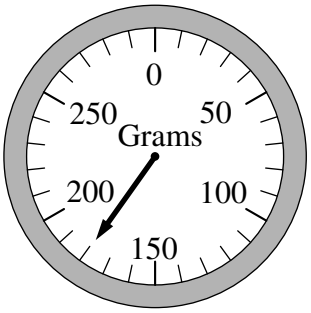
M1. What is the weight (mass) shown on the scale?

A. 153 g

B. 160 g

C. 165 g

D. 180 g

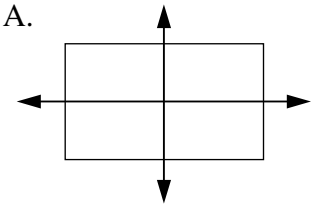


M-1

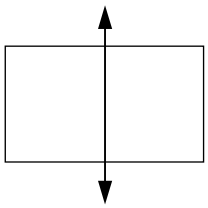
Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	D	Measurement	Knowing	87%	83%	366

M2. Which shows all of the lines of symmetry for a rectangle?

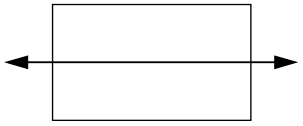
A.



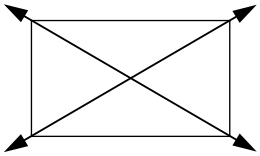
B.



C.



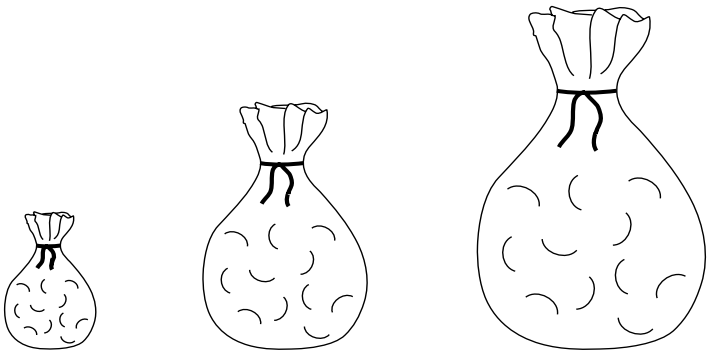
D.



M-2

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	A	Geometry	Knowing	66%	63%	500

M3. There is only one red marble in each of these bags.



10 marbles 100 marbles 1000 marbles

Without looking in the bags, you are to pick a marble out of one of the bags. Which bag would give you the greatest chance of picking the red marble?

A. The bag with 10 marbles

B. The bag with 100 marbles

C. The bag with 1000 marbles

D. All bags would give the same chance.

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	A	Data Representation, Analysis & Probability	Solving Problems	76%	73%	433

M4. Which number is largest?

A. $\frac{4}{5}$

B. $\frac{3}{4}$

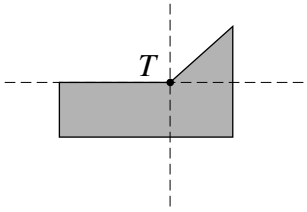
C. $\frac{5}{8}$

D. $\frac{7}{10}$

M-4

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	A	Fractions and Number Sense	Using Complex Procedures	39%	34%	615

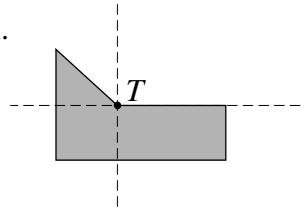
M5. A half-turn about point *T* in the plane is applied to the shaded figure.



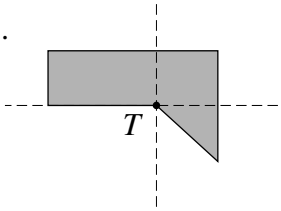
M-5

Which of these shows the result of the half-turn?

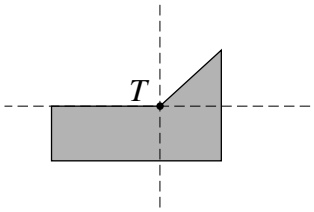
A.



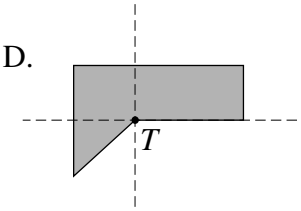
B.



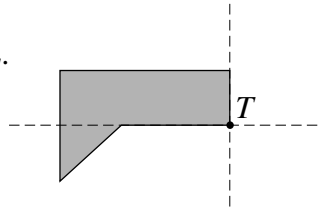
C.



D.



E.



Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	D	Geometry	Performing Routine Procedures	52%	43%	565

M6. A class has 28 students. The ratio of girls to boys is 4 : 3. How many girls are in the class?

Answer:_____

M-6

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	next page	Proportionality	Solving Problems	37%	30%	634

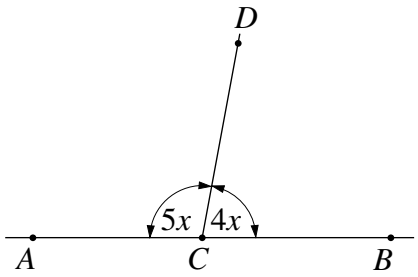
M-6 Coding Guide

M6. A class has 28 students. The ratio of girls to boys is 4 : 3. How many girls are in the class?

Answer:_____

Code	Response
Correct Response	
10	16
Incorrect Response	
70	7
71	12
72	13
73	15
74	21
79	Other incorrect
Nonresponse	
90	Crossed out/erased, illegible, or impossible to interpret.
99	BLANK

M7. In this figure *AB* is a straight line.



M-7

What is the measure, in degrees, of angle *BCD* ?

A. 20

B. 40

C. 50

D. 80

E. 100

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	D	Geometry	Solving Problems	72%	67%	457

M8. Multiply: $0.203 \times 0.56 =$

M-8

Answer: _____

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	next page	Fractions and Number Sense	Performing Routine Procedures	49%	44%	575

M-8 Coding Guide

M8. Multiply: $0.203 \times 0.56 =$

Answer: _____

Code	Response
Correct Response	
10	0.11368
Incorrect Response	
70	1.1368
71	11.368
72	11368
73	Other response in which the error is a misplaced decimal point.
74	Other response with one miscalculated digit such as 0.11369, 0.11358, etc.
75	Decimal number larger than 0 and less than 1, not covered by the codes above.
79	Other incorrect
Nonresponse	
90	Crossed out/erased, illegible, or impossible to interpret.
99	BLANK

N11. A newspaper reported that about 18 200 trees had been planted in the park. The number was rounded to the nearest hundred. Which of these could have been the actual number of trees planted?

A. 18 043

B. 18 189

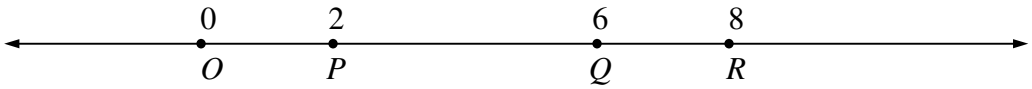
C. 18 289

D. 18 328

N-11

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Fractions and Number Sense	Solving Problems	82%	79%	392

N12. Point X (not shown) on the number line is 5 units from point R and 3 units from point Q.



Where is point X located?

A. Between O and P

B. Between P and Q

C. Between Q and R

D. To the right of R

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Geometry	Performing Routine Procedures	66%	61%	489

N13. If $x = 2$, what is the value of $\frac{7x+4}{5x-4}$?

Answer:_____

N-13

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	next page	Algebra	Performing Routine Procedures	53%	37%	576

N-13 Coding Guide

N13. If $x = 2$, what is the value of $\frac{7x+4}{5x-4}$?

Answer:_____

Code	Response
Correct Response	
10	3
11	An alternative form such as 18/6 OR 9/3 OR 6/2
Incorrect Response	
70	Indicates the correct substitution of x=2 in numerator and/or denominator but student did not correctly complete the solution.
71	Indicates a wrong substitution such as 7x=72 OR 7x=7+2 in the denominator; for example, any fractions with 76 or 13 as numerators and 48 or 3 as denominators.
72	A response containing the variable x.
79	Other incorrect
Nonresponse	
90	Crossed out/erased, illegible, or impossible to interpret.
99	BLANK

N14. In which list of fractions are all of the fractions equivalent?

A. $\frac{3}{4}, \frac{6}{8}, \frac{12}{14}$

B. $\frac{3}{5}, \frac{5}{7}, \frac{9}{15}$

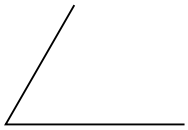
C. $\frac{3}{8}, \frac{6}{16}, \frac{12}{32}$

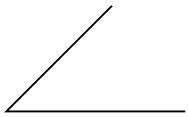
D. $\frac{5}{10}, \frac{10}{15}, \frac{1}{2}$

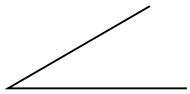
N-14

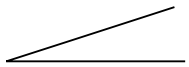
Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Fractions and Number Sense	Knowing	67%	62%	483

N15. Which of these angles has a measure closest to 30° ?

A. 

B. 

C. 

D. 

N-15

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Measurement	Knowing	64%	62%	492

N16. Jan had a bag of marbles. She gave half of them to James and then a third of the marbles still in the bag to Pat. She then had 6 marbles left. How many marbles were in the bag to start with?

A. 18

B. 24

C. 30

D. 36

N-16

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	A	Fractions and Number Sense	Solving Problems	47%	43%	580

N17. A car has a fuel tank that holds 35 L of fuel. The car consumes 7.5 L of fuel for each 100 km driven. A trip of 250 km was started with a full tank of fuel. How much fuel remained in the tank at the end of the trip?

A. 16.25 L

B. 17.65 L

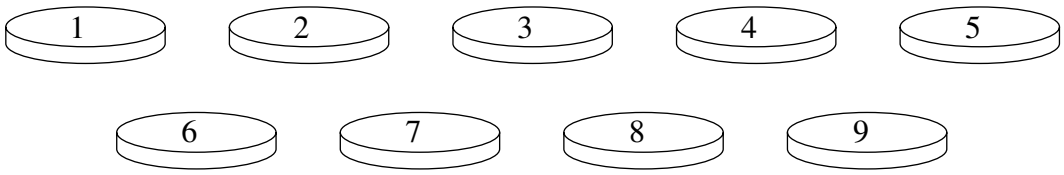
C. 18.75 L

D. 23.75 L

N-17

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	A	Fractions and Number Sense	Solving Problems	39%	35%	611

N18. The nine chips shown are placed in a jar and mixed.



Madeleine draws one chip from the jar. What is the probability that Madeleine draws a chip with an even number?

N-18

A. $\frac{1}{9}$

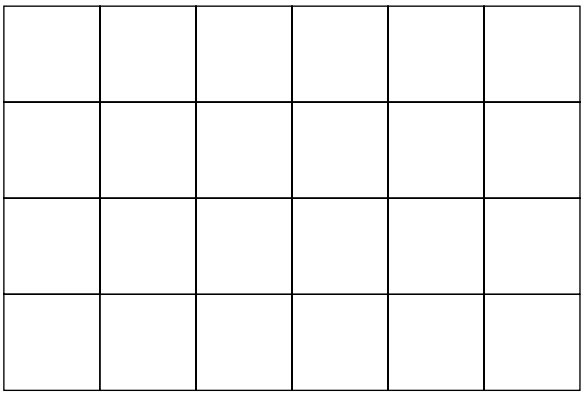
B. $\frac{2}{9}$

C. $\frac{4}{9}$

D. $\frac{1}{2}$

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Data Representation, Analysis & Probability	Solving Problems	56%	48%	541

N19. Shade in $\frac{5}{8}$ of the unit squares in the grid.

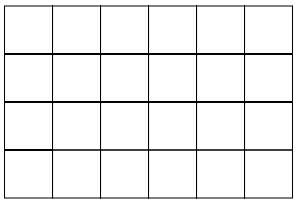


N-19

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	next page	Fractions and Number Sense	Knowing	52%	46%	559

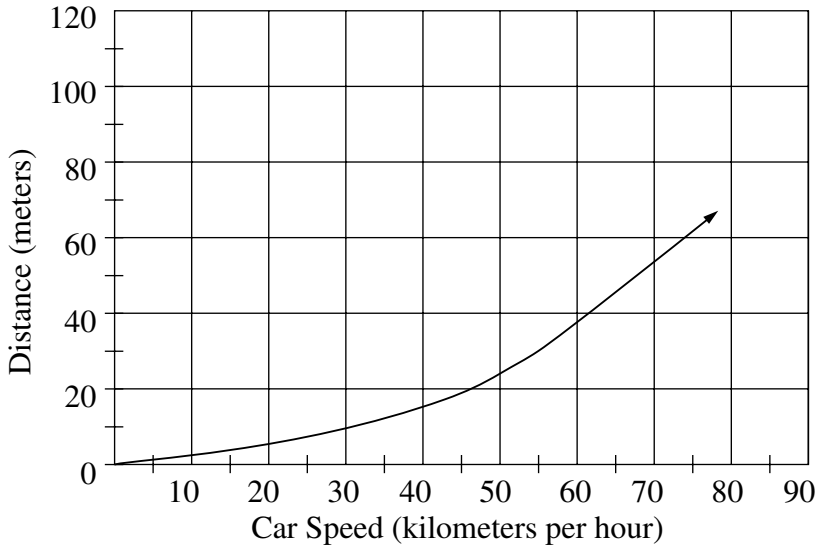
N-19 Coding Guide

N19. Shade in $\frac{5}{8}$ of the unit squares in the grid.



Code	Response
Correct Response	
10	15 squares are shaded (regardless of which squares).
Incorrect Response	
70	5 squares shaded
71	8 squares shaded
72	14 or 16 squares shaded.
73	Five (5) squares shaded AND 3 more squares (a total of 8) marked on the grid.
79	Other incorrect
Nonresponse	
90	Crossed out/erased, illegible, or impossible to interpret.
99	BLANK

O1. The graph shows the distance traveled before coming to a stop after the brakes are applied for a typical car traveling at different speeds.



A car traveling on a highway stopped 30 m after the brakes were applied. About how fast was the car traveling?

A. 48 km per hour

B. 55 km per hour

C. 70 km per hour

D. 160 km per hour

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Data Representation, Analysis & Probability	Solving Problems	58%	51%	535

O2. If the price of a can of beans is raised from 60 cents to 75 cents, what is the percent increase in the price?

A. 15%

B. 20%

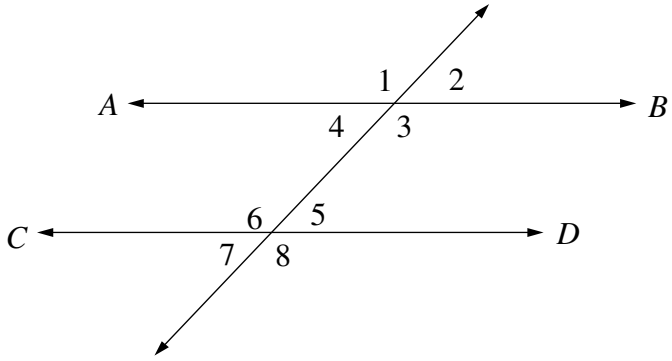
C. 25%

D. 30%

O-2

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Fractions and Number Sense	Performing Routine Procedures	28%	23%	680

O3. In this figure, lines *AB* and *CD* are parallel.



O-3

Two angles whose measures must add up to 180° are

A. ∠1 and ∠3

B. ∠4 and ∠6

C. ∠2 and ∠5

D. ∠2 and ∠7

E. ∠1 and ∠8

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Geometry	Knowing	47%	42%	581

O4. Which of these is 89.0638 rounded to the nearest hundredth?

A. 100

B. 90

C. 89.1

D. 89.06

E. 89.064

O-4

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	D	Fractions and Number Sense	Performing Routine Procedures	46%	43%	587

O5. Each of the six faces of a certain cube is painted either red or blue. When the cube is tossed, the probability of the cube landing with a red face up is $\frac{2}{3}$. How many faces are red?

A. One

B. Two

C. Three

D. Four

E. Five

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	D	Data Representation, Analysis & Probability	Solving Problems	47%	41%	587

O6. A cake is put in the oven at 7:20. If the cake takes three quarters of an hour to bake, at what time should it be taken out of the oven?

Answer: _____

O-6

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	next page	Measurement	Performing Routine Procedures	70%	65%	465

O-6 Coding Guide

O6. A cake is put in the oven at 7:20. If the cake takes three quarters of an hour to bake, at what time should it be taken out of the oven?

Answer: _____

Code	Response
Correct Response	
10	8:05
19	Responses equivalent to 8:05
Incorrect Response	
70	7:50
71	8:00
72	8:10
73	8:15
74	8:35
79	Other incorrect.
Nonresponse	
90	Crossed out/erased, illegible, or impossible to interpret.
99	BLANK

O7. If $3(x + 5) = 30$, then $x =$

A. 2

B. 5

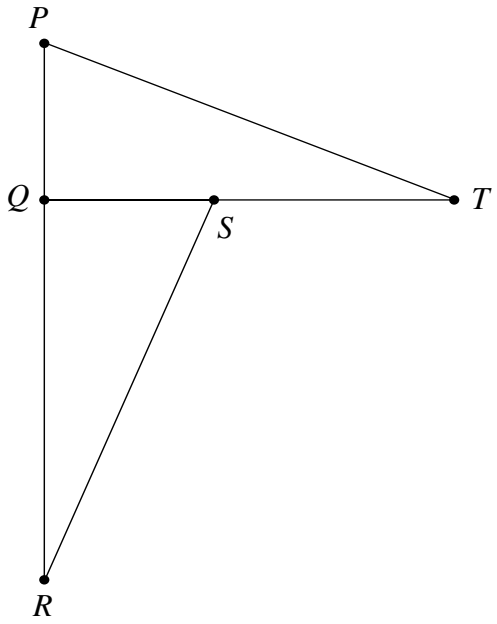
C. 10

D. 95

O-7

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Algebra	Performing Routine Procedures	72%	62%	474

O8. Triangle *PQT* can be rotated (turned) onto triangle *SQR*.



What point is the center of rotation?

A. *P*

B. *Q*

C. *R*

D. *S*

E. *T*

O-8

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Geometry	Performing Routine Procedures	70%	61%	483

O9. Luis exercises by running 5 km each day. The course he runs is $\frac{1}{4}$ km long. How many times through the course does he run each day?

Answer:_____

O-9

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	next page	Fractions and Number Sense	Solving Problems	50%	42%	571

O-9 Coding Guide

O9. Luis exercises by running 5 km each day. The course he runs is $\frac{1}{4}$ km long. How many times through the course does he run each day?

Answer:_____

Code	Response
Correct Response	
10	20
Incorrect Response	
70	20 km
71	5/4
72	2
73	3
74	4
75	5
79	Other incorrect
Nonresponse	
90	Crossed out/erased, illegible, or impossible to interpret.
99	BLANK

P8. What is the ratio of the length of a side of a square to its perimeter?

A. $\frac{1}{1}$

B. $\frac{1}{2}$

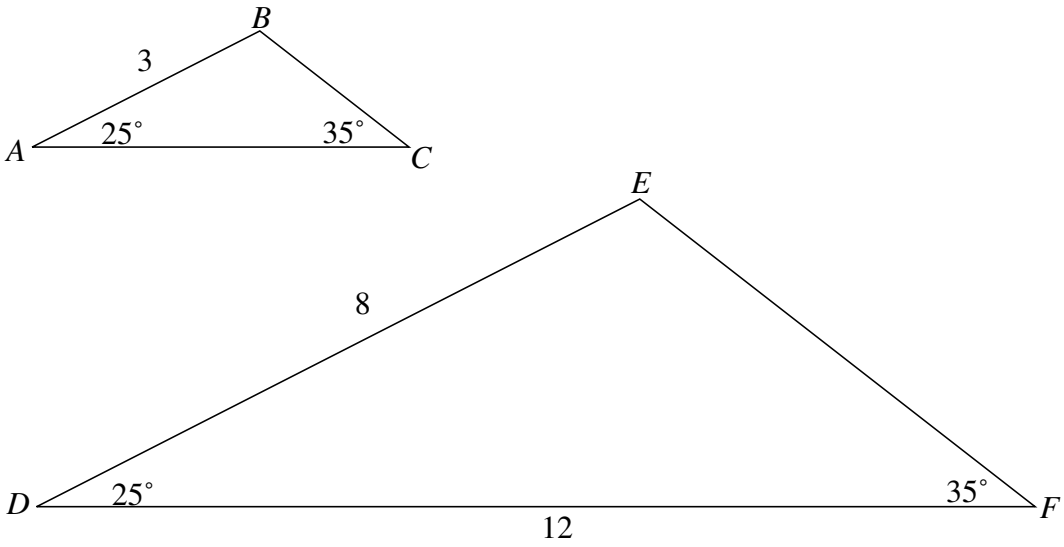
C. $\frac{1}{3}$

D. $\frac{1}{4}$

P-8

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	D	Geometry	Solving Problems	56%	50%	536

P9. Triangles *ABC* and *DEF* are similar triangles.



P-9

What is the length of side *AC* ?

A. 2

B. 4

C. 4.5

D. 5.5

E. 32

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Geometry	Performing Routine Procedures	38%	36%	617

P10. If m represents a positive number, which of these is equivalent to $m + m + m + m$?

A. $m + 4$

B. $4m$

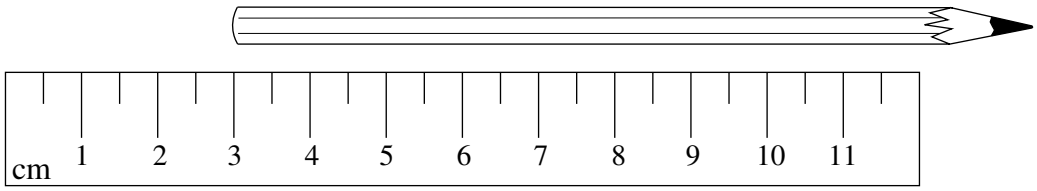
C. m^4

D. $4(m + 1)$

P-10

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Algebra	Knowing	58%	47%	540

P11.



Which of these is closest to the length of the pencil in the figure?

A. 9 cm

B. 10.5 cm

C. 12 cm

D. 13.5 cm

P-11

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Measurement	Using Complex Procedures	52%	49%	541

P12. Mark's garden has 84 rows of cabbages. There are 57 cabbages in each row. Which of these gives the BEST way to estimate how many cabbages there are altogether?

A. $100 \times 50 = 5000$

B. $90 \times 60 = 5400$

C. $80 \times 60 = 4800$

D. $80 \times 50 = 4000$

P-12

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Fractions and Number Sense	Using Complex Procedures	70%	66%	463

P13. A person's heart is beating 72 times a minute. At this rate, about how many times does it beat in one hour?

A. 420 000

B. 42 000

C. 4 200

D. 420

P-13

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Fractions and Number Sense	Solving Problems	66%	61%	479

P14. Janis, Maija, and their mother were eating a cake. Janis ate $\frac{1}{2}$ of the cake. Maija ate $\frac{1}{4}$ of the cake. Their mother ate $\frac{1}{4}$ of the cake. How much of the cake is left?

A. $\frac{3}{4}$

B. $\frac{1}{2}$

C. $\frac{1}{4}$

D. None

P-14

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	D	Fractions and Number Sense	Solving Problems	76%	72%	422

P15. Which of these expressions is equivalent to y^3 ?

A. $y + y + y$

B. $y \times y \times y$

C. $3y$

D. $y^2 + y$

P-15

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Algebra	Knowing	66%	55%	500

P16. Write 0.28 as a fraction reduced to its lowest terms.

Answer:_____

P-16

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	next page	Fractions and Number Sense	Performing Routine Procedures	33%	30%	637

P-16 Coding Guide

P16. Write 0.28 as a fraction reduced to its lowest terms.

Answer:_____

Code	Response
Correct Response	
10	7/25
Incorrect Response	
70	28/100 OR 14/50
71	Any fractions other than 28/100 with 28 as numerator.
72	Any fractions with 28 as denominator.
73	2/8 OR 1/4
74	Any expression which mixes decimal notation into the fraction *Example: 0,28/10 or 0.28/10*
79	Other incorrect
Nonresponse	
90	Crossed out/erased, illegible, or impossible to interpret.
99	BLANK

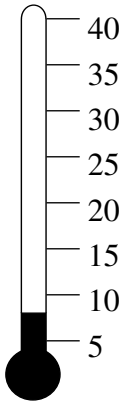
P17. This table shows temperatures at various times during the week.

TEMPERATURES					
	6 a.m.	9 a.m.	Noon	3 p.m.	8 p.m.
Monday	15˚	17˚	20˚	21˚	19˚
Tuesday	15˚	15˚	15˚	10˚	9˚
Wednesday	8˚	10˚	14˚	13˚	15˚
Thursday	8˚	11˚	14˚	17˚	20˚

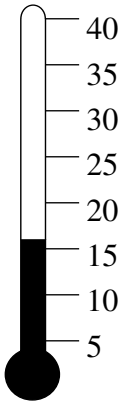
P-17

Which thermometer shows the temperature at 8 p.m. on Monday?

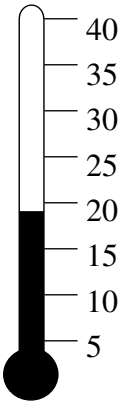
A.



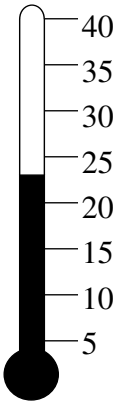
B.



C.



D.



Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Data Representation, Analysis & Probability	Using Complex Procedures	82%	79%	374

Q1. Juan has 5 fewer hats than Maria, and Clarissa has 3 times as many hats as Juan. If Maria has n hats, which of these represents the number of hats that Clarissa has?

A. $5 - 3n$

B. $3n$

C. $n - 5$

D. $3n - 5$

E. $3(n - 5)$

Q-1

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	E	Algebra	Using Complex Procedures	47%	37%	595

Q2. Subtract: $\frac{2x}{9} - \frac{x}{9} =$

A. $\frac{1}{9}$

B. 2

C. x

D. $\frac{x}{9}$

E. $\frac{x}{81}$

Q-2

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	D	Algebra	Performing Routine Procedures	51%	40%	568

Q3. Which of these is the longest time?

A. 15 000 seconds

B. 1 500 minutes

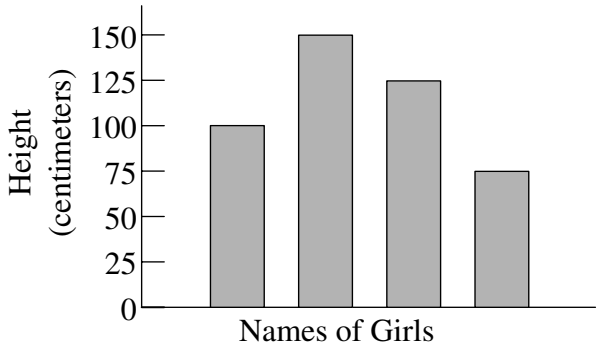
C. 10 hours

D. 1 day

Q-3

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Measurement	Using Complex Procedures	35%	31%	636

Q4. The graph shows the heights of four girls.



The names are missing from the graph. Debbie is the tallest. Amy is the shortest. Dawn is taller than Sarah. How tall is Sarah?

A. 75 cm

B. 100 cm

C. 125 cm

D. 150 cm

Q-4

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Data Representation, Analysis & Probability	Using Complex Procedures	83%	81%	376

Q5. Three-fifths of the students in a class are girls. If 5 girls and 5 boys are added to the class, which statement is true of the class?

A. There are more girls than boys.

B. There are the same number of girls as there are boys.

C. There are more boys than girls.

D. You cannot tell whether there are more girls or boys from the information given.

Q-5

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	A	Proportionality	Solving Problems	65%	62%	487

Q6. The Smith family uses about 6000 L of water per week. Approximately how many liters of water do they use per year?

A. 30 000

B. 240 000

C. 300 000

D. 2 400 000

E. 3 000 000

Q-6

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Fractions and Number Sense	Performing Routine Procedures	40%	35%	610

Q7. $P = LW$. If $P = 12$ and $L = 3$, then W is equal to

A. $\frac{3}{4}$

B. 3

C. 4

D. 12

E. 36

Q-7

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	C	Algebra	Performing Routine Procedures	63%	49%	519

Q8. Which list shows the numbers from smallest to largest?

A. $0.345,\ 0.19,\ 0.8,\ \frac{1}{5}$

B. $0.19,\ \frac{1}{5},\ 0.345,\ 0.8$

C. $0.8,\ 0.19,\ \frac{1}{5},\ 0.345$

D. $\frac{1}{5},\ 0.8,\ 0.345,\ 0.19$

Q-8

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	B	Fractions and Number Sense	Using Complex Procedures	44%	38%	587

Q9. $\frac{3}{4}+\left(\frac{2}{3}\times\frac{1}{4}\right)=$

A. $\frac{1}{8}$

B. $\frac{5}{16}$

C. $\frac{17}{48}$

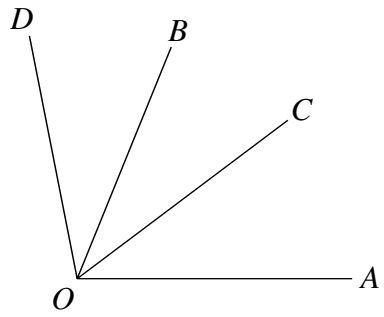
D. $\frac{5}{6}$

E. $\frac{11}{12}$

Q-9

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	E	Fractions and Number Sense	Performing Routine Procedures	51%	46%	558

Q10. In the figure, the measure of $\angle AOB$ is 70º, the measure of $\angle COD$ is 60º, and the measure of $\angle AOD$ is 100º.



What is the measure of $\angle COB$?

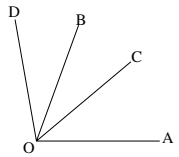
Answer:_____

Q-10

Subject	Item Key	Content Category	Performance Expectation	International Average Percent of Students Responding Correctly		International Difficulty Index
				Upper Grade	Lower Grade	
Mathematics	next page	Geometry	Using Complex Procedures	45%	40%	587

Q-10 Coding Guide

Q10. In the figure, the measure of $\angle AOB$ is 70°, the measure of $\angle COD$ is 60°, and the measure of $\angle AOD$ is 100°.



What is the measure of $\angle COB$?

Answer:_____

Note: There is no distinction made between responses with and without units.

Code	Response
Correct Response	
10	30
Incorrect Response	
70	20
71	35
72	40
73	45
74	50
75	60 OR 70
79	Other incorrect
Nonresponse	
90	Crossed out/erased, illegible, or impossible to interpret.
99	BLANK