60	2.5	57	2.5
G03	No	Which of the following is a name for 9740?	81	2.0	79	3.1	83	2.1
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	56	2.2	53	3.7	59	2.3
н09	No	Which number is equal to eight tens plus nine tens?	48	2.0	56	3.2	39	2.3
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	39	3.2	43	4.6	35	4.8
I04	Yes	What is 3 times 23?	73	2.4	72	3.5	74	3.7
I09	Yes	Subtract: 6000-2369.	62	3.2	60	4.5	63	5.0
J04	Yes	25 x 18 is more than 24 x 18. How much more?	26	3.2	31	4.8	22	3.4
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	40	2.8	37	4.4	42	3.7
K02	Yes	Add: 6971 + 5291	80	2.7	78	3.9	82	3.1
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	21	2.4	22	3.4	19	3.2
M03	Yes	Recognize symmetric property of multiplication: 7 x _ is the same as what?	56	2.7	56	3.8	55	4.7
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	43	3.0	47	4.0	38	4.4
M08	Yes	Which of the following four-digit numbers is the largest?	63	2.9	67	4.0	58	4.6
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	26	2.3	26	2.8	26	3.7
T02	Yes	Arrange four digits to make the smallest possible whole number.	55	2.2	55	3.0	55	3.2
U05	Yes	Write addition fact as a multiplication fact.	73	1.7	71	2.4	76	2.3
V02	Yes	Write the number that is 1000 more than 56,821.	18	1.6	18	2.4	18	2.4
V03	Yes	What is 5 less than 203?	33	2.2	34	2.8	31	3.4
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	17	1.9	15	2.6	19	2.4
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	18	2.0	21	3.2	15	1.8

COUNTRY ID=Ireland SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	erall	Bo	ys	Gi	rls
ITEM	REL	LABEL	%	(se)	olo	(se)	00	(se)
B05 C01	No No	Multi-step graph problem: determine Sarah's relative height, then her height from graph. Shown graph (20 unit increments), which class collected 45 bottles?	73 94	1.6	68 93	2.6	 78 94	1.4
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	85	1.1	83	1.8	87	1.6
F05 J03	No Yes	Shown temperature chart, when was the highest temperature recorded? Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	78 84	1.5 2.1	79 79	2.2 3.4	78 88	1.9 2.7
K04 L01	Yes Yes	Add points from various rounds of a game to determine who won game and by how much. Given graph showing numbers of trees, how many trees does each symbol represent?	69 62	2.7 3.1	66 65	4.1	71 58	3.4 4.1
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	52 72	2.6	55 75	3.9	49 70	3.5
M01 M02	Yes Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area. Multi-step word problem: add 6 one-digit numbers and subtract from 60.	65	2.8	62	3.7	68	2.9 4.1
S01 T01A	Yes Yes	Given table of frequencies, complete bar graph for same information. Read simple information from bar graph.	34 87	2.0 1.7	31 88	2.8 2.1	37 85	2.7 2.4
T01B		Read information from bar graph and add to find a total.	48	2.2	47	2.8	49	2.7

COUNTRY ID=Ireland SCALE=Fractions and Proportionality

Fourth	Granda
rourun	Grade

			0ve	Overall		erall Boys		Boys		rls
ITEM	REL	LABEL	8	(se)	98	(se)	8	(se)		
A01	No	In which figure are one-half of the dots black?	89	0.8	90	1.2	89	1.0		
A02	No	Determine total number from ratio and one number.	63	1.0	59	1.3	67	1.4		
в09	No	What is the sum of 2.5 and 3.8?	72	1.6	70	2.1	74	2.2		
C03	No	Which figure shows 2/3 of the square shaded?	69	2.1	66	2.6	71	2.4		
D08	No	Subtract: 4.03 - 1.15.	83	1.4	79	2.1	87	1.6		
D09	No	Which of the following diagram has three out of every four squares shaded?	60	1.6	58	2.2	62	2.0		
E04	No	Which of the following numbers means 7/10?	57	2.6	56	2.8	58	3.7		
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	82	1.1	83	1.5	81	1.7		
G01	No	Given map and legend, how far apart are two cities?	40	1.9	45	2.7	35	2.8		
I02	Yes	Which of the following word expressions is the same as .4?	55	3.9	54	4.9	55	5.3		
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	56	2.5	57	4.3	56	3.2		
I08	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	51	2.8	52	4.0	51	3.5		
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	79	2.8	77	3.3	82	4.3		
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	44	2.5	44	3.8	45	3.3		
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	48	3.4	49	5.1	48	4.4		
S03	Yes	Solve word problem: 96.4-33.2	29	1.9	27	2.7	31	2.7		
S04	Yes	Solve word problem: 10/30 = ?/90.	58	1.7	57	2.9	59	2.2		
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	26	1.9	23	2.5	30	2.5		
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	25	1.9	21	2.5	30	2.6		
U02	Yes	Write a fraction that is larger than 2/7.	74	1.9	73	2.3	75	2.6		
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	67	2.2	73	2.6	62	3.4		
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	47	2.6	48	3.2	46	3.5		
U03C	Yes	Solve two proportions and compare results.	83	1.5	83	2.2	84	2.1		
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	30	2.5	32	2.9	29	3.6		

COUNTRY ID=Ireland SCALE=Geometry

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Fourth Grade

			Ove	rall	Во	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	90	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	55	1.7	55	2.3	56	2.2
D07	No	Which two figures are congruent?	90	1.1	89	1.4	91	1.6
F09	No	Which of the following must be true of a triangle?	75	1.4	74	1.9	75	1.9
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	49	1.9	51	2.2	48	2.5
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	54	2.8	55	4.4	53	3.6
I06	Yes	Which of the following figures is made with straight sides only?	71	2.3	70	3.4	71	3.1
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	87	1.9	86	2.8	88	2.7
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	62	2.6	59	3.5	65	3.8
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	69	1.9	66	3.1	71	3.1
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	83	2.2	82	2.9	84	3.1
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	92	1.7	93	2.1	91	2.4
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	43	3.0	46	4.2	40	4.3
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	45	3.3	39	4.0	51	4.6
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	57	2.3	58	3.0	56	3.2

COUNTRY ID=Ireland SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Ove	rall	Boys		Giı	rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05 B07 C02 D06 E01 E03 F08 G02 H06 J06 J06 J06 J08 K05 K07 L06 L08 M07 S05	No No No No No No Yes Yes Yes Yes Yes Yes Yes Yes	<pre>Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which of the following could be the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59. About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters? Given 0 f a paper clip, about how many lengths of the clip is the length of this line?</pre>	79 54 68 53 82 58 58 58 58 58 58 58 58 58 58 58 58 58	0.9 1.4 1.8 1.7 1.3 1.5 1.8 2.1 2.1 3.6 2.8 2.5 1.9 2.6 3.3 2.8 2.3	$\begin{array}{c} 81\\ 54\\ 65\\ 54\\ 86\\ 54\\ 39\\ 56\\ 79\\ 56\\ 79\\ 56\\ 79\\ 51\\ 44\\ 61\\ \end{array}$	$\begin{array}{c} 1.2\\ 2.2\\ 2.6\\ 2.1\\ 2.0\\ 1.7\\ 2.2\\ 2.7\\ 2.6\\ 4.6\\ 3.8\\ 3.2\\ 3.0\\ 4.2\\ 4.8\\ 4.3\\ 2.9\end{array}$	55 71 51 84 77 56 54 41 53 60 79 21	$\begin{array}{c} 1.3\\ 1.9\\ 2.2\\ 2.6\\ 1.6\\ 2.2\\ 2.8\\ 2.9\\ 3.1\\ 5.1\\ 3.3\\ 3.6\\ 2.4\\ 3.5\\ 3.8\\ 4.3\\ 3.4\end{array}$
T03 U01	Yes Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure?	57 36	2.2 1.9	64 36	2.9 2.6	50 36	3.2 2.6
V05	Yes	How many millimeters are in a meter?	46	2.6	50	3.3	42	3.9

COUNTRY ID=Ireland SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	rall	Boys		Gir	rls
ITEM	REL	LABEL	%	(se)	olo	(se)	0/0	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	 59	2.1	57	2.7	61	2.6
н08	No	Given number pattern, what are the next three numbers?	70	1.5	67	2.1	72	2.1
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	60	2.8	61	3.3	58	4.3
J05	Yes	Determine common operation between four pairs of numbers.	38	2.9	38	3.8	37	4.2
к03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	62	2.7	64	3.4	61	4.0
К0б	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	68	2.4	67	3.2	70	3.7
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	75	2.0	78	3.1	71	2.7
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	66	2.8	72	3.9	60	4.2
M09	Yes	$4 \text{ x} \leq 17$: Which number could go in the blank to make the sentence true?	65	2.6	62	3.9	68	3.8
U04	Yes	Explain operation used to find next number in a pattern.	74	1.9	77	2.3	71	2.6

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

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COUNTRY ID=Ireland SCALE=Whole Numbers

			Ove	Overall		all Boys		rls
ITEM	REL	LABEL	%	(se)	%	(se)	0/0	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	78	1.1	75	1.6	80	1.4
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	82	0.9	81	1.2	82	1.1
B08	No	Which addition expression has the same value as 342?	86	1.1	87	1.3	84	1.5
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	87	1.4	86	1.9	88	1.7
E02	No	Which digit is in the hundreds place in 2345?	78	1.6	78	2.1	77	2.3
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	58	1.5	59	2.1	58	2.3
G03	No	Which of the following is a name for 9740?	93	1.1	91	1.9	95	1.1
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	68	1.8	70	2.2	67	2.5
Н09	No	Which number is equal to eight tens plus nine tens?	76	1.5	77	2.0	75	2.1
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	62	2.5	57	4.0	65	3.2
I04	Yes	What is 3 times 23?	87	1.9	86	2.8	88	2.4
I09	Yes	Subtract: 6000-2369.	82	2.5	79	4.2	85	2.7
J04	Yes	25 x 18 is more than 24 x 18. How much more?	51	3.2	51	3.9	51	5.4
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	83	2.3	85	2.7	80	3.6
K02	Yes	Add: 6971 + 5291	92	1.3	92	1.7	93	1.8
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	44	3.3	54	4.8	34	4.2
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	60	3.1	62	4.2	58	4.5
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	72	2.9	71	3.8	72	4.1
M08	Yes	Which of the following four-digit numbers is the largest?	88	2.0	87	2.9	88	2.9
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	62	2.1	63	2.7	60	2.8
T02	Yes	Arrange four digits to make the smallest possible whole number.	49	2.3	47	3.1	50	3.0
U05	Yes	Write addition fact as a multiplication fact.	86	1.6	87	2.1	85	2.2
V02	Yes	Write the number that is 1000 more than 56,821.	53	2.3	55	3.2	52	3.2
V03	Yes	What is 5 less than 203?	75	1.9	76	2.5	75	2.7
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	20	1.4	18	2.2	21	2.1

Yes Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know? 20 1.4 18 2.2 21 2.1 Yes Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above. 46 1.7 46 2.4 46 2.4 V04B

Fourth Grade

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

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COUNTRY ID=Israel SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	8	(se)	00	(se)
в05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	70	1.6	67	2.2	72	2.1
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	86	1.1	88	1.7	86	1.6
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	87	1.3	88	1.6	89	1.6
F05	No	Shown temperature chart, when was the highest temperature recorded?	74	2.0	76	2.1	76	2.6
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	68	2.6	66	4.3	72	3.3
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	57	3.1	55	3.9	60	4.8
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	51	3.1	56	5.2	46	4.5
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	51	2.7	50	4.1	53	4.7
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	85	2.7	88	2.9	82	3.6
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	56	2.7	52	5.2	58	3.5
S01	Yes	Given table of frequencies, complete bar graph for same information.	37	2.4	36	3.2	37	2.9
T01A	Yes	Read simple information from bar graph.	76	1.9	81	2.3	74	2.6
T01B	Yes	Read information from bar graph and add to find a total.	40	2.6	40	3.4	42	3.2

COUNTRY ID=Israel SCALE=Fractions and Proportionality

Fourth Grade

			Ove	erall	Boys		s Gir	
ITEM	REL	LABEL	%	(se)	8	(se)	8	(se)
A01 A02 B09 C03 D08 D09 E04 F06 G01 I02 I05 I08 J07 K09 M05 S03 S04 T04B	No No No No No No No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	<pre>In which figure are one-half of the dots black? Determine total number from ratio and one number. What is the sum of 2.5 and 3.8? Which figure shows 2/3 of the square shaded? Subtract: 4.03 - 1.15. Which of the following diagram has three out of every four squares shaded? Which of the following numbers means 7/10? Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains? Given map and legend, how far apart are two cities? Which of the following word expressions is the same as .4? If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make? Shown four diagrams with various fractions shaded, which two represent the same fraction? Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded? 54 marbles are equally divided into 6 bags. How many marbles in 2 bags? Given partly shaded figure, which of the following numbers represents the shaded part? Solve word problem: 10/30 = ?/90. Does 10 girls and 20 boys mean one girl for every two boys? Explain. Does 10 girls and 20 boys mean half of all students are girls? Explain.</pre>	87 59 52 60 51 54 23 62 31 18 60 53 62 34 28 25 57 16	0.8 1.5 2.9 2.25 2.2 2.4 1.5 2.9 2.9 3.5 3.4 2.8 3.2 1.9 2.6 1.7	89 60 55 60 47 51 25 59 36 19 67 58 63 38 22 4 59 16	$\begin{array}{c} 1.2\\ 2.3\\ 3.4\\ 3.1\\ 2.6\\ 3.0\\ 2.6\\ 3.0\\ 2.6\\ 4.5\\ 4.7\\ 5.3\\ 4.0\\ 4.5\\ 2.2\\ 3.5\\ 2.5\\ 2.5\\ 2.9\end{array}$	87 59 50 59 56 57 19 64 25 18 45 63 34 32 27 523 18	1.3 1.6 2.5 3.5 2.8 2.7 3.1 2.5 4.5 5.5 4.5 3.6 4.4 2.8 3.7 2.5
T04B U02 U03A U03B U03C V01	Yes Yes Yes Yes Yes Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain. Write a fraction that is larger than 2/7. Solve word problem using proportions: 3/10 = 9/? Solve word problem using proportions: 1/3 = 9/? Solve two proportions and compare results. Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	16 65 60 43 71 39	1.7 2.6 2.3 2.6 2.1 3.1	16 64 65 49 71 35	1.9 3.3 2.9 3.0 2.9 3.5	18 65 58 39 74 42	2.5 3.2 2.8 3.8 3.1 4.1

COUNTRY ID=Israel SCALE=Geometry

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Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	olo	(se)	%	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	33	2.1	34	2.5	33	2.7
D07	No	Which two figures are congruent?	82	1.5	81	2.2	85	1.9
F09	No	Which of the following must be true of a triangle?	81	1.3	80	2.3	82	1.6
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	33	1.5	32	3.0	35	2.0
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	54	3.2	59	5.1	45	4.5
I06	Yes	Which of the following figures is made with straight sides only?	72	2.7	69	5.0	75	4.6
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	90	1.8	91	2.4	90	2.9
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	68	3.5	67	4.9	70	4.5
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	66	2.6	64	3.6	68	3.9
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	72	2.8	71	3.9	78	3.6
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	80	2.7	81	3.4	80	3.9
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	32	3.0	31	4.7	29	4.3
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	49	2.8	48	4.5	52	4.1
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	55	2.4	52	2.7	61	2.7

COUNTRY ID=Israel SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			0ve	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	%	(se)	8	(se)
A05	No	Which of these figures has the largest area?	81	1.1	82	1.2	79	1.6
B07	No	Word problem: best estimate of 84 \times 57.	58	2.4	59	2.9	57	3.4
C02	No	Find volume of a stack of 5 cubes.	85	1.6	87	2.0	84	2.2
D06	No	How many degrees did temperature rise from minus 3 to 5?	60	2.2	65	2.8	57	2.9
E01	No	Shown calendar, what date is three weeks after December 2?	65	1.8	64	2.6	63	2.2
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	60	2.1	65	2.8	56	2.9
F08	No	Which units would be best to measure the weight (mass) of an egg?	55	2.2	61	2.8	50	2.9
G02	No	Which of the following could be the weight (mass) of an adult?	87	1.2	89	1.9	86	1.8
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	43	2.3	45	3.3	41	2.7
J06	Yes	Which of the following weight (mass) measures is the largest?	50	3.0	59	4.3	41	3.7
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	66	3.2	68	4.4	65	4.5
K05	Yes	About how many centimeters is this picture of a pencil?	66	2.8	68	3.6	64	4.4
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	17	2.5	18	3.7	17	3.8
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	62	2.4	70	3.9	55	3.6
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	27	3.1	25	4.7	31	4.3
M07	Yes	Which of the following would most likely be measured in milliliters?	28	3.1	27	4.6	30	3.9
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	35	2.2	36	3.5	35	3.1
т03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	46	2.7	53	3.1	41	3.3
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	46	2.1	45	3.6	48	3.0
V05	Yes	How many millimeters are in a meter?	41	2.7	47	4.2	36	3.6

COUNTRY ID=Israel SCALE=Patterns, Relations and Functions

Fourth Grade

			Ove	rall	Boys		Gir	cls
ITEM	REL	LABEL	8	(se)	%	(se)	90	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	58	1.8	60	2.7	58	2.4
H08	No	Given number pattern, what are the next three numbers?	63	2.4	64	3.1	65	3.1
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	61	3.0	59	4.1	65	4.6
J05	Yes	Determine common operation between four pairs of numbers.	45	3.5	50	5.0	40	4.1
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	59	3.1	57	3.8	61	4.3
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	56	3.1	60	4.8	55	4.6
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	69	2.8	61	4.6	77	3.6
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	68	3.4	69	4.2	67	4.3
M09	Yes	4 x = <17: Which number could go in the blank to make the sentence true?	77	2.7	76	4.2	77	3.6
U04	Yes	Explain operation used to find next number in a pattern.	46	2.9	48	3.7	46	3.5

COUNTRY ID=Israel SCALE=Whole Numbers

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	71	1.3	70	1.7	74	1.6
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	83	1.0	84	1.5	83	1.4
B08	No	Which addition expression has the same value as 342?	92	0.9	94	1.3	91	1.2
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	86	1.3	86	2.1	87	1.6
E02	No	Which digit is in the hundreds place in 2345?	91	1.3	91	1.8	92	1.6
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	76	1.7	80	2.2	75	2.5
G03	No	Which of the following is a name for 9740?	95	0.8	96	0.9	95	1.1
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	80	1.4	78	2.4	82	2.0
н09	No	Which number is equal to eight tens plus nine tens?	63	1.8	67	2.4	60	2.5
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	52	2.8	54	4.7	50	4.7
I04	Yes	What is 3 times 23?	80	2.6	81	3.7	77	4.3
I09	Yes	Subtract: 6000-2369.	71	3.4	71	4.1	71	5.4
J04	Yes	25 x 18 is more than 24 x 18. How much more?	47	3.4	47	4.5	47	4.0
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	72	2.8	72	4.7	72	3.1
K02	Yes	Add: 6971 + 5291	85	1.8	82	3.2	91	2.4
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	56	2.9	59	4.1	51	4.9
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	78	2.8	79	4.0	78	4.3
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	77	2.2	78	4.2	75	3.5
M08	Yes	Which of the following four-digit numbers is the largest?	91	1.8	91	2.4	91	2.0
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	71	2.1	73	3.0	69	3.0
T02	Yes	Arrange four digits to make the smallest possible whole number.	33	3.0	32	3.3	36	4.0
U05	Yes	Write addition fact as a multiplication fact.	86	1.4	85	1.9	89	2.0
V02	Yes	Write the number that is 1000 more than 56,821.	36	2.1	39	3.3	33	2.8
V03	Yes	What is 5 less than 203?	56	2.5	59	3.8	53	3.1
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	41	2.8	34	3.7	46	3.4
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	53	2.5	51	3.4	57	3.6

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

Fourth Grade

COUNTRY ID=Japan SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	00	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	74	1.0	71	1.4	76	1.4
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	97	0.5	97	0.7	97	0.6
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	86	0.9	85	1.4	87	1.1
F05	No	Shown temperature chart, when was the highest temperature recorded?	88	0.8	87	1.3	89	1.2
К04	Yes	Add points from various rounds of a game to determine who won game and by how much.	65	2.0	68	2.7	62	3.0
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	90	1.5	90	1.9	90	2.0
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	70	2.4	70	3.1	69	3.3
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	89	1.5	91	1.6	87	2.1
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	68	2.0	70	2.8	67	3.2
S01	Yes	Given table of frequencies, complete bar graph for same information.	78	1.3	73	1.6	83	1.7
T01A	Yes	Read simple information from bar graph.	94	0.7	94	1.0	95	1.0
T01B	Yes	Read information from bar graph and add to find a total.	32	1.9	31	2.3	32	2.4

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

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COUNTRY ID=Japan SCALE=Fractions and Proportionality

Fourth	Grade

			Ove	erall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	Ŷ	(se)	8	(se)
A01	No	In which figure are one-half of the dots black?	90	0.6	91	0.8	89	0.8
A02	No	Determine total number from ratio and one number.	62	0.9	63	1.1	61	1.2
B09	No	What is the sum of 2.5 and 3.8?	95	0.6	94	0.9	96	0.7
C03	No	Which figure shows 2/3 of the square shaded?	78	1.2	75	1.7	82	1.2
D08	No	Subtract: 4.03 - 1.15.	87	0.9	87	1.3	88	1.2
D09	No	Which of the following diagram has three out of every four squares shaded?	71	1.2	71	1.7	72	1.5
E04	No	Which of the following numbers means 7/10?	65	1.4	68	1.5	63	2.0
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	49	1.3	48	2.1	49	1.7
G01	No	Given map and legend, how far apart are two cities?	55	1.2	59	1.7	50	1.6
I02	Yes	Which of the following word expressions is the same as .4?	73	1.7	76	2.2	69	2.7
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	45	2.4	50	2.9	39	3.4
I08	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	58	2.1	59	3.3	57	2.9
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	89	1.6	87	2.4	91	1.8
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	49	2.2	47	2.9	51	2.8
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	71	2.3	73	3.1	69	3.0
S03	Yes		40	1.9	36	2.5	43	2.3
S04	Yes	Solve word problem: 10/30 = ?/90.	70	1.5	74	2.0	67	2.2
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	30	1.6	29	2.2	32	2.2
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	30	1.5	33	2.0	28	2.3
U02	Yes	Write a fraction that is larger than 2/7.	78	1.5	79	1.8	78	2.1
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	76	1.2	80	1.7	71	1.8
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	61	1.2	65	1.8	57	1.9
U03C	Yes	Solve two proportions and compare results.	85	1.2	85	1.7	85	1.6
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	41	1.7	38	2.4	45	2.4

COUNTRY ID=Japan SCALE=Geometry

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Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	9	(se)	olo	(se)	olo	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	46	1.2	48	1.5	45	1.9
D07	No	Which two figures are congruent?	92	0.6	92	0.9	93	1.0
F09	No	Which of the following must be true of a triangle?	71	1.2	71	1.6	71	1.6
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	50	1.5	56	1.9	44	2.1
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	77	2.0	82	2.4	72	2.8
I06	Yes	Which of the following figures is made with straight sides only?	90	1.4	90	1.9	91	1.9
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	90	1.6	88	2.3	92	1.9
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	52	2.5	51	3.3	52	3.1
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	56	2.0	56	3.3	57	3.0
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	86	1.4	84	2.2	88	1.9
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	59	2.8	59	3.3	60	3.6
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	61	2.2	63	3.1	58	2.7
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	88	1.0	87	1.5	89	1.1

COUNTRY ID=Japan SCALE=Measurement, Estimation, & Number Sense

			0ve	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	%	(se)	8	(se)
A05 B07 C02 D06 E01 E03 F08 G02 H06 J06 J06 J08 K05 K07 L08 M07 S05 T03 U01	No No No No No No Yes Yes Yes Yes Yes Yes Yes	Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which units would be best to measure the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59. About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters? Given picture of a paper clip, about how many lengths of the clip is the length of this line? Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	95 65 70 73 82 86 88 95 27 94 75 88 27 94 75 88 27 94 75 68 75 68 77	0.4 1.2 1.2 1.1 1.0 0.9 1.0 0.6 1.4 1.0 2.0 1.4 2.2 2.2 2.2 1.5 1.5 1.3	94 67 73 86 87 94 27 93 49 87 49 49 68 57	0.6 1.4 1.8 1.4 1.6 1.3 0.8 1.9 1.8 2.4 2.3 3.4 3.0 2.8 2.1 2.0 1.8	95 67 682 952 682 952 955 888 9565 8241 6758 7598 416758 758	0.5 1.6 1.7 1.5 1.3 1.1 1.1 1.1 1.9 2.7 3.5 2.1 2.0 1.8
V05	Yes Yes	Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	62	1.5	67	1.8	57	2.3

COUNTRY ID=Japan SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	rall	Boys		Girls	
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	74	1.2	75	1.6	74	1.6
H08	No	Given number pattern, what are the next three numbers?	82	0.9	80	1.3	84	1.3
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	88	1.6	88	2.2	88	2.1
J05	Yes	Determine common operation between four pairs of numbers.	50	2.1	51	3.1	49	2.7
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	73	2.0	77	2.3	70	3.3
К06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	86	1.4	86	1.9	85	2.1
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	91	1.2	89	1.7	93	1.5
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	73	2.1	73	2.9	73	2.7
M09	Yes	$4 \text{ x} \leq 17$: Which number could go in the blank to make the sentence true?	89	1.4	91	2.0	87	2.0
U04	Yes	Explain operation used to find next number in a pattern.	58	1.4	56	2.1	59	2.0

COUNTRY ID=Japan SCALE=Whole Numbers

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	양	(se)	90	(se)	8	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	75	0.8	73	1.0	77	1.0
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	90	0.6	91	0.6	89	0.9
B08	No	Which addition expression has the same value as 342?	95	0.5	95	0.7	95	0.6
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	91	0.7	92	0.9	91	1.0
E02	No	Which digit is in the hundreds place in 2345?	94	0.7	94	0.8	94	0.9
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	81	1.0	83	1.3	79	1.4
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	87	0.9	86	1.2	87	1.1
н09	No	Which number is equal to eight tens plus nine tens?	60	1.1	60	1.9	60	1.7
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	71	2.1	69	2.5	73	3.0
I04	Yes	What is 3 times 23?	96	0.8	96	1.4	97	1.1
I09	Yes	Subtract: 6000-2369.	89	1.4	89	2.0	89	1.8
J04	Yes	25 x 18 is more than 24 x 18. How much more?	59	2.6	64	3.2	55	3.3
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	90	1.1	92	1.5	87	2.0
K02	Yes	Add: 6971 + 5291	93	1.1	94	1.6	93	1.7
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	73	2.2	77	2.5	69	2.8
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	89	1.4	90	1.7	88	2.2
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	88	1.5	91	1.7	85	2.2
M08	Yes	Which of the following four-digit numbers is the largest?	94	1.0	94	1.5	95	1.5
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	86	1.2	87	1.6	84	1.6
T02	Yes	Arrange four digits to make the smallest possible whole number.	53	1.8	58	2.3	48	2.4
U05	Yes	Write addition fact as a multiplication fact.	92	0.8	93	1.1	92	1.2
V02	Yes	Write the number that is 1000 more than 56,821.	75	1.6	81	1.7	69	2.3
V03	Yes	What is 5 less than 203?	81	1.2	85	1.7	76	1.7
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	36	1.4	36	1.9	36	2.2
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	81	1.2	82	1.6	81	1.6

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

Fourth Grade

COUNTRY ID=Korea SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	erall	Boys		Gi	rls
ITEM	REL	LABEL	\$	(se)	8	(se)	90	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	70	1.3	68	2.0		1.8
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	98	0.6	98	0.7	98	0.6
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	97	0.6	96	0.9	97	0.7
F05	No	Shown temperature chart, when was the highest temperature recorded?	87	1.0	89	1.5	86	1.5
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	96	1.0	96	1.4	95	1.6
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	53	2.6	55	4.0	50	3.5
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	63	2.7	67	3.3	59	4.0
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	39	3.1	42	3.8	36	3.8
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	84	2.0	92	2.0	77	3.2
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	83	1.9	84	2.6	81	2.9
S01	Yes	Given table of frequencies, complete bar graph for same information.	83	1.5	81	2.2	86	1.8
T01A	Yes	Read simple information from bar graph.	96	0.8	97	0.9	94	1.4
T01B	Yes	Read information from bar graph and add to find a total.	73	2.0	70	2.7	76	2.7

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

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COUNTRY ID=Korea SCALE=Fractions and Proportionality

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A01	No	In which figure are one-half of the dots black?	44	1.0	49	1.4	40	1.6
A02	No	Determine total number from ratio and one number.	46	1.0	46	1.3	45	1.3
B09	No	What is the sum of 2.5 and 3.8?	96	0.5	96	0.9	96	0.7
C03	No	Which figure shows 2/3 of the square shaded?	84	1.2	83	1.7	86	1.5
D08	No	Subtract: 4.03 - 1.15.	89	1.1	89	1.5	88	1.6
D09	No	Which of the following diagram has three out of every four squares shaded?	66	1.3	67	2.0	65	1.9
E04	No	Which of the following numbers means 7/10?	81	1.3	83	1.8	79	1.8
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	39	1.3	42	2.0	35	1.9
G01	No	Given map and legend, how far apart are two cities?	47	1.6	48	2.2	46	2.3
I02	Yes	Which of the following word expressions is the same as .4?	70	2.7	75	3.2	65	4.2
105	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	67	2.5	71	3.4	64	3.2
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	57	2.6	60	4.4	54	3.4
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	92	1.4	92	1.7	92	2.1
к09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	54	2.7	56	3.5	53	3.7
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	67	2.7	71	3.2	63	3.9
S03	Yes	Solve word problem: 96.4-33.2	53	2.0	51	3.0	56	2.6
S04	Yes	Solve word problem: 10/30 = ?/90.	69	1.5	73	2.2	66	2.3
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	43	2.4	41	3.1	45	3.2
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	32	2.0	33	2.5	31	2.8
U02	Yes	Write a fraction that is larger than 2/7.	90	1.3	91	1.6	89	1.9
UO3A	Yes	Solve word problem using proportions: $3/10 = 9/?$	76	1.6	80	2.1	73	2.4
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	64	1.9	70	2.6	58	2.7
U03C		Solve two proportions and compare results.	76	1.6	79	2.2	73	2.0
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	41	2.1	41	2.9	41	2.7

COUNTRY ID=Korea SCALE=Geometry

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Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	90	(se)	%	(se)	olo	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	61	1.4	58	1.9	65	1.8
D07	No	Which two figures are congruent?	93	0.8	95	1.0	92	1.2
F09	No	Which of the following must be true of a triangle?	90	0.9	91	1.1	88	1.4
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	55	1.3	62	2.0	46	2.1
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	68	2.7	73	3.7	64	3.7
I06	Yes	Which of the following figures is made with straight sides only?	83	2.2	82	3.5	85	2.7
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	81	2.1	80	3.2	81	3.2
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	87	1.7	86	2.8	89	2.4
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	38	2.6	39	4.0	38	4.0
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	90	2.0	90	2.6	89	2.8
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	91	1.6	90	2.5	93	1.8
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	31	2.5	31	3.8	31	3.1
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	52	2.7	55	3.8	49	3.7
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	84	1.4	83	2.1	86	1.8

COUNTRY ID=Korea SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			0ve	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	%	(se)	%	(se)
A05	No	Which of these figures has the largest area?	87	0.7	88	1.0	94	0.9
B07	No	Word problem: best estimate of 84 x 57.	68	1.3	70	1.6		1.9
C02	No	Find volume of a stack of 5 cubes.	94	0.8	94	1.2		1.0
D06	No	How many degrees did temperature rise from minus 3 to 5?	61	1.6	70	2.0	53	2.5
E01	No	Shown calendar, what date is three weeks after December 2?	77	1.3	82	1.7	73	2.0
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	95	0.7	95	0.9	95	0.9
F08	No	Which units would be best to measure the weight (mass) of an egg?	82	1.3	83	1.7	81	1.8
G02	No	Which of the following could be the weight (mass) of an adult?	90	0.9	89	1.7	91	1.3
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	41	1.8	45	2.2	38	2.4
J06	Yes	Which of the following weight (mass) measures is the largest?	90	1.6	92	2.1	87	2.7
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	78	2.3	80	3.0	76	3.7
K05	Yes	About how many centimeters is this picture of a pencil?	85	2.0	88	2.6	83	2.7
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	38	3.0	41	4.0	36	3.9
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	67	2.5	69	3.5	65	3.8
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	65	2.1	62	3.7	69	3.3
M07	Yes	Which of the following would most likely be measured in milliliters?	31	2.5	28	3.6	33	3.5
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	67	2.0	67	2.8	67	2.9
T03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	74	1.9	78	2.5	69	2.8
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	74	2.0	69	2.5	79	2.2
V05	Yes	How many millimeters are in a meter?	52	1.9	57	2.5	47	2.8

COUNTRY ID=Korea SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	rall	Bo	ys	Gii	rls
ITEM	REL	LABEL	%	(se)	olo	(se)	90	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	72	1.4	72	2.1	72	2.0
H08	No	Given number pattern, what are the next three numbers?	89	1.0	87	1.5	91	1.4
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	86	1.9	85	3.3	86	2.3
J05	Yes	Determine common operation between four pairs of numbers.	70	2.2	74	3.2	67	4.1
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	80	2.2	79	2.8	80	3.3
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	87	1.7	89	2.6	86	2.6
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	93	1.4	92	2.1	93	1.8
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	86	1.8	88	2.7	85	2.6
M09	Yes	4 x = <17: Which number could go in the blank to make the sentence true?	93	1.4	94	1.9	93	2.2
U04	Yes	Explain operation used to find next number in a pattern.	74	1.7	76	2.1	71	2.5

COUNTRY ID=Korea SCALE=Whole Numbers

			Ove	erall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	8	(se)	8	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	80	0.7	80	1.1	80	1.3
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	92	0.5	93	0.7	92	0.8
B08	No	Which addition expression has the same value as 342?	97	0.5	98	0.6	96	0.7
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	95	0.7	95	1.0	94	1.0
E02	No	Which digit is in the hundreds place in 2345?	98	0.4	98	0.6	98	0.7
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	77	1.4	81	1.7	72	2.1
G03	No	Which of the following is a name for 9740?	99	0.3	99	0.3	99	0.5
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	92	0.7	93	1.0	90	1.2
Н09	No	Which number is equal to eight tens plus nine tens?	94	0.7	94	0.9	94	1.0
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	82	2.1	81	3.4	82	3.0
I04	Yes	What is 3 times 23?	86	1.8	84	3.0	88	2.2
I09	Yes	Subtract: 6000-2369.	93	1.6	90	2.7	95	1.6
J04	Yes	25 x 18 is more than 24 x 18. How much more?	80	1.8	84	2.6	75	3.1
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	91	1.8	93	2.1	89	2.8
K02	Yes	Add: 6971 + 5291	96	1.2	95	1.6	97	1.6
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	80	2.2	80	3.0	81	2.9
M0 3	Yes	Recognize symmetric property of multiplication: 7 x _ is the same as what?	82	1.9	84	2.6	79	3.3
M06	Yes	John wanted to add $1463 + 319$, but entered $1263 + 319$. How could he fix his mistake?	87	1.6	88	2.1	86	2.5
M08	Yes	Which of the following four-digit numbers is the largest?	97	1.0	96	1.5	97	1.3
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	91	1.1	92	1.7	90	1.4
T02	Yes	Arrange four digits to make the smallest possible whole number.	92	1.1	92	1.6	92	1.5
U05	Yes	Write addition fact as a multiplication fact.	94	0.9	93	1.3	94	1.3
V02	Yes	Write the number that is 1000 more than 56,821.	85	1.4	89	1.7	81	2.3
V03	Yes	What is 5 less than 203?	89	1.3	92	1.5	86	2.0
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	63	2.4	63	2.9	63	2.9
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	66	2.1	68	2.7	63	3.0

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

Fourth Grade

COUNTRY ID=Kuwait SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	erall	Воз	/s	Gir	ls
ITEM	REL	LABEL	90	(se)	8	(se)	00	(se)
в05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	38	1.5				
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	45	1.8				
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	55	1.7				
F05	No	Shown temperature chart, when was the highest temperature recorded?	46	1.7				
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	43	1.6				
к04	Yes	Add points from various rounds of a game to determine who won game and by how much.	10	1.5				
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	7	1.4				
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	31	2.1				
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	58	1.9				
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	8	1.2				
S01	Yes	Given table of frequencies, complete bar graph for same information.	8	0.9				
T01A	Yes	Read simple information from bar graph.	17	1.5				
T01B	Yes	Read information from bar graph and add to find a total.	3	0.8				

COUNTRY ID=Kuwait SCALE=Fractions and Proportionality

Fourth Grade

			Ove	erall	Bo	ys	Gir	ls
ITEM	REL	LABEL	olo	(se)	8	(se)	00	(se)
A01	No	In which figure are one-half of the dots black?	74	0.7				
A02	No	Determine total number from ratio and one number.	17	0.6				
в09	No	What is the sum of 2.5 and 3.8?	37	1.4				
C03	No	Which figure shows 2/3 of the square shaded?	20	1.3				
D08	No	Subtract: 4.03 - 1.15.	42	1.9				
D09	No	Which of the following diagram has three out of every four squares shaded?	36	1.5				
E04	No	Which of the following numbers means 7/10?	19	1.3				
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	53	2.2				
G01	No	Given map and legend, how far apart are two cities?	27	1.2				
I02	Yes	Which of the following word expressions is the same as .4?	22	1.9				
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	23	2.3				
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	38	2.5				
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	21	1.9				
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	20	1.8				
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	32	2.3				
S03	Yes	Solve word problem: 96.4-33.2	5	0.7				
S04	Yes	Solve word problem: 10/30 = ?/90.	11	1.2				
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	7	1.0	•	•	•	•
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	4	0.8				
U02	Yes	Write a fraction that is larger than 2/7.	30	1.7	•	•	•	•
UO3A	Yes	Solve word problem using proportions: 3/10 = 9/?	17	1.2				
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	7	1.1	•	•	•	•
U03C	Yes	Solve two proportions and compare results.	28	2.1	•	•	•	•
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	6	0.8	•	•	•	•

COUNTRY ID=Kuwait SCALE=Geometry

Fourth Grade

			Ove	erall	Воу	/S	Gir	cls
ITEM	REL	LABEL	90	(se)	olo	(se)	8	(se)
в06 в	No	Which of these solids has both a flat surface and a curved surface?	31	1.2				
D07	No	Which two figures are congruent?	55	2.0				
F09	No	Which of the following must be true of a triangle?	52	1.4				
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	29	1.2				
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	24	2.1				
106	Yes	Which of the following figures is made with straight sides only?	37	2.8				
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	75	1.9				
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	21	2.4				
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	49	2.1				
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	35	2.3				
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	61	2.3				
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	17	1.8				
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	14	1.5				
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	7	1.0		•		

COUNTRY ID=Kuwait SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Ove	rall	Воз	/S	Gir	ls
ITEM	REL	LABEL	8	(se)	%	(se)	8	(se)
A05	No	Which of these figures has the largest area?	63	0.8				
B07	No	Word problem: best estimate of 84 x 57.	34	1.2				
C02	No	Find volume of a stack of 5 cubes.	42	1.2				
D06	No	How many degrees did temperature rise from minus 3 to 5?	45	1.5				
E01	No	Shown calendar, what date is three weeks after December 2?	33	1.7				
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	34	1.2				
F08	No	Which units would be best to measure the weight (mass) of an egg?	38	1.2				
G02	No	Which of the following could be the weight (mass) of an adult?	65	1.0				
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	50	1.6				
J06	Yes	Which of the following weight (mass) measures is the largest?	67	2.3				
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	20	1.9				
K05	Yes	About how many centimeters is this picture of a pencil?	67	2.6				
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	22	1.9				
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	45	2.7				
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	8	1.2				
M07	Yes	Which of the following would most likely be measured in milliliters?	15	1.6				
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	14	1.4				
т03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	6	1.0				
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	15	1.5				
V05	Yes	How many millimeters are in a meter?	17	1.1	·	•	•	•

COUNTRY ID=Kuwait SCALE=Patterns, Relations and Functions

Fourth Grade

			Ove	erall	Boy	⁄s	Gir	ls
ITEM	REL	LABEL	90	(se)	olo	(se)	00	(se)
G04 H08	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	29 41			•		
I07	Yes		25	1.8		:		
J05 K03	Yes	Determine common operation between four pairs of numbers. Which pair of numbers follows the rule 'multiply by 5'?		2.1 2.3		•		
K06 L04		Extend pattern of figures to determine number of tiles in the sixth figure. Shown pattern of shapes, which of the following is arranged in the same pattern?	41 44			•		
L09 M09	Yes	Given statements about the relative ages of three children, which statement must also be true? $4 \text{ x} \leq 17$: Which number could go in the blank to make the sentence true?	43 43	2.7		·		
U04		Explain operation used to find next number in a pattern.		1.0				

COUNTRY ID=Kuwait SCALE=Whole Numbers

Fourth Grade

			Ove	erall	Boy	ys	Gir	ls
ITEM	REL	LABEL	olo	(se)	%	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	38	1.1				
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	53	1.2				
B08	No	Which addition expression has the same value as 342?	59	1.1				
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	40	1.6				
E02	No	Which digit is in the hundreds place in 2345?	65	1.6				
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	61	1.4				
G03	No	Which of the following is a name for 9740?	77	1.3				
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	57	1.9				
H09	No	Which number is equal to eight tens plus nine tens?	34	1.2				
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	34	2.6				
I04	Yes	What is 3 times 23?	12	1.6				
I09	Yes	Subtract: 6000-2369.	46	2.4				
J04	Yes	25 x 18 is more than 24 x 18. How much more?	19	1.6				
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	38	2.2				
K02	Yes	Add: 6971 + 5291	72	2.0				
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	24	1.7				
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	41	2.4				
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	38	1.8				
M08	Yes	Which of the following four-digit numbers is the largest?	47	1.7				
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	27	1.5				
т02	Yes	Arrange four digits to make the smallest possible whole number.	10	1.0				
U05	Yes	Write addition fact as a multiplication fact.	42	1.9				
V02	Yes	Write the number that is 1000 more than 56,821.	13	1.1				
V03	Yes	What is 5 less than 203?	10	1.0				
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	1	0.4				
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	5	0.7	•			

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

May 11, 1998 90

COUNTRY ID=Latvia (LSS) SCALE=Data Rep., Analysis and Probability

May 11, 1998 91

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	olo	(se)	90	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	69	1.6	67	2.1	72	
C01 D05	No No	Shown graph (20 unit increments), which class collected 45 bottles? Shown bar graph, which two classes collected exactly 80 bottles?	74 65	2.0 1.8	73 59	2.6 2.4	74 70	2.3 2.4
F05	No	Shown temperature chart, when was the highest temperature recorded?	59	2.4	58	3.2	60	2.8
J03 K04	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined? Add points from various rounds of a game to determine who won game and by how much.	70 43	2.6	65 41	4.0 4.9	77 45	3.8 4.7
L01		Given graph showing numbers of trees, how many trees does each symbol represent?	31	3.8	31	4.9	31	4.5
L02	Yes		42	3.5	42	4.3	42	4.5
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	79	3.0	79	4.1	78	3.8
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	59	3.3	56	4.9	61	4.3
S01	Yes		31	3.1	29	3.5	33	4.0
T01A	Yes	Read simple information from bar graph.	63	2.6	65	3.0	61	3.7
T01B	Yes	Read information from bar graph and add to find a total.	33	2.7	35	3.5	31	3.3

COUNTRY ID=Latvia (LSS) SCALE=Fractions and Proportionality

Fourth	Grade
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			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	%	(se)	olo	(se)	8	(se)
A01	No	In which figure are one-half of the dots black?	84	1.1	82	1.6	87	1.4
A02	No	Determine total number from ratio and one number.	47	1.6	46	1.9	47	1.9
B09	No	What is the sum of 2.5 and 3.8?	59	2.3	58	2.8	60	2.8
C03	No	Which figure shows 2/3 of the square shaded?	51	2.5	51	3.1	51	3.1
D08	No	Subtract: 4.03 - 1.15.	64	2.2	61	2.8	67	2.8
D09	No	Which of the following diagram has three out of every four squares shaded?	43	2.5	45	3.4	42	3.2
E04	No	Which of the following numbers means 7/10?	17	2.1	18	2.8	16	2.4
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	68	1.9	67	2.5	68	2.4
102	Yes	Which of the following word expressions is the same as .4?	17	3.0	19	4.1	16	3.7
105	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	53	3.3	57	4.4	50	4.7
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	53	3.2	48	4.8	58	3.9
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	48	3.2	46	4.5	51	4.2
К09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	45	3.7	42	5.3	49	5.3
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	30	3.2	33	4.4	25	3.8
S03	Yes	Solve word problem: 96.4-33.2	18	2.4	14	2.7	21	3.1
S04	Yes	Solve word problem: 10/30 = ?/90.	46	2.4	46	3.3	46	3.7
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	9	1.5	8	1.8	10	2.2
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	6	1.2	5	1.6	7	2.0
U02	Yes	Write a fraction that is larger than 2/7.	45	3.0	47	3.9	43	3.4
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	60	2.5	65	3.3	55	3.2
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	47	2.7	48	3.3	46	3.8
U03C	Yes	Solve two proportions and compare results.	66	2.5	62	3.3	69	3.4
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	24	2.5	24	3.2	23	3.2

COUNTRY ID=Latvia (LSS) SCALE=Geometry

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	00	(se)	8	(se)	\$	(se)
в06	No	Which of these solids has both a flat surface and a curved surface?	44	2.3	47	2.9	40	3.0
D07	No	Which two figures are congruent?	92	0.9	90	1.4	95	1.0
F09	No	Which of the following must be true of a triangle?	74	1.6	69	2.0	79	2.1
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	66	2.0	69	2.5	63	2.7
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	63	3.4	68	4.5	59	4.7
I06	Yes	Which of the following figures is made with straight sides only?	88	2.2	87	3.0	89	3.0
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	89	2.1	85	3.2	93	2.5
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	62	3.8	63	4.2	62	5.0
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	56	3.5	56	4.8	57	4.1
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	75	3.1	71	3.8	79	4.2
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	85	2.1	84	3.2	86	2.8
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	32	2.8	29	3.3	35	4.4
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	42	3.4	39	4.8	46	4.8
т05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	60	2.9	53	4.1	67	3.4

COUNTRY ID=Latvia (LSS) SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	90	(se)	8	(se)	olo	(se)
A05	No	Which of these figures has the largest area?	92	0.7	92	0.9	92	0.8
B07	No	Word problem: best estimate of 84 x 57.	36	1.9	37	2.7	35	2.3
C02	No	Find volume of a stack of 5 cubes.	76	1.6	76	2.4	76	2.1
D06	No	How many degrees did temperature rise from minus 3 to 5?	66	2.1	65	2.9	66	2.7
E01	No	Shown calendar, what date is three weeks after December 2?	71	1.7	67	2.3	75	2.1
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	55	2.0	56	2.9	55	2.7
F08	No	Which units would be best to measure the weight (mass) of an egg?	71	2.0	71	2.6	71	2.7
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	75	2.0	74	2.8	76	2.4
J06	Yes	Which of the following weight (mass) measures is the largest?	77	2.7	75	3.7	79	4.0
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	39	3.3	37	4.7	41	5.2
K05	Yes	About how many centimeters is this picture of a pencil?	85	2.7	87	3.1	83	3.6
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	24	3.1	23	4.0	24	4.4
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	57	3.3	56	4.8	57	3.8
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	48	3.6	51	4.7	45	5.1
M07	Yes	Which of the following would most likely be measured in milliliters?	42	3.0	40	4.9	45	3.9
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	37	2.1	35	3.3	38	3.2
т03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	59	2.4	67	3.2	52	3.6
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	40	2.9	37	3.7	44	3.8
V05	Yes	How many millimeters are in a meter?	65	2.2	64	3.3	66	3.1

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

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COUNTRY ID=Latvia (LSS) SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	Overall		ys	Gi	rls
ITEM	REL	LABEL	00	(se)	%	(se)	00	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	52	2.1	51	2.9	54	2.5
H08	No	Given number pattern, what are the next three numbers?	69	1.9	65	2.8	73	2.3
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	72	2.7	70	4.3	74	4.0
J05	Yes	Determine common operation between four pairs of numbers.	53	3.4	52	4.6	55	4.6
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	53	3.3	56	4.8	50	5.3
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	72	3.0	72	4.2	72	4.3
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	82	2.7	79	4.0	86	3.4
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	50	3.3	49	4.7	51	4.7
M09	Yes	4 x = <17: Which number could go in the blank to make the sentence true?	79	3.1	76	4.8	83	3.4
U04	Yes	Explain operation used to find next number in a pattern.	70	2.5	70	3.4	71	3.3

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

May 11, 1998 95

COUNTRY ID=Latvia (LSS) SCALE=Whole Numbers

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	olo	(se)	90	(se)	olo	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	68	1.4	67	1.7	70	1.8
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	80	1.3	81	1.4	80	1.7
B08	No	Which addition expression has the same value as 342?	93	0.9	92	1.2	93	1.2
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	79	1.6	76	2.2	82	2.1
E02	No	Which digit is in the hundreds place in 2345?	78	1.9	77	2.3	79	2.4
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	75	1.6	74	2.4	77	2.2
G03	No	Which of the following is a name for 9740?	94	0.9	93	1.2	95	1.1
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	77	1.9	76	2.4	79	2.3
н09	No	Which number is equal to eight tens plus nine tens?	70	1.8	67	2.4	74	2.5
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	61	3.2	61	4.9	61	4.6
I04	Yes	What is 3 times 23?	95	2.0	91	3.8	98	1.3
I09	Yes	Subtract: 6000-2369.	80	2.8	78	3.6	81	3.5
J04	Yes	25 x 18 is more than 24 x 18. How much more?	42	3.7	41	4.4	44	5.3
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	66	3.4	66	4.7	66	4.6
K02	Yes	Add: 6971 + 5291	85	2.7	83	3.7	88	3.3
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	52	3.2	55	4.5	48	4.9
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	61	3.7	60	5.2	61	4.1
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	78	2.8	79	4.6	77	3.7
M08	Yes	Which of the following four-digit numbers is the largest?	88	2.3	87	3.7	89	3.1
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	63	2.5	62	3.2	64	3.5
T02	Yes	Arrange four digits to make the smallest possible whole number.	38	2.9	37	3.6	40	3.8
U05	Yes	Write addition fact as a multiplication fact.	81	2.0	77	2.7	84	2.7
V02	Yes	Write the number that is 1000 more than 56,821.	50	3.1	51	4.2	49	3.9
V03	Yes	What is 5 less than 203?	59	2.7	60	4.1	59	3.3
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	11	1.6	11	1.9	11	2.3
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	39	2.3	35	3.0	44	3.6

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

Fourth Grade

COUNTRY ID=Netherlands SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	Overall		ys	Gi	rls
ITEM	REL	LABEL	90	(se)	8	(se)	00	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	 76	1.6	73	2.1	79	2.1
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	95	0.8	95	1.3	95	1.1
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	91	1.1	89	1.6	92	1.4
F05	No	Shown temperature chart, when was the highest temperature recorded?	84	1.4	85	2.3	85	1.6
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	88	2.1	92	2.1	84	3.2
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	70	2.9	71	3.5	70	3.9
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	63	3.2	61	4.2	64	4.5
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	74	2.6	78	2.6	71	3.9
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	86	2.4	91	2.7	80	3.5
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	69	3.0	69	4.0	69	4.2
S01	Yes	Given table of frequencies, complete bar graph for same information.	42	2.8	42	3.9	43	3.5
T01A	Yes	Read simple information from bar graph.	94	1.2	94	1.6	93	1.5
T01B	Yes	Read information from bar graph and add to find a total.	56	2.5	54	3.1	58	3.4

COUNTRY ID=Netherlands SCALE=Fractions and Proportionality

Fourth	Grade

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	Ŷ	(se)	8	(se)
A01	No	In which figure are one-half of the dots black?	97	0.5	97	0.6	97	0.6
A02	No	Determine total number from ratio and one number.	83	1.0	83	1.1	82	1.2
B09	No	What is the sum of 2.5 and 3.8?	75	1.6	77	1.9	73	2.2
C03	No	Which figure shows 2/3 of the square shaded?	65	2.4	67	2.9	63	2.7
D08	No	Subtract: 4.03 - 1.15.	82	1.6	83	1.9	81	2.1
D09	No	Which of the following diagram has three out of every four squares shaded?	65	2.0	67	2.8	64	2.6
E04	No	Which of the following numbers means 7/10?	35	1.9	36	2.4	33	2.9
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	64	2.1	65	2.5	64	2.3
G01	No	Given map and legend, how far apart are two cities?	55	1.9	60	2.8	50	2.6
I02	Yes	Which of the following word expressions is the same as .4?	29	3.3	32	4.4	28	4.8
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	67	3.2	69	4.1	65	4.8
I08	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	59	3.2	62	4.0	56	4.8
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	70	2.9	73	4.6	68	4.3
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	51	3.2	49	4.2	54	4.5
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	32	2.7	37	3.9	27	4.0
S03	Yes	Solve word problem: 96.4-33.2	28	2.2	26	2.8	31	3.0
S04	Yes	Solve word problem: 10/30 = ?/90.	73	2.4	76	3.1	70	3.0
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	38	2.3	37	3.0	40	3.6
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	24	2.1	23	3.1	24	2.5
U02	Yes	Write a fraction that is larger than 2/7.	50	2.3	48	2.9	51	3.6
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	81	2.0	83	2.8	78	2.7
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	62	2.5	66	3.5	59	3.0
U03C	Yes	Solve two proportions and compare results.	90	1.8	91	2.0	87	2.6
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	56	3.4	58	3.7	55	4.2

COUNTRY ID=Netherlands SCALE=Geometry

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	%	(se)	00	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	57	1.5	62	2.0	52	2.2
D07	No	Which two figures are congruent?	92	0.9	93	1.3	91	1.2
F09	No	Which of the following must be true of a triangle?	80	1.2	81	1.5	79	1.9
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	46	1.8	52	2.6	41	2.7
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	63	3.2	72	4.2	56	5.0
I06	Yes	Which of the following figures is made with straight sides only?	88	2.2	89	2.5	89	3.3
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	94	1.5	95	2.1	93	2.9
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	40	3.4	41	4.6	40	4.2
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	70	2.3	68	3.4	73	3.4
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	89	2.0	88	2.7	91	2.3
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	97	1.1	97	2.0	98	1.2
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	55	2.9	62	3.8	49	4.1
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	50	3.1	55	4.7	45	4.1
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	71	2.5	71	3.1	71	3.6

COUNTRY ID=Netherlands SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05	No	Which of these figures has the largest area?	84	1.0	86	1.3	82	$1.2 \\ 2.4$
B07	No	Word problem: best estimate of 84 x 57.	58	1.9	60	2.1	57	
C02 D06	No	Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5?	85 76	1.1	88 83	1.3	81 69	1.8
E01	No No	Shown calendar, what date is three weeks after December 2?	81	1.7	83	1.9	79	2.3
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	79	1.5	82	2.1	76	2.3
F08	No	Which units would be best to measure the weight (mass) of an egg?	86	1.3	91	1.6	81	2.0
G02	No	Which of the following could be the weight (mass) of an adult?	89	1.2	91	1.5	87	1.5
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	46	2.4	47	3.2	45	3.1
J06	Yes	Which of the following weight (mass) measures is the largest?	92	1.7	95	1.6	90	2.7
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	66	3.2	75	3.4	60	
K05	Yes	About how many centimeters is this picture of a pencil?	77	2.6	82	3.2	72	4.0
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	35	3.6	32	4.3	39	4.9
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	71	3.0	71	3.8	70	4.3
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	61	3.0	60	4.3	62	4.8
M07	Yes	Which of the following would most likely be measured in milliliters?	27	2.9	28	4.2	27	3.7
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	61	2.1	60	3.3	63	3.1
T03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	72		79	2.1	64	3.6
U01 V05	Yes Yes	Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	76 57	1.7	71 65	2.7	81 49	2.2
	100	now wany with woods are in a wood.	57	2.0	0.0	5.5		5.5

COUNTRY ID=Netherlands SCALE=Patterns, Relations and Functions

Fourth Grade

Overall		Boys		rls
(se)	90	(se)	00	(se)
1.8	56 57	2.1	63 62	2.9
2.3	75	3.7	76	3.9
2.8	39	3.5	34	4.0
2.1 2.3	81 80	3.0 3.6	86 87	2.9 2.6
2.8	67 75	4.0	65 65	4.3 4.5 2.9
(se) 1.8 2.0 2.3 3.2 2.8 2.1 2.3 2.8	se) % 1.8 56 2.0 57 2.3 75 3.2 42 2.8 39 2.1 81 2.3 80 2.8 67 2.9 75	se) % (se) 1.8 56 2.1 2.0 57 2.6 2.3 75 3.7 3.2 42 4.0 2.8 39 3.5 2.1 81 3.0 2.3 80 3.6 2.8 67 4.0 2.9 75 2.8	se) % (se) % 1.8 56 2.1 63 2.0 57 2.6 62 2.3 75 3.7 76 3.2 42 4.0 41 2.8 39 3.5 34 2.1 81 3.0 86 2.3 80 3.6 87 2.8 67 4.0 65 2.9 75 2.8 65

COUNTRY ID=Netherlands SCALE=Whole Numbers

			0ve	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	olo	(se)
A03 A04	No	Find number of pencils given pencils/box and number of boxes.	70 87	1.3 0.8	70 87	1.6 1.2	71 87	1.6 1.1
B08	No No	Find number of small squares given groupings of hundreds, tens, and ones. Which addition expression has the same value as 342?	95	0.8	87 96	0.9	87 95	1.1
C04	NO	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	95	0.9	90	1.0	95	1.2
E02	NO	Which digit is in the hundreds place in 2345?	83	1.6	87	1.7	80	2.3
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	80	1.7	79	2.5	80	1.8
G03	No	Which of the following is a name for 9740?	94	0.9	94	1.1	95	1.0
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	58	2.8	61	3.1	55	3.3
н09	No	Which number is equal to eight tens plus nine tens?	80	1.5	82	2.3	78	1.9
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	70	3.2	69	4.7	72	4.0
I04	Yes	What is 3 times 23?	98	1.1	98	1.3	97	1.7
I09	Yes	Subtract: 6000-2369.	86	2.0	87	2.9	85	3.1
J04	Yes	25 x 18 is more than 24 x 18. How much more?	60	3.0	67	4.4	53	4.2
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	92	1.6	93	2.5	91	2.5
K02	Yes	Add: 6971 + 5291	90	1.6	90	2.1	90	2.7
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	65	3.3	66	3.8	63	4.6
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	66	2.7	68	3.8	65	4.1
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	84	2.5	87	2.8	81	3.4
M08	Yes	Which of the following four-digit numbers is the largest?	93	1.7	96	1.8	91	2.5
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	83	1.9	85	2.3	82	2.5
T02	Yes	Arrange four digits to make the smallest possible whole number.	43	2.4	46	3.2	40	3.4
U05	Yes	Write addition fact as a multiplication fact.	85	1.5	83	2.1	86	1.8
V02	Yes	Write the number that is 1000 more than 56,821.	55	2.5	57	3.4	54	3.5

Yes Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know? Yes Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.

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

Yes What is 5 less than 203?

V03

V04A

V04B

Fourth Grade

70 3.3 19 2.5

64

26

3.4 2.5

64 3.0

67

22

2.6

1.8

62 2.3 59 3.5

COUNTRY ID=New Zealand SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	Overall		ys	Gi	rls
ITEM	REL	LABEL	8	(se)	8	(se)	00	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	66	1.6	57	2.4	74	1.9
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	90 84	1.2	89 80	1.8	90 88	1.4
D05 F05	No No	Shown bar graph, which two classes collected exactly 80 bottles? Shown temperature chart, when was the highest temperature recorded?	73	2.1	71	2.4	88 74	1.8
J03	Yes	Shown temperature chart, when was the rightst temperature recorded: Shown be graph of how Mary spent her day, how much time did she spend on two categories combined?	73	3.0	71	4.3	74	4.1
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	49	3.4	52	4.8	46	4.3
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	45	3.3	43	4.5	46	4.4
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	55	3.6	52	4.6	59	4.5
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	74	2.8	70	4.1	78	3.7
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	38	2.9	33	3.9	42	4.1
S01		Given table of frequencies, complete bar graph for same information.	48	2.8	43	3.7	54	3.6
T01A	Yes	Read simple information from bar graph.	77	2.2	77	3.1	78	2.7
T01B	Yes	Read information from bar graph and add to find a total.	30	2.6	27	3.4	33	3.3

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

May 11, 1998 103

COUNTRY ID=New Zealand SCALE=Fractions and Proportionality

Fourth Grade

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	%	(se)
A01	No	In which figure are one-half of the dots black?	80	1.3	80	1.8	81	1.4
A02	No	Determine total number from ratio and one number.	58	1.4	57	1.9	59	1.6
B09	No	What is the sum of 2.5 and 3.8?	43	2.0	42	2.6	44	2.4
C03	No	Which figure shows 2/3 of the square shaded?	47	2.4	50	3.3	45	2.9
D08	No	Subtract: 4.03 - 1.15.	26	2.1	25	2.7	26	2.6
D09	No	Which of the following diagram has three out of every four squares shaded?	47	2.1	44	2.8	49	2.5
E04	No	Which of the following numbers means 7/10?	32	2.3	32	2.9	33	2.8
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	69	2.0	68	2.8	70	2.5
G01	No	Given map and legend, how far apart are two cities?	38	1.9	43	2.5	33	2.8
102	Yes	Which of the following word expressions is the same as .4?	20	2.5	23	4.3	16	3.1
105	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	48	3.6	45	4.7	51	4.7
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	50	3.8	50	5.2	51	4.9
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	50	3.5	49	4.9	51	4.7
к09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	33	3.3	34	4.9	32	4.2
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	25	2.7	22	3.5	28	4.0
S03	Yes	Solve word problem: 96.4-33.2	13	1.9	11	2.0	16	2.8
S04	Yes	Solve word problem: 10/30 = ?/90.	47	2.6	48	3.9	46	3.0
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	25	2.5	18	2.8	31	3.4
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	15	1.6	13	1.9	17	2.6
U02	Yes	Write a fraction that is larger than 2/7.	51	2.6	48	3.9	55	2.8
UO3A	Yes	Solve word problem using proportions: $3/10 = 9/?$	60	2.4	65	3.0	56	3.4
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	36	2.4	40	3.3	33	3.1
U03C		Solve two proportions and compare results.	75	2.0	71	2.9	80	2.3
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	16	1.7	19	2.6	14	1.9

COUNTRY ID=New Zealand SCALE=Geometry

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	%	(se)	00	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	68	1.8	63	2.6	74	1.9
D07	No	Which two figures are congruent?	86	1.5	84	2.2	87	1.7
F09	No	Which of the following must be true of a triangle?	71	2.1	71	2.9	72	2.5
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	47	1.9	45	2.5	48	2.6
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	52	3.5	54	5.1	50	4.7
I06	Yes	Which of the following figures is made with straight sides only?	81	2.6	79	4.1	83	3.1
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	93	1.6	92	2.5	93	2.4
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	58	3.7	53	4.2	62	4.9
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	70	3.2	62	5.0	79	3.4
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	69	3.2	65	4.8	72	3.6
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	93	1.6	95	2.1	92	2.7
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	32	3.3	28	3.9	36	4.5
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	45	2.6	38	4.3	52	3.9
т05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	64	2.3	62	3.3	65	3.0

COUNTRY ID=New Zealand SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			0ve	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05	No	Which of these figures has the largest area?	77	0.9	76	1.6	78	1.1
B07	No	Word problem: best estimate of 84 x 57.	37	1.5	36	2.3	37	
C02	No	Find volume of a stack of 5 cubes.	53	2.1	54	3.1	53	2.7
D06	No	How many degrees did temperature rise from minus 3 to 5?	43	1.8	44	2.7	41	2.3
E01	No	Shown calendar, what date is three weeks after December 2?	71	1.6	69	2.3	73	2.2
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	69	1.8	70	2.6	68	2.7
F08	No	Which units would be best to measure the weight (mass) of an egg?	56	1.9	57	2.8	55	2.7
G02	No	Which of the following could be the weight (mass) of an adult?	68	2.0	67	2.8	69	2.8
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	37	1.9	37	2.9	36	2.5
J06	Yes	Which of the following weight (mass) measures is the largest?	58	3.3	61	4.4	55	4.6
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	42	3.3	41	4.3	44	4.6
K05	Yes	About how many centimeters is this picture of a pencil?	71	2.9	66	4.8	76	3.4
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	23	2.3	24	3.7	21	3.5
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	42	2.8	42	4.2	42	4.0
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	21	2.6	24	3.7	19	3.6
M07	Yes	Which of the following would most likely be measured in milliliters?	35	3.6	36	3.9	34	5.2
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	45	2.5	42	3.8	47	3.1
T03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	45	2.6	46	3.5	45	3.5
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	37	2.2	32	2.9	41	2.9
V05	Yes	How many millimeters are in a meter?	43	2.8	44	3.7	41	3.7
		-						

COUNTRY ID=New Zealand SCALE=Patterns, Relations and Functions

Fourth Grade

			Ove	Overall		Boys		Girls	
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)	
G04 H08 I07 J05 K03 K06 L04 L09 M09	Yes Yes Yes Yes Yes	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks. Given number pattern, what are the next three numbers? Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining? Determine common operation between four pairs of numbers. Which pair of numbers follows the rule 'multiply by 5'? Extend pattern of figures to determine number of tiles in the sixth figure. Shown pattern of shapes, which of the following is arranged in the same pattern? Given statements about the relative ages of three children, which statement must also be true? 4 x _ <17: Which number could go in the blank to make the sentence true?	 46 74 48 27 42 49 71 64 57	1.9 1.7 3.6 2.9 3.6 3.1 2.6 2.9 2.9	46 69 42 22 39 41 65 64 64	2.5 2.6 5.1 3.4 4.7 4.6 3.9 4.2 4.1	54 32 44 56	2.6 2.4 4.8 4.2 4.4 3.7 3.8 4.4 4.1	
U04	Yes	Explain operation used to find next number in a pattern.	48	2.3	50	3.3	45	3.0	

COUNTRY ID=New Zealand SCALE=Whole Numbers

			Overall		Boys		Girls	
ITEM	REL	LABEL	8	(se)	8	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	45	1.2	41	1.7	49	1.6
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	77	1.0	80	1.4	73	1.6
B08	No	Which addition expression has the same value as 342?	78	1.3	75	2.2	80	2.1
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	68	1.9	68	2.7	68	2.8
E02	No	Which digit is in the hundreds place in 2345?	73	2.3	71	3.0	75	2.8
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	58	1.8	60	2.7	56	2.2
G03	No	Which of the following is a name for 9740?	85	1.5	84	2.0	86	2.3
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	60	2.1	57	2.7	63	3.3
н09	No	Which number is equal to eight tens plus nine tens?	67	1.8	65	2.6	69	2.5
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	47	3.6	47	4.9	46	5.1
I04	Yes	What is 3 times 23?	78	3.0	75	3.9	82	3.5
I09	Yes	Subtract: 6000-2369.	30	3.6	30	4.6	30	4.7
J04	Yes	25 x 18 is more than 24 x 18. How much more?	28	3.0	31	4.2	25	4.1
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	73	3.3	70	4.4	76	4.0
K02	Yes	Add: 6971 + 5291	69	3.0	66	4.5	72	3.8
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	33	3.3	36	4.5	29	4.2
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	59	3.5	55	4.5	63	4.6
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	65	3.3	68	4.4	63	4.6
M08	Yes	Which of the following four-digit numbers is the largest?	83	2.6	79	4.1	86	3.1
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	49	2.3	45	3.1	52	3.1
T02	Yes	Arrange four digits to make the smallest possible whole number.	39	2.3	35	2.7	44	3.3
U05	Yes	Write addition fact as a multiplication fact.	67	2.5	67	3.5	67	2.9
						~ ~	~ -	

V02 Yes Write the number that is 1000 more than 56,821. V03 Yes What is 5 less than 203?

V04A

Yes Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know? Yes Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above. V04B

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

25

44

13

2.5

3.2

2.1

40 3.0

Fourth Grade

32

51

13

2.0

2.7

1.7

40

58 12

42 2.3 44 3.4

3.1

3.6 2.4

COUNTRY ID=Norway SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	8	(se)	%	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	66	1.5	63	2.0	69	2.3
C01 D05	No No	Shown graph (20 unit increments), which class collected 45 bottles? Shown bar graph, which two classes collected exactly 80 bottles?	88 83	1.2 1.6	88 82	1.6 2.2	89 85	1.8 2.1
F05	No	Shown temperature chart, when was the highest temperature recorded?	75	1.7	73	2.2	77	2.5
J03 K04	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined? Add points from various rounds of a game to determine who won game and by how much.	80 38	2.3	80 41	2.9 4.6	81 34	3.9 3.8
L01	Yes Yes	Add points from various founds of a game to determine who won game and by now much. Given graph showing numbers of trees, how many trees does each symbol represent?	40	3.2	43	4.0	37	4.4
L02		Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	58	3.1	56	4.6	- ·	4.3
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	86	2.3	87	2.9	85	3.7
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	48	3.2	44	4.6	50	4.5
S01		Given table of frequencies, complete bar graph for same information.	26	2.5	28	3.7	24	3.1
TO1A			79	1.8	78	2.5	82	2.4
T01B	Yes	Read information from bar graph and add to find a total.	28	1.9	24	2.5	34	2.8

COUNTRY ID=Norway SCALE=Fractions and Proportionality

Fourth Grade	
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			Ove	erall	Boys		Gi	rls
ITEM	REL	LABEL	%	(se)	98	(se)	90	(se)
A01	No	In which figure are one-half of the dots black?	93	0.6	93	0.8	93	0.9
A02	No	Determine total number from ratio and one number.	49	1.3	48	1.6	49	2.0
B09	No	What is the sum of 2.5 and 3.8?	47	1.7	53	2.3	41	2.5
C03	No	Which figure shows 2/3 of the square shaded?	24	1.8	25	2.4	24	2.3
D08	No	Subtract: 4.03 - 1.15.	51	2.6	47	3.1	55	3.4
D09	No	Which of the following diagram has three out of every four squares shaded?	49	1.7	51	2.5	46	2.5
E04	No	Which of the following numbers means 7/10?	15	1.6	17	2.4	12	2.0
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	53	2.0	52	2.6	54	2.7
G01	No	Given map and legend, how far apart are two cities?	45	1.6	50	2.5	39	2.7
102	Yes	Which of the following word expressions is the same as .4?	14	2.4	16	3.2	11	3.6
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	51	3.0	56	4.4	48	5.3
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	55	3.1	51	4.5	61	4.0
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	25	2.8	25	3.6	24	3.9
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	12	1.9	14	2.8	10	2.8
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	19	2.4	25	3.8	15	3.3
S03	Yes	Solve word problem: 96.4-33.2	19	1.8	18	2.7	19	2.5
S04	Yes	Solve word problem: 10/30 = ?/90.	27	2.3	27	2.9	27	3.3
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	24	2.1	21	2.4	27	3.2
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	15	1.7	14	2.4	17	2.7
U02	Yes	Write a fraction that is larger than 2/7.	38	2.6	39	3.1	38	3.5
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	61	2.6	66	3.4	54	3.7
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	43	2.2	46	3.2	37	3.2
U03C	Yes	Solve two proportions and compare results.	73	2.2	76	2.8	70	3.5
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	16	1.8	17	2.3	16	2.4

COUNTRY ID=Norway SCALE=Geometry

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Fourth Grade

			Ove	rall	Во	ys	Gi	rls
ITEM	REL	LABEL	8	(se)	90	(se)	00	(se)
в06	No	Which of these solids has both a flat surface and a curved surface?	34	1.8	37	2.5	31	2.3
D07	No	Which two figures are congruent?	86	1.4	87	2.0	85	2.0
F09	No	Which of the following must be true of a triangle?	73	1.4	68	2.2	77	2.0
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	63	2.0	61	2.6	66	2.6
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	60	3.2	65	4.4	54	4.4
I06	Yes	Which of the following figures is made with straight sides only?	81	2.8	82	3.8	82	3.9
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	78	2.8	79	3.8	77	3.8
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	29	2.8	32	3.4	26	4.2
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	59	3.4	60	4.8	57	4.3
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	63	2.8	59	4.2	67	3.7
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	88	2.1	88	3.1	89	2.8
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	8	1.7	6	2.1	11	2.7
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	41	3.5	38	4.9	43	4.9
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	43	2.7	39	3.5	48	3.7

COUNTRY ID=Norway SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05	No	Which of these figures has the largest area?	74	1.2	75	1.4	73	1.7
B07	No	Word problem: best estimate of 84 x 57.	35	1.5	35	2.4	34	2.3
C02	No	Find volume of a stack of 5 cubes.	51	1.9	52	2.5	50	2.7
D06	No	How many degrees did temperature rise from minus 3 to 5?	65	1.6	69	2.4	58	2.6
E01	No	Shown calendar, what date is three weeks after December 2?	70	1.6	70	2.2	71	2.5
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	63	2.1	66	2.6	57	3.0
F08	No	Which units would be best to measure the weight (mass) of an egg?	68	1.6	70	2.0	66	2.5
G02	No	Which of the following could be the weight (mass) of an adult?	90	1.3	91	1.5	88	2.0
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	57	2.2	56	2.8	59	3.5
J06	Yes	Which of the following weight (mass) measures is the largest?	74	3.1	78	3.9	68	4.8
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	40	2.9	42	4.4	39	4.5
K05	Yes	About how many centimeters is this picture of a pencil?	79	2.4	79	3.0	79	3.1
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	19	2.2	15	3.1	24	3.8
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	49	3.1	49	4.2	48	4.6
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	35	3.6	37	4.7	33	4.8
M07	Yes	Which of the following would most likely be measured in milliliters?	24	2.1	27	3.8	22	3.0
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	60	2.2	61	2.9	58	3.7
T03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	60	2.2	62	3.0	56	3.5
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	52	2.5	53	3.4	52	3.3
V05	Yes	How many millimeters are in a meter?	43	2.1	48	2.9	38	3.2

COUNTRY ID=Norway SCALE=Patterns, Relations and Functions

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	00	(se)	%	(se)	8	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	40	1.7	43	2.4	36	2.8
H08	No	Given number pattern, what are the next three numbers?	49	2.0	44	2.2	53	3.3
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	49	3.1	45	4.4	53	4.2
J05	Yes	Determine common operation between four pairs of numbers.	30	3.5	29	4.6	32	4.4
К03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	46	3.5	44	4.8	48	4.3
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	49	3.4	49	4.3	47	4.9
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	65	3.0	59	4.3	70	4.2
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	66	3.2	67	4.4	65	4.4
M09	Yes	$4 \text{ x} \leq 17$: Which number could go in the blank to make the sentence true?	63	3.3	65	4.2	61	4.3
U04	Yes	Explain operation used to find next number in a pattern.	46	2.2	46	3.3	47	3.5

COUNTRY ID=Norway SCALE=Whole Numbers

						orado		
			0ve	rall	Bo	уs	Giı	ls
ITEM	REL	LABEL	%	(se)	8	(se)	8	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	41	1.2	43	1.7	40	2.1
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	85	1.1	84	1.4	85	1.4
B08	No	Which addition expression has the same value as 342?	88	1.0	89	1.6	88	1.5
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	73	1.6	72	2.3	74	2.2
E02	No	Which digit is in the hundreds place in 2345?	75	1.7	77	2.4	73	2.3
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	65	1.6	66	2.6	64	2.3
G03	No	Which of the following is a name for 9740?	92	1.1	91	1.5	93	1.7
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	81	1.6	81	2.4	81	2.0
н09	No	Which number is equal to eight tens plus nine tens?	74	1.7	75	2.5	71	2.4

I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	43	3.2	43	4.6	43	4.4
I04	Yes	What is 3 times 23?	82	2.6	83	3.1	80	4.2
I09	Yes	Subtract: 6000-2369.	60	3.7	57	4.7	63	4.9
J04	Yes	25 x 18 is more than 24 x 18. How much more?	38	2.8	41	3.5	37	4.6
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	68	2.8	67	3.6	68	4.3
K02	Yes	Add: 6971 + 5291	76	2.7	70	4.1	85	3.1
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	35	2.9	39	4.5	31	4.2
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	64	3.0	62	4.5	67	4.2
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	68	2.9	75	3.1	62	4.6
M08	Yes	Which of the following four-digit numbers is the largest?	87	1.8	84	3.1	88	2.5
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	45	2.2	50	3.0	40	3.6
T02	Yes	Arrange four digits to make the smallest possible whole number.	29	2.2	27	2.7	29	3.4
U05	Yes	Write addition fact as a multiplication fact.	66	2.5	65	3.1	66	4.0
V02	Yes	Write the number that is 1000 more than 56,821.	45	2.5	54	3.2	36	3.6
V03	Yes	What is 5 less than 203?	64	2.8	68	3.3	59	4.0
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	6	1.1	5	1.5	7	1.7
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	41	2.8	38	3.1	43	3.8

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

Fourth Grade

COUNTRY ID=Portugal SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	\$	(se)	8	(se)	8	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	44	1.8	44	2.3	44	2.5
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	67	2.0	65	2.4	69	2.7
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	66	1.8	66	2.6	67	2.3
F05	No	Shown temperature chart, when was the highest temperature recorded?	47	1.7	48	2.4	45	2.5
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	70	2.7	67	3.3	73	3.3
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	34	2.8	37	3.4	31	3.6
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	22	2.7	24	3.3	21	3.8
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	30	2.4	32	3.4	29	3.6
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	62	2.7	67	3.8	57	3.7
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	47	2.6	46	3.9	48	3.8
S01	Yes	Given table of frequencies, complete bar graph for same information.	13	1.3	12	1.6	15	2.3
T01A	Yes	Read simple information from bar graph.	57	2.5	59	3.1	55	2.9
T01B	Yes	Read information from bar graph and add to find a total.	26	2.0	24	2.7	28	2.7

COUNTRY ID=Portugal SCALE=Fractions and Proportionality

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A01	No	In which figure are one-half of the dots black?	81	1.0	82	1.2	79	1.3
A02	No	Determine total number from ratio and one number.	30	1.4	28	1.5	33	1.7
B09	No	What is the sum of 2.5 and 3.8?	77	1.5	75	2.0		1.8
C03	No	Which figure shows 2/3 of the square shaded?	20	1.8	17	2.0	24	2.6
D08	No	Subtract: 4.03 - 1.15.	66	1.9	64	2.3	68	2.4
D09	No	Which of the following diagram has three out of every four squares shaded?	36	1.9	38	2.3	35	2.5
E04	No	Which of the following numbers means 7/10?	33	2.2	33	2.6	33	2.6
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	58	1.6	57	2.2	60	2.4
G01	No	Given map and legend, how far apart are two cities?	29	1.6	33	2.2	24	2.0
I02	Yes	Which of the following word expressions is the same as .4?	90	1.7	91	2.4	90	2.4
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	42	3.2	44	3.9	40	4.2
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	42	2.7	43	3.8	42	3.6
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	16	2.3	16	3.1	15	3.1
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	26	2.6	27	3.8	25	3.2
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	71	2.7	67	4.0	74	3.5
S03	Yes	Solve word problem: 96.4-33.2	15	1.3	12	1.5	18	2.1
S04	Yes	Solve word problem: 10/30 = ?/90.	25	1.7	26	2.5	24	2.3
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	9	1.1	9	1.6	9	1.5
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	3	0.6	3	0.8	2	0.8
U02	Yes	Write a fraction that is larger than 2/7.	28	2.1	29	2.7	28	2.8
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	46	2.2	46	2.9	45	2.7
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	25	2.2	28	2.7	22	2.4
U03C	Yes		62	2.0	63	2.5	60	2.6
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	6	1.1	6	1.6	5	1.3

COUNTRY ID=Portugal SCALE=Geometry

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	90	(se)	olo	(se)	%	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	72	1.4	74	1.9	70	2.2
D07	No	Which two figures are congruent?	77	1.6	80	2.1	75	2.0
F09	No	Which of the following must be true of a triangle?	71	1.6	67	2.3	76	1.7
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	33	1.7	35	2.1	31	2.2
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	34	2.7	39	3.9	30	3.9
I06	Yes	Which of the following figures is made with straight sides only?	41	3.0	49	4.2	33	3.7
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	84	2.2	83	3.2	85	3.1
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	37	2.8	34	3.6	40	4.5
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	58	2.7	54	4.2	61	3.8
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	49	2.8	46	3.8	52	3.4
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	69	2.3	67	3.7	72	3.8
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	62	2.6	61	3.8	63	3.6
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	17	2.2	18	3.0	16	3.2
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	26	2.2	26	2.8	26	3.0

COUNTRY ID=Portugal SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			0ve	rall	Bo	/s	Giı	rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05	No	Which of these figures has the largest area?	83	0.9	83	1.2	83	1.3
B07	No	Word problem: best estimate of 84 x 57.	34	1.6	35	1.9	34	
C02 D06	No No	Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5?	61 49	1.6 1.5	64 53	2.5	58 45	2.0
E01	No	Shown calendar, what date is three weeks after December 2?	50	1.8	49	2.2	51	2.4
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	55	2.1	59	2.7	51	2.6
F08	No	Which units would be best to measure the weight (mass) of an egg?	61	1.7	61	2.3	62	2.4
G02	No	Which of the following could be the weight (mass) of an adult?	72	1.7	74	2.5	70	2.1
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	61	1.9	61	2.4	62	2.7
J06	Yes	Which of the following weight (mass) measures is the largest?	79	2.2	75	3.1	84	3.1
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	34	3.0	35	3.8	33	4.4
K05 K07	Yes	About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	66 18	3.3	67 22	4.0	65 15	4.3
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	43	2.4	41	3.7	44	3.7
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	27	2.5	29	3.7	26	3.5
M07	Yes	Which of the following would most likely be measured in milliliters?	45	3.1	45	4.2	45	4.8
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	29	2.0	29	2.5	29	2.8
T03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	16	1.7	19	2.0	13	2.2
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	43	2.1	43	3.3	42	2.4
V05	Yes	How many millimeters are in a meter?	54	2.2	54	3.0	55	2.8

COUNTRY ID=Portugal SCALE=Patterns, Relations and Functions

Fourth Grade

			Ove	Overall		ys	Giı	cls
ITEM	REL	LABEL	00	(se)	90	(se)	00	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	42	1.9	42	2.2	41	2.5
H08	No	Given number pattern, what are the next three numbers?	47	1.7	48	2.4	45	2.2
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	47	3.1	51	4.1	43	4.5
J05	Yes	Determine common operation between four pairs of numbers.	32	2.6	30	3.2	36	3.6
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	40	2.7	45	3.8	35	3.8
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	56	3.0	64	4.3	49	3.8
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	58	3.0	56	3.9	60	3.9
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	54	2.8	53	3.8	56	3.8
M09	Yes	4 x = <17: Which number could go in the blank to make the sentence true?	65	3.1	66	3.8	63	4.1
U04	Yes	Explain operation used to find next number in a pattern.	30	2.3	31	2.9	29	2.7

COUNTRY ID=Portugal SCALE=Whole Numbers

				r	ourun	Graue		
			Ov	erall	Во	Boys (rls
ITEM	REL	LABEL	8	(se)	8	(se)	90	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	71	1.3	71	1.5	71	1.6
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	70	1.3	71	1.6	68	1.8
B08	No	Which addition expression has the same value as 342?	79	1.4	79	1.9	80	1.9
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	70	1.8	72	1.8	67	2.6
E02	No	Which digit is in the hundreds place in 2345?	71	1.5	70	2.0	73	2.3
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	43	1.7	43	2.5	44	2.2

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Fourth Grade

TIPM	REL	LADEL	6	(se)	6	(se)	70	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	71	1.3	71	1.5	71	1.6
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	70	1.3	71	1.6	68	1.8
B08	No	Which addition expression has the same value as 342?	79	1.4	79	1.9	80	1.9
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	70	1.8	72	1.8	67	2.6
E02	No	Which digit is in the hundreds place in 2345?	71	1.5	70	2.0	73	2.3
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	43	1.7	43	2.5	44	2.2
G03	No	Which of the following is a name for 9740?	88	1.0	90	1.4	86	1.4
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	60	1.7	60	2.2	60	2.2
н09	No	Which number is equal to eight tens plus nine tens?	45	1.8	46	2.3	45	2.3
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	40	3.0	40	3.6	40	4.6
I04	Yes	What is 3 times 23?	80	2.6	78	3.6	83	2.9
I09	Yes	Subtract: 6000-2369.	77	2.3	75	3.5	79	3.8
J04	Yes	25 x 18 is more than 24 x 18. How much more?	38	3.0	37	3.6	38	4.5
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	62	2.5	64	3.4	60	4.1
K02	Yes	Add: 6971 + 5291	86	1.9	83	3.1	89	2.3
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	31	2.9	31	3.9	31	3.9
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	51	2.6	58	3.2	44	3.8
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	48	2.6	45	3.8	50	3.9
M08	Yes	Which of the following four-digit numbers is the largest?	80	1.9	78	3.1	82	2.8
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	60	2.3	59	2.6	60	3.2
т02	Yes	Arrange four digits to make the smallest possible whole number.	31	2.3	29	2.8	34	3.1
U05	Yes	Write addition fact as a multiplication fact.	65	2.3	66	2.9	65	2.9
V02	Yes	Write the number that is 1000 more than 56,821.	32	1.8	35	2.8	29	2.6
V03	Yes	What is 5 less than 203?	34	2.0	37	2.7	31	2.7
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	32	1.9	31	2.6	34	3.3
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	29	1.9	30	2.7	28	2.6

COUNTRY ID=Singapore SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	%	(se)	%	(se)	\$	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	78	1.2	76	1.4	80	1.5
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	96	0.4	95	0.6	97	0.6
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	94	0.5	93	0.7	96	0.6
F05	No	Shown temperature chart, when was the highest temperature recorded?	75	1.1	75	1.4	75	1.5
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	90	1.2	91	1.4	88	2.0
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	71	1.8	72	2.3	71	2.6
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	75	1.8	73	2.5	77	2.5
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	61	1.9	60	2.4	62	2.9
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	70	1.8	69	2.4	72	2.3
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	73	2.0	69	2.9	78	2.2
S01	Yes	Given table of frequencies, complete bar graph for same information.	74	1.6	71	1.9	77	1.9
T01A	Yes	Read simple information from bar graph.	95	0.5	95	0.9	96	0.7
T01B	Yes	Read information from bar graph and add to find a total.	80	1.3	79	1.7	81	1.9

COUNTRY ID=Singapore SCALE=Fractions and Proportionality

Fourth	Grade

			Overall		all Boy		Gi	rls
ITEM	REL	LABEL	%	(se)	Ŷ	(se)	8	(se)
A01	No	In which figure are one-half of the dots black?	87	0.8	88	0.9	87	1.1
A02	No	Determine total number from ratio and one number.	74	1.2	74	1.3	75	1.5
B09	No	What is the sum of 2.5 and 3.8?	94	0.5	93	0.7	95	0.5
C03	No	Which figure shows 2/3 of the square shaded?	90	0.7	91	0.9	89	1.1
D08	No	Subtract: 4.03 - 1.15.	93	0.5	92	0.7	94	0.7
D09	No	Which of the following diagram has three out of every four squares shaded?	71	1.3	69	1.9	74	1.8
E04	No	Which of the following numbers means 7/10?	92	0.6	90	0.9	94	0.7
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	78	1.3	76	1.5	81	1.6
G01	No	Given map and legend, how far apart are two cities?	49	1.4	54	1.7	43	1.8
102	Yes	Which of the following word expressions is the same as .4?	90	1.1	88	1.7	92	1.6
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	60	2.2	61	2.8	59	2.7
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	72	2.1	69	2.6	74	2.8
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	94	1.0	93	1.2	95	1.3
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	76	1.7	76	1.9	76	2.5
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	81	1.7	78	2.3	84	2.1
S03	Yes	Solve word problem: 96.4-33.2	61	1.6	59	2.1	63	1.8
S04	Yes	Solve word problem: 10/30 = ?/90.	63	2.0	63	2.4	63	2.5
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	41	1.9	41	2.1	42	2.6
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	37	2.0	36	2.4	37	2.9
U02	Yes	Write a fraction that is larger than 2/7.	76	1.2	78	1.5	74	1.9
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	74	1.7	76	1.9	71	2.3
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	69	1.8	71	2.0	66	2.4
U03C	Yes	Solve two proportions and compare results.	86	1.0	85	1.5	88	1.3
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	58	2.0	55	2.0	62	2.8

COUNTRY ID=Singapore SCALE=Geometry

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	%	(se)	%	(se)	00	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	56	1.4	54	1.7	57	1.8
D07	No	Which two figures are congruent?	91	0.6	89	0.9	94	0.6
F09	No	Which of the following must be true of a triangle?	81	0.9	79	1.3	84	1.1
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	48	1.3	50	1.4	46	1.8
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	48	2.1	51	2.7	44	3.0
I06	Yes	Which of the following figures is made with straight sides only?	74	1.8	73	2.2	75	2.4
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	92	0.9	92	1.3	91	1.4
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	93	0.9	93	1.3	94	1.3
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	64	1.9	62	2.5	65	2.7
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	85	1.4	83	1.8	86	2.1
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	92	1.2	92	1.6	92	1.5
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	44	2.2	44	2.7	44	3.3
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	56	2.1	50	2.7	62	2.8
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	87	0.9	85	1.3	89	1.3

COUNTRY ID=Singapore SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Overall		Bo	ys Gi		rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05 B07 C02 D06	No No No	Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5?	87 76 84 46	0.6 1.3 1.0 1.3	86 75 84 50	0.8 1.5 1.3 1.5	85	0.8 1.7 1.3 1.9
E01 E03 F08 G02	No No No	Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which units would be best to measure the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult?	72 82 76 83	1.2 1.1 1.2 1.0	72 81 75 82	1.5 1.3 1.4 1.1	72 83 76 84	1.7 1.3 1.6 1.3
H06 J06 J08	No Yes Yes	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59.	88 76 80	0.9 1.7 1.7	87 78 79	1.1 2.1 2.3	90 74 81	1.0 2.7 2.2
K05 K07 L06 L08	Yes Yes Yes Yes	About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace?	91 46 59 25 45	1.0 2.0 2.5 1.9 1.9	89 50 60 28 45	1.5 2.9 2.9 2.8 2.4	93 43 59 22	1.2 3.0 3.3 2.2
M07 S05 T03 U01 V05	Yes Yes Yes Yes Yes	Which of the following would most likely be measured in milliliters? Given picture of a paper clip, about how many lengths of the clip is the length of this line? Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	45 47 51 66 43	1.9 2.0 2.1 1.8 1.9	45 47 55 65 43	2.4 2.3 2.2 1.9 2.2	46 48 46 67 44	2.8 2.6 2.9 2.7 2.3

COUNTRY ID=Singapore SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	Overall		Boys		rls
ITEM	REL	LABEL	8	(se)	%	(se)	8	(se)
G04 H08 I07 J05 K03 K06 L04 L09 M09	Yes Yes Yes Yes Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	77 92 74 54 66 75 85 72 87	1.1 0.6 2.0 2.2 2.0 1.5 1.4 1.9 1.4	77 91 69 58 68 74 82 74 86	$ \begin{array}{c} 1.5\\ 0.9\\ 2.4\\ 2.7\\ 2.3\\ 2.0\\ 2.0\\ 2.5\\ 2.1\\ \end{array} $	75 88 70	1.6 0.8 2.6 3.0 3.2 2.4 2.0 2.8 1.9
U04	Yes	Explain operation used to find next number in a pattern.	79	1.3	77	1.6	80	1.8

COUNTRY ID=Singapore SCALE=Whole Numbers

			Ove	Overall		ys	Gi	rls
ITEM	REL	LABEL	%	(se)	8	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	88	0.6	86	0.7	90	0.8
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	89	0.5	89	0.6	90	0.8
B08	No	Which addition expression has the same value as 342?	96	0.4	96	0.5	96	0.6
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	91	0.7	90	0.8	92	0.9
E02	No	Which digit is in the hundreds place in 2345?	95	0.5	94	0.7	96	0.6
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	85	1.0	85	1.3	86	1.4
G03	No	Which of the following is a name for 9740?	96	0.5	95	0.7	98	0.5
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	89	0.8	89	1.0	88	1.1
Н09	No	Which number is equal to eight tens plus nine tens?	80	1.3	77	1.6	82	1.5
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	62	2.2	57	2.6	68	3.0
I04	Yes	What is 3 times 23?	93	0.9	92	1.2	94	1.4
I09	Yes	Subtract: 6000-2369.	91	1.0	90	1.6	93	1.4
J04	Yes	25 x 18 is more than 24 x 18. How much more?	73	1.7	74	1.9	72	2.7
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	84	1.4	82	2.1	87	1.7
K02	Yes	Add: 6971 + 5291	94	0.8	94	1.1	95	1.0
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	61	2.3	62	2.7	61	3.4
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	78	1.7	76	2.6	79	2.1
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	81	1.8	80	2.6	82	2.3
M08	Yes	Which of the following four-digit numbers is the largest?	91	1.3	89	1.9	94	1.4
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	92	0.7	91	1.0	93	0.9
T02	Yes	Arrange four digits to make the smallest possible whole number.	72	1.5	72	1.9	73	2.0
U05	Yes	Write addition fact as a multiplication fact.	90	0.8	89	1.0	92	1.1
V02	Yes	Write the number that is 1000 more than 56,821.	83	1.4	82	1.6	83	1.8
V03	Yes	What is 5 less than 203?	82	1.2	82	1.6	82	1.7
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	29	1.0	25	1.4	34	1.8
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	70	1.8	68	2.0	73	2.1

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

Fourth Grade

COUNTRY ID=Thailand SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	rall	Bo	ys	Gi	rls
ITEM	REL	LABEL	90	(se)	olo	(se)	olo	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	43	2.4	39	2.5	47	3.0
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	89	1.3	90	1.7	89	1.5
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	86	1.7	81	2.9	91	1.1
F05	No	Shown temperature chart, when was the highest temperature recorded?	51	1.8	53	2.7	50	2.3
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	74	2.8	70	3.8	80	3.1
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	28	3.2	22	3.8	36	4.3
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	48	3.6	45	4.8	49	4.0
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	39	2.8	35	4.4	41	4.0
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	78	3.0	84	3.5	73	4.2
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	44	3.5	33	4.8	54	4.8
S01	Yes	Given table of frequencies, complete bar graph for same information.	38	3.2	35	3.5	42	4.1
T01A	Yes	Read simple information from bar graph.	82	2.1	82	3.2	82	2.7
T01B	Yes	Read information from bar graph and add to find a total.	23	2.2	20	2.5	27	3.0

COUNTRY ID=Thailand SCALE=Fractions and Proportionality

Fourth Grade

			Ove	Overall		oys (rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A01	No	In which figure are one-half of the dots black?	74	1.9	75	2.3	73	2.1
A02	No	Determine total number from ratio and one number.	36	1.2	36	1.5	36	1.7
B09	No	What is the sum of 2.5 and 3.8?	66	2.0	64	2.8	67	
C03	No	Which figure shows 2/3 of the square shaded?	71	2.2	69	2.7	73	2.7
D08	No	Subtract: 4.03 - 1.15.	69	1.9	65	2.5	73	2.4
D09	No	Which of the following diagram has three out of every four squares shaded?	43	1.9	42	3.1	44	2.3
E04	No	Which of the following numbers means 7/10?	37	2.6	36	3.4	39	2.5
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	51	2.0	51	2.4	51	2.7
G01	No	Given map and legend, how far apart are two cities?	26	1.8	27	2.4	26	3.1
I02	Yes	Which of the following word expressions is the same as .4?	26	2.6	26	3.7	26	3.7
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	57	2.7	64	4.2	51	3.8
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	43	4.2	36	5.2	49	5.5
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	75	3.0	75	4.2	76	4.4
к09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	25	2.5	19	3.0	33	4.4
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	35	3.2	38	5.7	32	3.7
S03	Yes	Solve word problem: 96.4-33.2	32	2.7	30	3.1	35	3.2
S04	Yes	Solve word problem: 10/30 = ?/90.	26	3.2	24	2.8	27	5.0
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	4	1.3	3	1.5	6	1.8
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	_4	1.3	3	1.5	_4	1.4
U02	Yes	Write a fraction that is larger than 2/7.	73	2.3	68	3.5	77	2.5
UO3A	Yes	Solve word problem using proportions: 3/10 = 9/?	54	2.7	54	3.6	54	3.0
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	32	2.6	32	4.0	31	3.3
U03C	Yes		66	2.3	64	3.2	68	3.5
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	14	2.1	13	2.2	14	3.3

COUNTRY ID=Thailand SCALE=Geometry

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	\$	(se)	90	(se)	olo	(se)
в06	No	Which of these solids has both a flat surface and a curved surface?	53	2.2	52	2.6	53	3.2
D07	No	Which two figures are congruent?	83	1.6	79	2.5	87	1.9
F09	No	Which of the following must be true of a triangle?	57	1.8	56	2.6	59	2.7
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	17	1.5	18	1.8	16	2.3
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	24	4.2	25	5.4	23	4.7
I06	Yes	Which of the following figures is made with straight sides only?	72	3.2	74	4.0	71	4.5
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	71	2.9	70	4.2	73	4.1
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	66	3.0	65	4.0	66	3.7
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	50	3.3	46	3.9	55	4.8
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	71	2.1	67	3.0	78	3.7
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	80	3.1	80	3.8	80	3.7
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	32	3.2	36	4.5	28	3.8
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	19	3.0	20	4.4	19	3.7
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	46	3.3	45	3.9	48	3.5

COUNTRY ID=Thailand SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Ove	rall	11 Boy		Gi	rls
ITEM	REL	LABEL	%	(se)	%	(se)	8	(se)
A05 B07	No No	Which of these figures has the largest area? Word problem: best estimate of 84 x 57.	93 33	1.0 1.4	93 37	1.5 2.3		0.8 1.6
C02 D06	No No	Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5?	62 34	1.7 2.0	61 35	2.4 2.5	63 33	2.3
E01 E03	No No	Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	54 46	2.6	52 46	2.9	55 45	3.1 2.7
F08 G02 H06	No No No	Which units would be best to measure the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	53 80 29	1.9 1.7 2.3	56 77 30	2.6 2.5 2.7	49 82 28	3.0 1.8 2.5
J06 J08	Yes	Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59.	73 28	2.9	76 27	3.2	69 30	4.8
K05 K07	Yes Yes	About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	84 15	2.9	82 16	4.3	86 14	2.4
L06 L08	Yes Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace?	50 15	3.3 2.2	55 15	4.4 3.4	47 15	4.4 2.9
M07 S05 T03	Yes Yes	Which of the following would most likely be measured in milliliters? Given picture of a paper clip, about how many lengths of the clip is the length of this line?	22 33	2.4 2.8 2.1	22 34 13	3.8	22 33 12	3.9 3.3 3.2
U01 V05	Yes Yes Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	13 22 34	2.1 3.0 3.0	13 24 36	2.3 3.3 3.2	12 21 33	3.2 3.6 4.2

COUNTRY ID=Thailand SCALE=Patterns, Relations and Functions

Fourth Grade

			Ove	rall	Boys		Girl	
ITEM	REL	LABEL	00	(se)	%	(se)	8	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	49	1.9	47	2.5	51	2.7
H08	No	Given number pattern, what are the next three numbers?	53	2.6	52	2.9	55	3.0
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	54	4.1	52	5.4	55	4.8
J05	Yes	Determine common operation between four pairs of numbers.	37	2.5	35	3.5	39	4.1
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	44	2.9	43	3.9	45	4.7
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	59	2.6	56	3.3	62	3.7
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	55	2.8	48	4.1	60	3.8
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	47	3.6	51	5.0	44	3.6
M09	Yes	$4 \text{ x} \le 17$: Which number could go in the blank to make the sentence true?	56	3.1	52	4.8	60	4.6

COUNTRY ID=Thailand SCALE=Whole Numbers

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	74	1.3	70	1.5	78	1.7
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	86	1.2	85	1.3	87	1.3
в08	No	Which addition expression has the same value as 342?	86	1.4	85	1.8	88	1.7
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	73	1.8	71	2.4	75	2.7
E02	No	Which digit is in the hundreds place in 2345?	83	1.7	82	2.2	83	2.0
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	59	1.7	56	2.7	63	2.9
G03	No	Which of the following is a name for 9740?	95	1.0	94	1.4	95	1.0
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	67	2.2	67	2.9	66	2.8
Н09	No	Which number is equal to eight tens plus nine tens?	81	2.0	84	2.4	77	2.7
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	54	2.9	47	3.8	60	4.1
I04	Yes	What is 3 times 23?	54	2.8	58	4.4	50	3.5
I09	Yes	Subtract: 6000-2369.	65	3.0	62	4.8	68	3.8
J04	Yes	25 x 18 is more than 24 x 18. How much more?	33	2.3	28	2.9	40	3.7
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	50	3.3	48	3.6	53	5.2
K02	Yes	Add: 6971 + 5291	91	1.7	92	2.0	89	3.1
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	36	3.4	37	3.9	35	4.0
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	55	3.4	49	4.6	61	4.8
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	53	3.3	48	4.6	57	4.5
M08	Yes	Which of the following four-digit numbers is the largest?	81	2.4	75	3.8	88	2.6
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	59	2.5	59	3.4	58	3.4
T02	Yes	Arrange four digits to make the smallest possible whole number.	19	2.2	17	2.5	22	3.4
U05	Yes	Write addition fact as a multiplication fact.	65	2.2	62	3.5	68	3.1
V02	Yes		32	2.5	32	3.1	32	3.1
V03	Yes	What is 5 less than 203?	39	2.8	36	3.3	42	3.5
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	0	0.1			0	0.2
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	18	2.2	14	2.4	21	2.7

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

Fourth Grade

COUNTRY ID=England SCALE=Data Rep., Analysis and Probability

Fourth Grade

	Ove	erall	Boys		Giı	rls
ITEM REL LABEL	9	(se)	%	(se)	\$	(se)
B05NoMulti-step graph problem: determine Sarah's relative height, then her height from graph.C01NoShown graph (20 unit increments), which class collected 45 bottles?D05NoShown bar graph, which two classes collected exactly 80 bottles?F05NoShown temperature chart, when was the highest temperature recorded?J03YesShown pie graph of how Mary spent her day, how much time did she spend on two categories combined?K04YesAdd points from various rounds of a game to determine who won game and by how much.L01YesGiven graph showing numbers of trees, how many trees does each symbol represent?L02YesGiven bags containing different numbers of marbles, determine greatest chance of choosing red marble.M01YesGiven several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.M02YesMulti-step word problem: add 6 one-digit numbers and subtract from 60.S01YesGiven table of frequencies, complete bar graph for same information.	69 90 84 77 75 45 49 55 78 49	1.3 1.1 1.2 1.3 2.4 2.4 2.6 2.9 1.9 2.8 2.2	 66 90 80 77 74 46 50 53 77 49	2.0 1.5 1.8 2.9 3.2 3.5 4.2 2.8 3.9	71 91 86 78 75 44 49 57 79 49	1.9 1.3 1.8 1.8 3.2 4.4 3.7 3.9 2.5 3.0 3.2

COUNTRY ID=England SCALE=Fractions and Proportionality

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A01	No	In which figure are one-half of the dots black?	81	0.9	84	1.1	79	1.2
A02	No	Determine total number from ratio and one number.	61	1.0	60	1.3	61	1.5
B09	No	What is the sum of 2.5 and 3.8?	51	1.7	48	2.3	54	2.0
C03	No	Which figure shows 2/3 of the square shaded?	47	1.9	46	2.3	48	2.5
D08	No	Subtract: 4.03 - 1.15.	38	1.6	35	2.3	41	2.0
D09	No	Which of the following diagram has three out of every four squares shaded?	53	2.1	52	2.4	54	2.5
E04	No	Which of the following numbers means 7/10?	25	1.9	27	1.9	24	2.8
F06	No	Janis ate $1/2$ cake, Maija ate $1/4$, mother ate $1/4$, how much remains?	74	1.4	74	2.1	75	1.7
G01	No	Given map and legend, how far apart are two cities?	37	1.8	40	2.2	34	2.3
I02	Yes	Which of the following word expressions is the same as .4?	20	3.0	20	3.8	20	3.7
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	51	3.0	59	4.6	44	3.4
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	57	2.8	59	4.1	55	4.1
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	48	3.0	44	3.7	52	4.5
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	35	2.3	33	3.4	38	3.9
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	34	2.9	36	3.6	31	4.1
S03	Yes		22	2.0	20	2.4	24	3.1
S04	Yes		53	1.8	58	2.8	47	2.5
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	30	1.8	28	2.1	32	3.2
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	20	1.3	16	1.7	23	2.2
U02	Yes		55	2.0	53	2.6	57	2.9
UO3A	Yes		60	1.8	65	2.4	55	2.4
U03B	Yes		40	1.6	44	2.9	36	2.5
U03C	Yes		75	1.6	74	2.4	75	2.2
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	20	1.9	23	2.5	17	2.4

COUNTRY ID=England SCALE=Geometry

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Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	%	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	71	1.2	70	1.9	72	2.1
D07	No	Which two figures are congruent?	88	0.9	87	1.5	89	1.3
F09	No	Which of the following must be true of a triangle?	73	1.4	72	1.8	74	1.8
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	51	1.7	53	2.3	50	2.4
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	64	3.0	76	3.6	53	4.2
I06	Yes	Which of the following figures is made with straight sides only?	82	2.1	86	2.9	80	2.9
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	91	1.5	88	2.4	93	1.8
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	84	2.2	81	3.4	88	2.9
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	74	2.6	72	3.4	76	3.9
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	75	2.1	74	2.6	77	3.5
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	94	1.3	91	2.2	97	1.2
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	39	2.6	40	3.8	37	3.8
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	68	2.4	66	3.7	71	2.9
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	76	1.8	75	2.2	78	2.4

COUNTRY ID=England SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			0ve	rall	Boys		s Gir	
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05 B07 C02 D06 E01 E03 F08 G02 H06	No No No No No No No No No No	Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which units would be best to measure the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	83 36 64 60 70 62 62 50 43	1.0 1.6 1.5 1.7 1.5 1.6 1.8 2.1 1.8	84 37 65 60 70 67 67 53 42	$ \begin{array}{c} 1.2\\ 2.2\\ 2.0\\ 2.1\\ 2.0\\ 2.0\\ 2.5\\ 2.4\\ 2.8\end{array} $	83 35 63 60 70 57 57 47 43	1.2 1.9 2.1 2.7 1.7 2.2 2.2 2.2 2.7 2.2
J06 J08 K05 L06 L08 M07 S05 T03 U01 V05	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	Which of the following weight (mass) measures is the larges? Word problem: best estimate of 57 + 62 + 59. About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters? Given picture of a paper clip, about how many lengths of the clip is the length of this line? Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	62 46 68 29 47 27 37 58 49 38 44	2.6 2.9 3.0 3.2 2.9 2.1 2.8 1.9 2.0 1.8 2.2	66 51 67 26 44 37 38 60 53 39 50	3.9 4.3 3.7 3.4 4.8 3.4 2.5 2.6 2.3 3.1	58 40 69 32 50 17 37 56 45 38 38	3.7 4.2 4.2 3.5 2.7 4.2 2.6 2.9 2.9 2.9

COUNTRY ID=England SCALE=Patterns, Relations and Functions

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Fourth Grade

		Ove	rall	Boys		Girls	
REL	LABEL	00	(se)	90	(se)	0/0	(se)
No No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks. Given number pattern, what are the next three numbers?	44 77	1.8	46 77	2.3	43 78	2.7
	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	43 35	2.8	48 38	4.6		3.6
Yes	Which pair of numbers follows the rule 'multiply by 5'?	42	2.6	40	3.6	43	3.8
Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	75	2.3	71	3.5	79	3.0
Yes	$4 \text{ x} \le 17$: Which number could go in the blank to make the sentence true?	56	2.8	55	4.1	57	3.9 3.8 2.6
	No No Yes Yes Yes Yes Yes Yes Yes	No Given number pattern, what are the next three numbers? Yes Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining? Yes Determine common operation between four pairs of numbers. Yes Which pair of numbers follows the rule 'multiply by 5'? Yes Extend pattern of figures to determine number of tiles in the sixth figure. Yes Shown pattern of shapes, which of the following is arranged in the same pattern? Yes Given statements about the relative ages of three children, which statement must also be true? Yes 4 x _ <17: Which number could go in the blank to make the sentence true?	REL LABEL % No Given symbol for number of magazines read in a week, select expression for number read in 6 weeks. 44 No Given number pattern, what are the next three numbers? 77 Yes Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining? 43 Yes Determine common operation between four pairs of numbers. 35 Yes Which pair of numbers follows the rule 'multiply by 5'? 42 Yes Extend pattern of figures to determine number of tiles in the sixth figure. 54 Yes Shown pattern of shapes, which of the following is arranged in the same pattern? 75 Yes Given statements about the relative ages of three children, which statement must also be true? 66 Yes 4 x _ <17:	NoGiven symbol for number of magazines read in a week, select expression for number read in 6 weeks.441.8NoGiven number pattern, what are the next three numbers?771.4YesGiven at 130 page book, and 78 pages read, which expression gives the number of pages remaining?432.8YesDetermine common operation between four pairs of numbers.352.7YesWhich pair of numbers follows the rule 'multiply by 5'?422.6YesExtend pattern of figures to determine number of tiles in the sixth figure.542.7YesShown pattern of shapes, which of the following is arranged in the same pattern?752.3YesGiven statements about the relative ages of three children, which statement must also be true?662.7	REL LABEL% (se)NoGiven symbol for number of magazines read in a week, select expression for number read in 6 weeks.441.846NoGiven number pattern, what are the next three numbers?771.477YesGiven a 130 page book, and 78 pages read, which expression gives the number of pages remaining?432.848YesDetermine common operation between four pairs of numbers.352.738YesWhich pair of numbers follows the rule 'multiply by 5'?422.640YesExtend pattern of figures to determine number of tiles in the sixth figure.542.753YesShown pattern of shapes, which of the following is arranged in the same pattern?752.371YesGiven statements about the relative ages of three children, which statement must also be true?662.769Yes4 x<17:	REL LABEL% (se)% (se)NoGiven symbol for number of magazines read in a week, select expression for number read in 6 weeks.441.8462.3NoGiven number pattern, what are the next three numbers?771.4772.0YesGiven a 130 page book, and 78 pages read, which expression gives the number of pages remaining?432.8484.6YesDetermine common operation between four pairs of numbers.352.7383.6YesWhich pair of numbers follows the rule 'multiply by 5'?422.6403.6YesShown pattern of figures to determine number of tiles in the sixth figure.542.7533.3YesShown pattern of shapes, which of the following is arranged in the same pattern?752.3713.5YesGiven statements about the relative ages of three children, which statement must also be true?662.7693.5Yes4 x _ <17:	REL LABEL% (se)% (se)%NoGiven symbol for number of magazines read in a week, select expression for number read in 6 weeks.441.8462.343NoGiven number pattern, what are the next three numbers?771.4772.078YesGiven a 130 page book, and 78 pages read, which expression gives the number of pages remaining?432.8484.639YesDetermine common operation between four pairs of numbers.352.7383.643YesWhich pair of numbers follows the rule 'multiply by 5'?422.6403.643YesExtend pattern of figures to determine number of tiles in the sixth figure.542.7533.355YesShown pattern of shapes, which of the following is arranged in the same pattern?752.3713.579YesGiven statements about the relative ages of three children, which statement must also be true?662.7693.562Yes4 x _ <17:

COUNTRY ID=England SCALE=Whole Numbers

			Overall		l Boys		Gii	rls
ITEM	REL	LABEL	%	(se)	8	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	47	1.4	45	1.6	48	1.9
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	82	0.9	82	1.2	81	1.3
B08	No	Which addition expression has the same value as 342?	79	1.2	83	1.4	75	1.8
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	74	1.7	76	2.2	72	2.1
E02	No	Which digit is in the hundreds place in 2345?	68	1.4	69	1.7	67	2.7
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	54	2.0	57	2.4	51	3.0
G03	No	Which of the following is a name for 9740?	86	1.0	86	1.5	86	1.6
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	36	1.8	34	2.3	38	2.3
н09	No	Which number is equal to eight tens plus nine tens?	74	1.5	74	1.9	73	2.1
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	48	2.9	47	4.7	48	4.0
I04	Yes	What is 3 times 23?	89	1.7	92	2.2	87	2.4
I09	Yes	Subtract: 6000-2369.	36	2.5	37	4.2	36	3.2
J04	Yes	25 x 18 is more than 24 x 18. How much more?	37	3.0	46	4.0	27	3.9
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	83	1.8	82	2.6	83	2.5
K02	Yes	Add: 6971 + 5291	60	2.4	53	3.1	69	3.6
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	34	2.6	45	3.8	23	3.4
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	61	2.2	65	4.0	58	3.4
M06	Yes	John wanted to add $1463 + 319$, but entered $1263 + 319$. How could he fix his mistake?	70	2.6	71	3.5	68	3.4
M08	Yes	Which of the following four-digit numbers is the largest?	83	2.0	80	3.2	87	2.8
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	49	2.1	56	2.8	42	2.8
T02	Yes	Arrange four digits to make the smallest possible whole number.	35	2.3	37	3.4	33	2.9
U05	Yes	Write addition fact as a multiplication fact.	53	1.9	53	2.3	52	2.7
V02	Yes	Write the number that is 1000 more than 56,821.	36	1.8	42	2.5	29	2.4
V03	Yes	What is 5 less than 203?	61	1.8	66	2.3	57	3.0
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	11	1.3	10	1.8	11	1.8
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	50	2.2	48	2.7	53	2.9

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

Fourth Grade

COUNTRY ID=Scotland SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	erall	Boys		Gi	rls
ITEM	REL	LABEL	0,0	(se)	8	(se)	%	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	69	1.5	65	1.9	73	1.7
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	92	1.0	91	1.3	93	1.1
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	83	1.4	82	1.8	86	1.6
F05	No	Shown temperature chart, when was the highest temperature recorded?	77	1.5	76	2.1	77	1.7
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	74	2.1	72	3.1	76	3.1
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	53	2.3	54	3.8	52	3.1
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	56	2.8	56	3.4	57	4.3
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	55	2.5	49	3.9	61	3.3
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	73	2.9	75	3.6	70	3.7
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	54	2.6	55	3.2	53	3.5
S01	Yes	Given table of frequencies, complete bar graph for same information.	45	2.0	44	2.1	47	3.1
TO1A	Yes	Read simple information from bar graph.	83	1.5	85	1.9	81	2.1
T01B	Yes	Read information from bar graph and add to find a total.	43	2.3	40	3.0	47	2.6

COUNTRY ID=Scotland SCALE=Fractions and Proportionality

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	%	(se)
A01	No	In which figure are one-half of the dots black?	78	1.3	80	1.3	77	1.7
A02	No	Determine total number from ratio and one number.	55	1.2	53	1.4	56	1.5
B09	No	What is the sum of 2.5 and 3.8?	56	1.8	55	1.9	58	2.4
C03	No	Which figure shows 2/3 of the square shaded?	52	1.8	48	2.3	57	2.1
D08	No	Subtract: 4.03 - 1.15.	57	2.0	53	2.5	60	2.5
D09	No	Which of the following diagram has three out of every four squares shaded?	48	1.8	51	2.2	45	2.2
E04	No	Which of the following numbers means 7/10?	31	2.3	34	2.7	29	2.6
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	73	1.6	71	2.2	75	1.8
G01	No	Given map and legend, how far apart are two cities?	36	1.7	40	2.4	32	2.1
I02	Yes	Which of the following word expressions is the same as .4?	28	2.9	24	3.3	31	3.8
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	46	2.5	45	3.2	47	3.9
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	46	3.1	50	4.1	43	4.1
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	66	2.5	64	3.9	67	3.6
к09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	33	2.4	33	3.4	33	3.2
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	34	2.7	34	3.7	35	3.9
S03	Yes	Solve word problem: 96.4-33.2	27	2.2	24	2.7	29	2.9
S04	Yes	Solve word problem: 10/30 = ?/90.	52	2.3	54	2.9	51	3.1
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	26	1.9	23	2.5	28	2.4
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	16	1.7	14	2.5	17	2.0
U02	Yes	Write a fraction that is larger than 2/7.	54	2.2	55	2.8	53	3.1
UO3A	Yes	Solve word problem using proportions: $3/10 = 9/?$	57	2.1	60	2.8	54	2.8
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	45	1.9	48	2.5	41	2.8
U03C	Yes		80	1.5	79	1.9	80	2.4
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	20	1.7	20	2.1	21	2.3

COUNTRY ID=Scotland SCALE=Geometry

Fourth Grade

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	00	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	71	1.5	71	1.7	72	2.0
D07	No	Which two figures are congruent?	88	1.0	87	1.4	89	1.3
F09	No	Which of the following must be true of a triangle?	71	1.7	70	2.3	71	2.0
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	49	1.6	51	2.0	47	2.3
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	61	2.5	63	3.5	57	3.8
106	Yes	Which of the following figures is made with straight sides only?	73	2.5	76	3.2	70	3.8
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	95	1.0	93	1.8	97	1.2
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	90	1.6	89	2.1	90	2.2
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	69	2.5	69	3.3	69	3.3
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	77	2.0	76	2.9	79	3.0
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	95	1.2	94	1.8	96	1.5
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	44	2.8	45	3.6	44	3.8
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	55	2.7	50	3.9	59	3.4
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	76	1.8	74	2.4	77	2.3

COUNTRY ID=Scotland SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Overall		Boys		Giı	cls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05 B07 C02 D06	No No No	Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5?	89 41 65 57	0.8 1.4 1.4 1.6	89 41 68 60	0.9 1.9 1.9 2.2	88 42 62 55	1.0 1.9 2.1 2.2
E01 E03 F08 G02	No No No	Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which units would be best to measure the weight (mass) of an egg? Which of the following could be the weight (mass) of an adult?	75 73 57 50	1.5 1.6 1.8 1.8	74 75 57 50	1.8 2.0 2.0 2.2	76 71 58 51	2.4 2.3 2.7 2.4
H06 J06 J08	No Yes Yes	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59.	45 55 47	1.7 2.7 2.6	46 58 48	2.1 3.4 3.6	45 51 46	2.6 3.7 4.1
K05 K07 L06 L08 M07	Yes Yes Yes Yes Yes	About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters?	69 24 50 23 35	2.9 1.9 2.7 2.6 2.2	75 22 45 26 38	3.8 2.3 3.5 3.5 3.6	64 27 55 20 31	4.0 3.1 3.8 3.6 3.4
S05 T03 U01 V05	Yes Yes Yes Yes	Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	57 54 52 37	1.7 2.0 2.2 2.3	56 57 50 34	2.3 3.1 3.0 2.7	58 50 54 40	2.8 2.7 2.7 3.1

COUNTRY ID=Scotland SCALE=Patterns, Relations and Functions

Fourth Grade

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	8	(se)	olo	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	48	1.4	46	2.2	49	2.0
H08	No	Given number pattern, what are the next three numbers?	78	1.5	77	1.7	78	2.1
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	47	2.9	49	4.1	45	4.4
J05	Yes	Determine common operation between four pairs of numbers.	31	2.6	33	3.3	29	3.5
K03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	49	2.1	49	3.5	49	3.4
K06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	61	2.7	63	3.7	58	4.0
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	73	2.3	69	3.5	78	2.5
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	65	2.1	68	3.4	62	3.3
M09	Yes	4 x = <17: Which number could go in the blank to make the sentence true?	59	2.5	58	3.5	60	3.7
U04	Yes	Explain operation used to find next number in a pattern.	63	2.2	65	2.9	62	2.5

COUNTRY ID=Scotland SCALE=Whole Numbers

	F
	Overall

ITEM	REL	LABEL	%	(se)	olo	(se)	%	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	60	1.4	57	1.5	63	1.5
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	85	0.8	86	1.0	84	1.1
B08	No	Which addition expression has the same value as 342?	80	1.3	81	1.6	80	1.7
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	79	1.3	78	1.8	80	1.8
E02	No	Which digit is in the hundreds place in 2345?	74	1.6	74	1.9	74	2.3
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	53	1.7	53	2.0	52	2.5
G03	No	Which of the following is a name for 9740?	88	1.2	88	1.3	88	1.6
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	39	1.8	39	2.3	40	2.4
Н09	No	Which number is equal to eight tens plus nine tens?	67	1.5	71	1.9	64	2.3
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	56	2.5	53	3.2	59	3.9
I04	Yes	What is 3 times 23?	85	1.7	84	2.8	87	2.5
I09	Yes	Subtract: 6000-2369.	55	2.4	47	3.4	64	3.6
J04	Yes	25 x 18 is more than 24 x 18. How much more?	37	2.6	42	3.7	33	3.2
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	80	2.1	80	3.0	81	2.6
K02	Yes	Add: 6971 + 5291	73	2.5	69	3.4	77	3.4
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	43	2.7	46	3.8	39	4.3
M03	Yes	Recognize symmetric property of multiplication: 7 x _ is the same as what?	58	2.4	59	3.8	58	3.0
M06	Yes	John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?	66	2.4	70	3.2	62	3.2
M08	Yes	Which of the following four-digit numbers is the largest?	85	1.8	87	2.4	84	2.5
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	47	1.9	50	2.7	44	2.7
T02	Yes	Arrange four digits to make the smallest possible whole number.	39	2.3	40	2.9	38	3.2
U05	Yes	Write addition fact as a multiplication fact.	66	2.1	64	2.4	68	2.8
V02	Yes	Write the number that is 1000 more than 56,821.	35	2.1	39	2.6	31	2.9
V03	Yes	What is 5 less than 203?	67	1.5	70	2.0	64	2.4
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	12	1.3	9	1.7	15	2.0
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	48	2.2	44	2.5	52	3.1

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

Girls

Fourth Grade Boys

COUNTRY ID=United States SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	Overall		Boys		rls
ITEM	REL	LABEL	00	(se)	8	(se)	00	(se)
B05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	76	1.0	71 95	1.1	80 97	1.2
C01 D05	No No	Shown graph (20 unit increments), which class collected 45 bottles? Shown bar graph, which two classes collected exactly 80 bottles?	96 93	0.4 0.6	95 92	1.3	97 95	0.5 0.6
F05 J03	No	Shown temperature chart, when was the highest temperature recorded? Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	81 78	1.2 1.8	80 78	1.6 2.6	81 77	1.2
K04	Yes Yes	shown pie graph of how mary spent her day, how much time did she spend on two categories combined? Add points from various rounds of a game to determine who won game and by how much.	53	2.7	52	2.0 4.1	53	2.4 3.2
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	68	2.2	72	2.6	64	2.8
L02 M01	Yes Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble. Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	68 83	1.9 1.5	69 85	2.9 1.9	67 82	3.0 2.1
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	53	1.7	53	3.1	54	2.3
S01 T01A	Yes Yes	Given table of frequencies, complete bar graph for same information. Read simple information from bar graph.	55 90	1.7 0.9	52 90	2.3 1.1	58 89	2.5 1.3
T01B	Yes	Read information from bar graph and add to find a total.	57	1.9	53	2.9	61	1.8

COUNTRY ID=United States SCALE=Fractions and Proportionality

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	%	(se)
A01	No	In which figure are one-half of the dots black?	76	1.3	78	1.4	74	1.3
A02	No	Determine total number from ratio and one number.	53	0.8	51	1.2	55	1.2
B09	No	What is the sum of 2.5 and 3.8?	67	1.8	66	1.9	68	
C03	No	Which figure shows 2/3 of the square shaded?	71	1.8	68	1.7	74	2.1
D08	No	Subtract: 4.03 - 1.15.	70	1.4	69	2.0	70	1.8
D09	No	Which of the following diagram has three out of every four squares shaded?	61	1.2	61	1.7	60	1.6
E04	No	Which of the following numbers means 7/10?	44	2.3	44	2.3	44	2.7
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	59	1.2	57	1.8	61	1.5
G01	No	Given map and legend, how far apart are two cities?	32	1.2	34	2.0	29	1.7
I02	Yes	Which of the following word expressions is the same as .4?	40	2.8	42	3.3	39	3.7
105	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	43	2.0	50	2.5	35	2.8
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	52	1.9	57	2.1	46	2.9
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	80	1.6	79	2.1	82	2.1
к09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	36	2.1	37	4.1	35	2.4
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	32	2.5	29	3.3	35	2.6
S03	Yes	Solve word problem: 96.4-33.2	32	1.8	30	2.1	34	2.2
S04	Yes	Solve word problem: 10/30 = ?/90.	45	1.4	47	2.1	43	2.0
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	25	1.5	22	2.0	28	2.0
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	17	1.5	17	1.7	17	1.9
U02	Yes	Write a fraction that is larger than 2/7.	68	1.4	68	2.1	68	1.4
UO3A	Yes	Solve word problem using proportions: $3/10 = 9/?$	62	1.7	67	2.0	57	2.1
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	44	2.0	48	3.1	40	1.8
U03C	Yes		82	1.2	81	2.0	84	1.0
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	27	1.6	27	2.2	27	2.0

COUNTRY ID=United States SCALE=Geometry

Fourth Grade

			Ove	erall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	00	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	70	1.4	70	1.9	70	1.6
D07	No	Which two figures are congruent?	92	0.6	92	0.9	92	0.9
F09	No	Which of the following must be true of a triangle?	72	0.9	70	1.3	75	1.3
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	45	1.4	45	2.0	46	1.8
I01	Yes	Shown map with city blocks, and given directions to school, locate school on map.	62	2.1	63	2.5	60	3.4
I06	Yes	Which of the following figures is made with straight sides only?	75	1.4	76	2.4	75	2.4
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	91	1.0	90	1.6	91	1.7
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	74	2.0	75	2.2	72	3.5
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	74	1.7	76	2.2	73	2.4
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	83	1.5	84	2.5	83	1.7
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	97	0.5	96	0.9	98	0.5
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	35	1.9	35	2.3	35	2.5
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	56	2.3	55	3.4	56	3.0
т05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	66	1.9	66	1.9	65	2.5

COUNTRY ID=United States SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

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			0ve	rall	all Boys		Gir	
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05 B07 C02 D06 E01 E03 F08 G02 H06 J06 J06 J06 J08 K05 K07 L06 L08 M07 S05	No No No No No No Yes Yes Yes Yes Yes Yes Yes Yes	<pre>Which of these figures has the largest area? Word problem: best estimate of 84 x 57. Find volume of a stack of 5 cubes. How many degrees did temperature rise from minus 3 to 5? Shown calendar, what date is three weeks after December 2? Which of the following numbers would be rounded to 600 when rounded to the nearest hundred? Which of the following could be the weight (mass) of an edg? Which of the following could be the weight (mass) of an adult? Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle? Which of the following weight (mass) measures is the largest? Word problem: best estimate of 57 + 62 + 59. About how many centimeters is this picture of a pencil? A 20 cm wire is formed into a rectangle with width 4cm. What is the length? Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000? Given number of paces in which each of several children cross the room, who had the longest pace? Which of the following would most likely be measured in milliliters? Given of a paper clip, about how many lengths of the clip is the length of this line?</pre>	81 64 65 50 73 82 58 48 50 61 71 55 23 52 10 38 53	0.7 1.5 1.4 1.3 1.1 1.3 1.2 2.3 2.1 2.0 2.2 1.9 2.6 1.5 2.2 1.4	$\begin{array}{c} 82\\ 64\\ 67\\ 53\\ 72\\ 860\\ 48\\ 53\\ 64\\ 53\\ 64\\ 55\\ 23\\ 49\\ 112\\ 42\\ 54\end{array}$	0.8 1.9 1.6 1.4 1.3 1.6 2.0 2.8 2.2 2.9 3.5 2.3 3.5 2.0 3.5 2.0 3.4 1.7	$\begin{array}{c} 80\\ 63\\ 64\\ 46\\ 73\\ 55\\ 47\\ 58\\ 74\\ 58\\ 74\\ 58\\ 74\\ 53\\ 55\\ 10\\ 33\\ 51\end{array}$	0.9 1.7 1.6 1.8 1.5 1.4 1.6 1.7 3.6 2.6 3.1 2.6 3.1 1.8 2.5 2.0
T03 U01 V05	Yes Yes Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start? Given a triangle and large irregular figure, how many triangles will cover the figure? How many millimeters are in a meter?	49 46 21	1.7 1.7 2.1	54 44 24	2.3 2.4 2.1	44 47 19	2.3 2.0 2.7

COUNTRY ID=United States SCALE=Patterns, Relations and Functions

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Fourth Grade

			0ve	rall	Bo	Boys		rls
ITEM	REL	LABEL	90	(se)	8	(se)	0/0	(se)
G04	No	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks.	63	1.7	62	1.8	63	2.2
H08	No	Given number pattern, what are the next three numbers?	87	1.1	86	1.0	88	1.5
I07	Yes	Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining?	71	1.4	71	2.6	72	2.5
J05	Yes	Determine common operation between four pairs of numbers.	32	2.3	36	3.1	29	2.5
к03	Yes	Which pair of numbers follows the rule 'multiply by 5'?	65	2.3	66	2.7	64	2.8
К06	Yes	Extend pattern of figures to determine number of tiles in the sixth figure.	59	1.5	59	2.3	60	2.1
L04	Yes	Shown pattern of shapes, which of the following is arranged in the same pattern?	79	1.9	77	2.2	81	2.4
L09	Yes	Given statements about the relative ages of three children, which statement must also be true?	73	1.7	74	2.4	71	2.4
M09	Yes	4 x = <17: Which number could go in the blank to make the sentence true?	71	2.3	73	2.7	70	2.8
U04	Yes	Explain operation used to find next number in a pattern.	61	2.0	62	3.1	59	2.2

COUNTRY ID=United States SCALE=Whole Numbers

			Overall		Boys		Gi	rls
ITEM	REL	LABEL	99	(se)	8	(se)	90	(se)
A03	No	Find number of pencils given pencils/box and number of boxes.	72	0.9	70	1.2	75	1.0
A04	No	Find number of small squares given groupings of hundreds, tens, and ones.	89	0.5	90	0.7	87	0.7
в08	No	Which addition expression has the same value as 342?	86	0.7	87	1.0	86	0.8
C04	No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	82	0.9	81	1.5	82	1.3
E02	No	Which digit is in the hundreds place in 2345?	89	0.9	89	1.1	89	1.0
F07	No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	75	1.3	75	1.5	74	1.8
G03	No	Which of the following is a name for 9740?	92	0.7	92	1.0	93	0.7
H07	No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	77	1.3	78	1.7	76	1.6
Н09	No	Which number is equal to eight tens plus nine tens?	61	1.3	63	1.9	58	1.8
I03	Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	57	2.2	55	3.0	60	2.7
I04	Yes	What is 3 times 23?	90	1.0	88	1.8	91	1.3
I09	Yes	Subtract: 6000-2369.	71	2.2	68	2.7	74	2.6
J04	Yes	25 x 18 is more than 24 x 18. How much more?	46	2.1	48	2.9	44	2.8
J09	Yes	Given chart with consecutive numbers in rows, extend pattern to find the number in square.	83	1.4	83	1.8	82	2.3
K02	Yes	Add: 6971 + 5291	86	1.1	85	1.5	86	1.9
L07	Yes	In which of the following pairs of numbers is the 2nd number 100 more than the 1st?	45	1.9	47	2.6	43	2.7
M03	Yes	Recognize symmetric property of multiplication: 7 x $_$ is the same as what?	71	1.9	71	2.6	71	2.3
M06	Yes		69	1.8	72	3.1	67	2.5
M08	Yes		89	1.5	88	2.0	89	1.6
S02	Yes	Complete number sentence: 2000+?+30+9=2739.	58	1.6	62	2.2	54	2.1
T02	Yes	Arrange four digits to make the smallest possible whole number.	50	1.8	49	2.5	50	2.6
U05	Yes	Write addition fact as a multiplication fact.	84	1.4	83	2.0	84	1.5
V02	Yes	Write the number that is 1000 more than 56,821.	58	2.1	61	2.3	54	2.9
V03	Yes	What is 5 less than 203?	64	1.8	67	2.4	60	1.9
V04A	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know?	23	1.5	18	1.7	28	2.0
V04B	Yes	Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.	57	1.3	58	1.5	56	1.9

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

Fourth Grade

COUNTRY ID=Slovenia SCALE=Data Rep., Analysis and Probability

Fourth Grade

			Ove	erall	Boys		Gi	rls
ITEM	REL	LABEL	00	(se)	8	(se)	8	(se)
в05	No	Multi-step graph problem: determine Sarah's relative height, then her height from graph.	75	1.4	73	1.7	77	2.2
C01	No	Shown graph (20 unit increments), which class collected 45 bottles?	87	1.3	87	1.7	87	1.7
D05	No	Shown bar graph, which two classes collected exactly 80 bottles?	77	1.6	75	2.3	80	1.9
F05	No	Shown temperature chart, when was the highest temperature recorded?	76	1.6	77	2.4	77	1.9
J03	Yes	Shown pie graph of how Mary spent her day, how much time did she spend on two categories combined?	82	2.3	83	2.5	82	4.0
K04	Yes	Add points from various rounds of a game to determine who won game and by how much.	63	3.0	64	3.7	61	3.9
L01	Yes	Given graph showing numbers of trees, how many trees does each symbol represent?	44	3.6	43	4.7	45	5.3
L02	Yes	Given bags containing different numbers of marbles, determine greatest chance of choosing red marble.	49	2.7	49	3.5	50	4.5
M01	Yes	Given several hexagons with various parts shaded, find greatest chance of stone landing on shaded area.	84	2.2	87	2.7	80	3.9
M02	Yes	Multi-step word problem: add 6 one-digit numbers and subtract from 60.	65	2.7	59	3.9	70	4.1
S01	Yes	Given table of frequencies, complete bar graph for same information.	32	2.2	34	2.9	31	3.0
T01A	Yes	Read simple information from bar graph.	73	2.1	77	2.8	70	2.6
T01B	Yes	Read information from bar graph and add to find a total.	48	2.7	46	3.8	49	2.9

COUNTRY ID=Slovenia SCALE=Fractions and Proportionality

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	%	(se)	%	(se)
A01	No	In which figure are one-half of the dots black?	94	0.5	93	0.5	95	0.6
A02	No	Determine total number from ratio and one number.	61	1.0	61	1.6	61	1.5
в09	No	What is the sum of 2.5 and 3.8?	66	1.8	64	1.9	66	2.7
C03	No	Which figure shows 2/3 of the square shaded?	52	1.7	51	2.6	54	2.4
D08	No	Subtract: 4.03 - 1.15.	68	1.8	65	2.4	71	2.2
D09	No	Which of the following diagram has three out of every four squares shaded?	65	1.9	65	2.4	66	2.7
E04	No	Which of the following numbers means 7/10?	4	0.7	5	1.1	3	0.8
F06	No	Janis ate 1/2 cake, Maija ate 1/4, mother ate 1/4, how much remains?	75	2.0	75	2.7	74	2.8
G01	No	Given map and legend, how far apart are two cities?	49	2.1	55	2.5	43	2.4
I02	Yes	Which of the following word expressions is the same as .4?	16	2.2	16	2.8	15	3.3
I05	Yes	If five tomatoes make 1/2 liter of sauce, how much sauce do 15 tomatoes make?	61	3.2	68	4.5	53	4.3
108	Yes	Shown four diagrams with various fractions shaded, which two represent the same fraction?	64	2.6	67	4.4	60	4.4
J07	Yes	Shown a square divided into 9 squares, 5 of which are shaded, what fraction of the figure is shaded?	47	3.2	48	5.1	47	3.4
K09	Yes	54 marbles are equally divided into 6 bags. How many marbles in 2 bags?	47	3.1	48	4.1	45	4.2
M05	Yes	Given partly shaded figure, which of the following numbers represents the shaded part?	29	3.5	36	4.9	20	3.4
S03	Yes	Solve word problem: 96.4-33.2	33	2.5	32	2.8	35	3.3
S04	Yes	Solve word problem: 10/30 = ?/90.	51	2.2	53	3.4	50	3.5
T04A	Yes	Does 10 girls and 20 boys mean one girl for every two boys? Explain.	24	2.5	20	2.6	27	3.3
T04B	Yes	Does 10 girls and 20 boys mean half of all students are girls? Explain.	12	1.7	11	2.3	13	2.0
U02	Yes	Write a fraction that is larger than 2/7.	39	2.0	37	3.0	41	3.3
U03A	Yes	Solve word problem using proportions: 3/10 = 9/?	68	1.7	74	2.5	62	3.1
U03B	Yes	Solve word problem using proportions: 1/3 = 9/?	61	2.5	63	2.7	60	3.2
U03C	Yes	Solve two proportions and compare results.	82	1.8	82	2.4	81	2.2
V01	Yes	Is 1/3 less than 1/4? Shade appropriate parts of a circle to demonstrate.	26	2.1	22	2.5	30	3.3

COUNTRY ID=Slovenia SCALE=Geometry

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	8	(se)	90	(se)	00	(se)
B06	No	Which of these solids has both a flat surface and a curved surface?	51	1.4	50	2.0	51	2.4
D07	No	Which two figures are congruent?	92	0.7	92	1.3	93	1.0
F09	No	Which of the following must be true of a triangle?	77	1.6	77	2.3	78	2.0
H05	No	Shown diagram of a figure made of blocks, which of the following could be the figure after it is turned?	61	1.5	63	2.0	59	2.4
101	Yes	Shown map with city blocks, and given directions to school, locate school on map.	63	2.6	64	3.6	60	4.1
I06	Yes	Which of the following figures is made with straight sides only?	85	2.1	86	3.2	85	2.9
J01	Yes	Shown hexagon divided into six triangles, identify smaller shape. (recognize triangles)	95	1.2	95	1.4	96	1.9
J02	Yes	Shown several drawings with a line through each, which does not show a line of symmetry?	63	3.5	65	4.4	62	4.5
K01	Yes	Shown figure with overlapping shapes, which number is in square and circle, but not in triangle?	72	2.8	68	4.1	75	3.4
K08	Yes	Which of the following rectangles is not divided into 4 equal parts?	78	2.4	75	3.8	79	3.2
L03	Yes	Shown "game board" graph, which object is located at (2,D)?	93	1.7	92	2.2	94	2.5
L05	Yes	Shown diagram of cube with one edge labeled, how many edges does the cube have?	60	2.7	59	3.7	60	4.0
M04	Yes	Given explanation of how grid works, give the coordinates of a particular point.	46	2.8	41	4.2	51	3.5
T05	Yes	Shown picture of folded paper with shape cut out, draw picture of cut-out when unfolded.	68	2.0	61	3.1	75	2.5

COUNTRY ID=Slovenia SCALE=Measurement, Estimation, & Number Sense

Fourth Grade

			Ove	rall	Boys		Gi	rls
ITEM	REL	LABEL	%	(se)	%	(se)	%	(se)
A05	No	Which of these figures has the largest area?	86	1.1	86	1.3	86	1.6
B07	No	Word problem: best estimate of 84 x 57.	52	1.8	53	2.4		2.4
C02	No	Find volume of a stack of 5 cubes.	74	1.6	75	2.2	74	2.5
D06	No	How many degrees did temperature rise from minus 3 to 5?	59	2.0	69	2.5	50	2.9
E01	No	Shown calendar, what date is three weeks after December 2?	76	1.6	76	1.9	77	2.1
E03	No	Which of the following numbers would be rounded to 600 when rounded to the nearest hundred?	65	1.7	70	2.1	61	2.5
F08	No	Which units would be best to measure the weight (mass) of an egg?	80	1.4	82	2.0	77	2.3
G02	No	Which of the following could be the weight (mass) of an adult?	78	1.7	79	2.3	78	2.4
H06	No	Shown 6 x 4 rectangle, which of the following expressions gives the perimeter of the rectangle?	72	1.8	71	2.4	72	2.1
J06	Yes	Which of the following weight (mass) measures is the largest?	89	2.0	88	2.9	90	2.7
J08	Yes	Word problem: best estimate of 57 + 62 + 59.	45	2.7	49	3.6	41	3.8
K05	Yes	About how many centimeters is this picture of a pencil?	84	2.3	87	3.1	81	3.0
K07	Yes	A 20 cm wire is formed into a rectangle with width 4cm. What is the length?	20	2.3	24	3.8	16	2.9
L06	Yes	Given 1 clothespin = 9.2 g, which is the best estimate of the weight (mass) of 1000?	71	2.6	71	4.0	70	4.1
L08	Yes	Given number of paces in which each of several children cross the room, who had the longest pace?	54	3.2	54	4.2	54	4.9
M07	Yes	Which of the following would most likely be measured in milliliters?	45	3.2	42	3.8	49	4.4
S05	Yes	Given picture of a paper clip, about how many lengths of the clip is the length of this line?	43	2.2	42	3.4	45	3.4
T03	Yes	Mr. Brown talks a 1 hour and 30 minute walk and returns at 7:00. At what time did he start?	59	2.3	64	2.8	54	3.3
U01	Yes	Given a triangle and large irregular figure, how many triangles will cover the figure?	53	2.9	49	3.5	57	3.7
V05	Yes	How many millimeters are in a meter?	70	1.5	70	2.4	70	2.6
	100							=

COUNTRY ID=Slovenia SCALE=Patterns, Relations and Functions

Fourth Grade

			0ve	rall	Boys		Girl	
ITEM	REL	LABEL	8	(se)	%	(se)	8	(se)
G04 H08 I07 J05 K03 K06 L04 L09 M09	Yes Yes Yes Yes Yes	Given symbol for number of magazines read in a week, select expression for number read in 6 weeks. Given number pattern, what are the next three numbers? Given a 130 page book, and 78 pages read, which expression gives the number of pages remaining? Determine common operation between four pairs of numbers. Which pair of numbers follows the rule 'multiply by 5'? Extend pattern of figures to determine number of tiles in the sixth figure. Shown pattern of shapes, which of the following is arranged in the same pattern? Given statements about the relative ages of three children, which statement must also be true? 4 x _ <17: Which number could go in the blank to make the sentence true?	57 75 67 47 61 72 75 72 86	1.5 1.5 2.6 3.1 3.0 2.8 2.7 3.2 1.6	58 71 67 45 60 72 74 72 85	2.5 2.3 4.1 4.3 4.6 3.5 3.9 4.3 2.6	67 49 61 71	2.1 1.8 4.1 4.8 4.0 4.2 3.3 3.9 2.5
U04		Explain operation used to find next number in a pattern.	68	2.0	66	2.0	88 70	3.1

Yes 25 x 18 is more than 24 x 18. How much more?

Yes Write addition fact as a multiplication fact.

Yes Write the number that is 1000 more than 56,821.

Yes Which of the following four-digit numbers is the largest? Yes Complete number sentence: 2000+?+30+9=2739.

Yes Arrange four digits to make the smallest possible whole number.

Yes Given chart with consecutive numbers in rows, extend pattern to find the number in square.

Yes In which of the following pairs of numbers is the 2nd number 100 more than the 1st?

Yes Recognize symmetric property of multiplication: 7 x _ is the same as what? Yes John wanted to add 1463 + 319, but entered 1263 + 319. How could he fix his mistake?

COUNTRY ID=Slovenia SCALE=Whole Numbers

A04

B08

C04

E02

F07

G03

Н07

н09

I03

I04

т09

J04

J09

K02

L07

M03

M06

M08

S02

т02

U05

V02

V03

V04A

V04B

		0ve	Overall		Boys		rls
REL	LABEL	90	(se)	%	(se)	90	(se)
No	Find number of pencils given pencils/box and number of boxes.	80	0.9	78	1.0	82	1.6
No	Find number of small squares given groupings of hundreds, tens, and ones.	82	0.8	83	1.0	82	1.4
No	Which addition expression has the same value as 342?	92	0.8	92	1.0	92	1.2
No	Which expression shows how long it will take to wash 8 windows at 4 minutes/window?	82	1.3	81	2.0	83	1.8
No	Which digit is in the hundreds place in 2345?	67	1.8	68	2.7	65	2.4
No	What number equals 3 ones + 5 tens + 4 hundreds + 60 thousands?	70	1.6	69	2.6	71	2.5
No	Which of the following is a name for 9740?	87	1.2	86	1.3	88	1.7
No	Determine the relative magnitude of three-digit numbers when digits are rearranged.	83	1.3	81	1.6	84	2.0
No	Which number is equal to eight tens plus nine tens?	56	2.1	58	2.6	54	2.5
Yes	Which of the numbers below, when subtracted from 900, yields an answer greater than 300?	72	3.0	70	4.3	74	3.8
Yes	What is 3 times 23?	95	1.3	97	1.7	94	2.0
Yes	Subtract: 6000-2369.	86	1.9	85	2.9	86	3.0

ITEM	REL	LABEI	Ľ				
A03	No	Find	number	of	pencils	given	penc

Yes Add: 6971 + 5291

Yes What is 5 less than 203?

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

4.4

3.8

2.3

4.5

4.8

3.4

2.1

2.6

3.1

1.9

3.1

2.1

3.7

3.0

50

77

90

65

57

82

95

80

29

88

69

81

54

63

Fourth Grade

3.0 52 3.8

76

91

62

59

79

90

83

30

85

71

77

38

52

3.8

2.6

4.0

4.1

3.2

2.0

2.3

2.7

2.1

2.2

2.8

3.7

3.0

51

77

91

63

57

80

92

81

30

86

70

79

45

57

2.8

1.6

3.3

3.2

1.9

1.5

1.6

2.2

1.5

2.0

1.8

2.9

2.4

Yes Arrange 4 digits as addition of 2 2-digit numbers. Which sum is greater? How do you know? Yes Arrange 4 digits as addition of 2 2-digit numbers. Find arrangement with sum greater than either of above.