3rd Grade Mathematics (TEKS) - Diagnostic Post-Test

Student Name: _____ Teacher Name: Jackie Bittner

Score: _____ Date: _____

Question 1 : 1563259

$$4 \times 5$$

Which expression is equivalent to the multiplication problem shown above?

A	5 + 4	B	5 + 5 + 5 + 5
C	4 × 4 × 4 × 4 × 4	D	5 × 5 × 5 × 5

Question 2 : 1563269

There are 8 teams with 12 players on each team. Which expression is in the same fact family as 8 × 12 = 96?

A	12 × 96
B	8 + 12
C	96 − 8
D	96 ÷ 8

Question 3 : 1563253

The table shows the number of cars cleaned on different days last week at Caleb's Car Cleaning.

Caleb's Car Cleaning

Day	Number of Cars
Monday	31
Tuesday	27
Wednesday	39
Thursday	52
Friday	46

What is the best estimate of the total number of cars cleaned on Tuesday, Thursday, and Friday?

A	140	B	110
C	130	D	150

Question 4 : 1563258

There are 6 eggs in each carton of eggs, as shown.

Which expression can be used to find the total number of eggs in 8 cartons?

A	8 + 6	B	8 × 6
C	8 − 6	D	8 ÷ 6

Question 5 : 1563234

Which comparison statement is correct?

A	8,804 < 8,840
B	19,876 < 19,867
C	9,849 > 9,850
D	35,810 < 35,799

Question 6 : 1563252

For work last month, Shelbie took three trips. The list below shows the miles she traveled for each trip.

• Trip 1: 518 miles

• Trip 2: 174 miles

• Trip 3: 287 miles

Which expression shows the best way to estimate the difference between the number of miles traveled for trip 3 and the number of miles traveled for trip 2?

A	290 − 170
B	290 + 170
C	300 − 100
D	300 + 100

Question 7 : 1563261

The art teacher separated 27 paintbrushes into groups of three. How many groups of three did the teacher make?

A	9
B	24
C	30
D	7

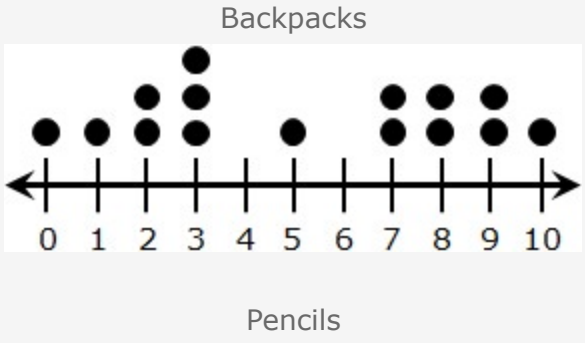
Question 8 : 1565435

The list shows the number of pencils in 15 students' backpacks.

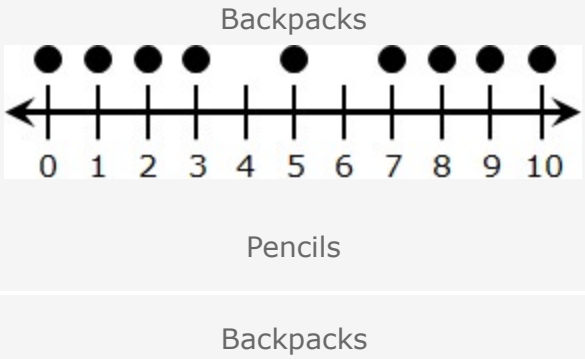
10, 8, 7, 9, 2, 8, 0, 1, 3, 9, 5, 7, 2, 3, 2

Which plot represents the number of pencils in the backpacks?

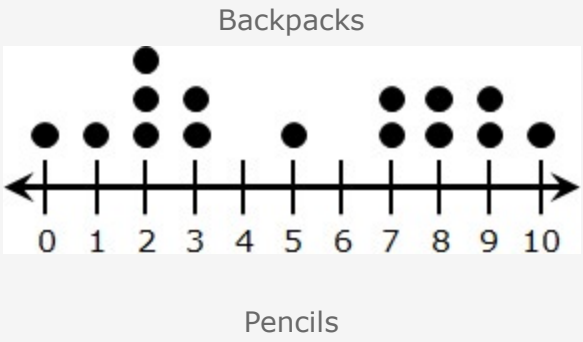
A



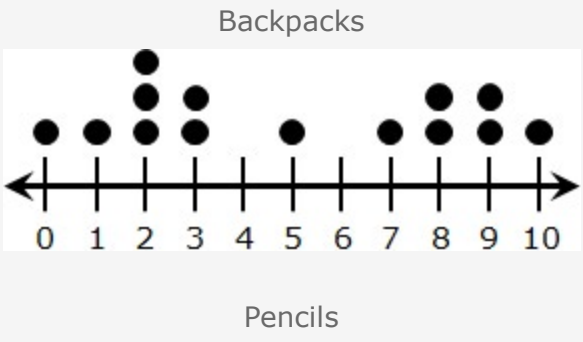
B



C



D



Question 9 : 1563254

A collection of coins is shown above. What is the value of the collection of coins?

A	$1.33
B	$1.43
C	$1.53
D	$1.28

Question 10 : 1566657

The picture represents the flowers that Holly planted in each of her 4 flower pots. She planted the same number of flowers in each pot.

What fraction of the flowers are in each pot?

A	$\frac{8}{2}$	B	$\frac{2}{8}$
C	$\frac{2}{4}$	D	$\frac{1}{8}$

Question 11 : 1565131

There are 9 oranges in each bag of oranges sold at a market. Which table shows the number of oranges in different numbers of these bags?

A

Bags of Oranges

Number of Bags	4	9	10	11
Number of Oranges	36	45	54	63

B

Bags of Oranges

Number of Bags	4	9	10	11
Number of Oranges	36	81	99	119

C

Bags of Oranges

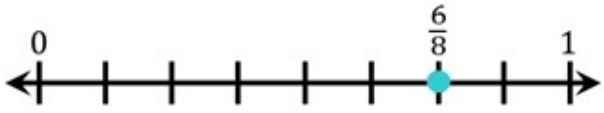
Number of Bags	4	9	10	11
Number of Oranges	36	81	90	99

D

Bags of Oranges

Number of Bags	4	9	10	11
Number of Oranges	36	72	108	144

Question 12 : 1563247



Which number line models the same fraction as six-eighths?

A

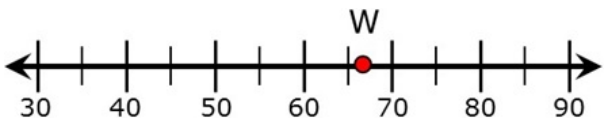
B

C

D

Question 13 : 1563236

A number line is shown.



Which statement best describes the location of point W on the number line?

A	Point W is closer to 75 than 65.
B	Point W is about at 80.
C	Point W is closer to 70 than 60.
D	Point W is nearly at 60.

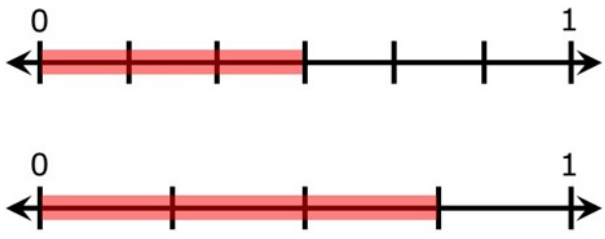
Question 14 : 1563265

The picture above shows the number of cartons of orange juice at a store. If the cartons are arranged in 2 equal rows, how many cartons will be in each row?

A	7, because 28 ÷ 4 = 7
B	2, because 28 ÷ 14 = 2
C	14, because 28 ÷ 2 = 14
D	4, because 28 ÷ 7 = 4

Question 15 : 1563248

The number lines are shaded to represent two different fractions.



Based on the number lines, which comparison is true?

A	$\frac{3}{6} > \frac{3}{4}$	B	$\frac{3}{6} = \frac{3}{4}$
C	$\frac{3}{6} < \frac{3}{4}$	D	$\frac{3}{6} < \frac{2}{4}$

Question 16 : 1563285

All of the squares are congruent. Which set of squares are both separated into halves?

A

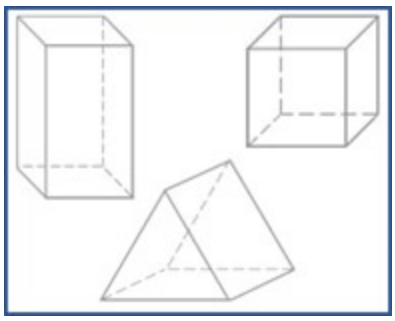
B

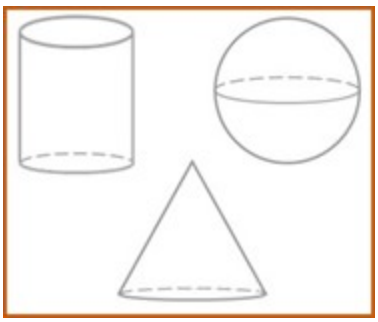
C

D

Question 17 : 1565133

Sasha sorted six figures into two sets, as shown below.





Set 1 Set 2

Which statement about the figures Sasha sorted is true?

A	All of the figures in Set 1 have vertices.
B	All of the figures in Set 2 have edges.
C	All of the figures in Set 1 have rectangular bases.
D	All of the figures in Set 2 have circular bases.

Question 18 : 1563277

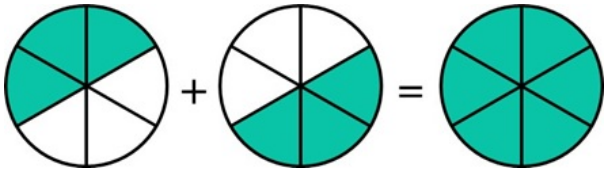
An equation is shown.

$$54 = \square \times 9$$

What is the missing number that makes the equation true?

A	6
B	7
C	63
D	45

Question 19 : 1563243



Which equation represents the model above?

A	$\frac{3}{6} + \frac{3}{6} = \frac{6}{6}$	B	$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

C	$\frac{3}{3} + \frac{3}{3} = \frac{6}{3}$	D	$\frac{6}{3} + \frac{6}{3} = \frac{12}{3}$

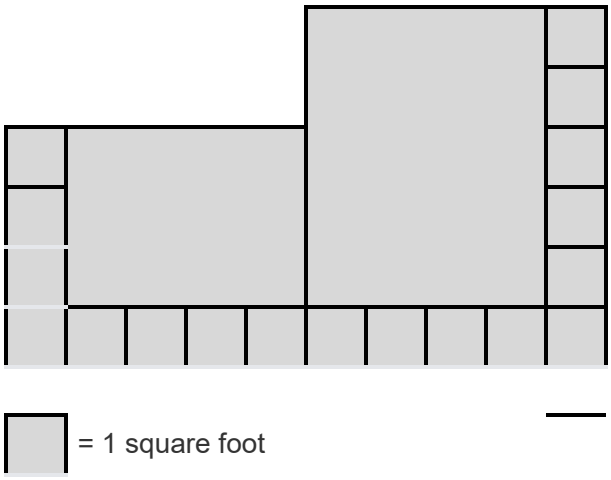
Question 20 : 1563239

Which number line is shaded to show six-eighths?

A		B	
C		D	

Question 21 : 1565454

A figure composed of two rectangular sections is shown.



= 1 square foot

What is the total area of the figure in square feet?

A	72 square feet
B	40 square feet
C	100 square feet
D	50 square feet

Question 22 : 1565129

Mr. Sanchez has 36 papers to grade. He will arrange the papers in 4 equal stacks. How many papers will be in each stack?

A	9
B	8
C	40
D	32

Question 23 : 1563282

Anthony made a mural out of square canvases. The area of each canvas is 1 square foot. The mural has 8 rows of canvases with 6 canvases in each row. What is the area of Anthony's mural?

A	48 square feet
B	24 square feet
C	14 square feet
D	28 square feet

Question 24 : 1563238

What part of the model is shaded?

A	$\frac{5}{8}$	B	$\frac{5}{3}$
C	$\frac{3}{5}$	D	$\frac{5}{5}$

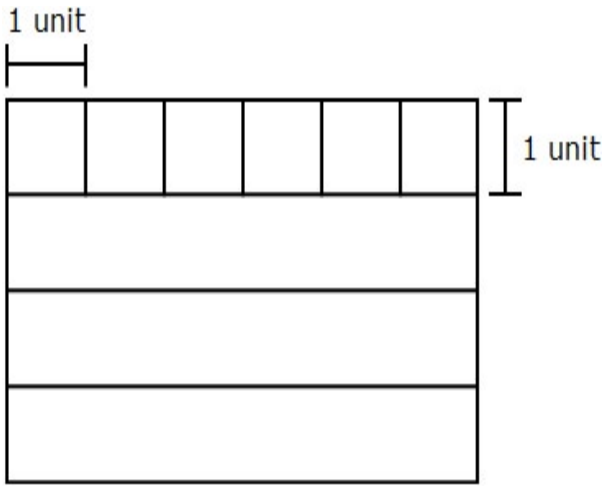
Question 25 : 1563272

There were 37 students in the lunchroom. Twenty-two more students entered the lunchroom. Then, 13 students left the lunchroom. Which equation shows how to find the number of students left in the lunchroom?

A	37 + 22 + 13 = ☐
B	37 − 22 + 13 = ☐
C	37 − 22 − 13 = ☐
D	37 + 22 − 13 = ☐

Question 26 : 1563283

A model of a rectangular wall is shown. The top row has been divided into squares of equal size.



The rest of the model will also be divided into squares of the same size. What is the area in square units represented by this model?

A	48 square units
B	24 square units
C	20 square units
D	10 square units

Question 27 : 1563279

Student Desks

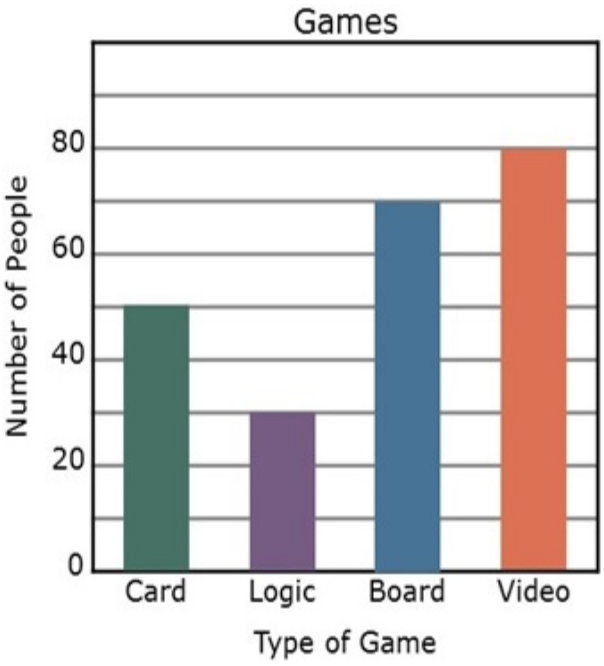
Number of Students	Number of Desks
64	81
75	92
87	104
92	109

The table shows the relationship between the number of students and the number of desks at a school in different years. Which statement describes the relationship between the number of students and the numbers of desks at the school?

A	The number of desks + 11 = the number of students
B	The number of desks − 17 = the number of students
C	The number of desks − 11 = the number of students
D	The number of desks + 17 = the number of students

Question 28 : 1565446

The graph shows the results of a survey about what type of game people like best.



Based on the graph, which statement is true?

A	Exactly 40 fewer people chose logic games than board games.
B	Exactly 40 more people chose video games than card games.
C	A total of 70 people chose card games or logic games.
D	A total of 160 people chose board games or video games.

Question 29 : 1565123

The table shows the number of students at four different elementary schools. The two schools with the greatest number of students have chess clubs.

School Students

School	Number of Students
Hanson	208
Goodson	297
Jackson	249
Lawson	278

What is the total number of students at these two schools?

A	546	B	565
C	575	D	675

Question 30 : 1563284

The squares are congruent. Both squares are partitioned into thirds.

Figure 1

Figure 2

Which statement about the shaded parts of the figures is true?

A	The area of the shaded part of Figure 1 is greater than the area of the shaded part of Figure 2.
B	The area of the shaded part of Figure 2 is greater than the area of the shaded part of Figure 1.
C	The areas of the shaded parts are equal.
D	Not here

Question 31 : 1563276

An equation is shown.

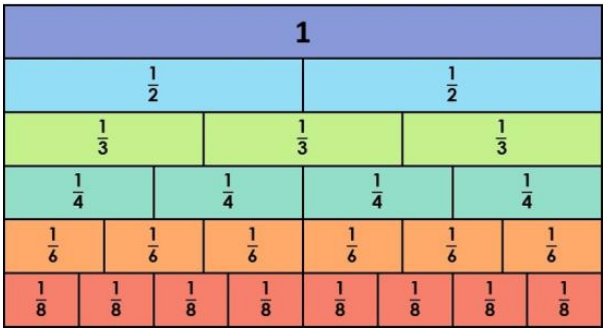
$$12 = \square \div 4$$

What is the missing number that makes the equation true?

A	16
B	48
C	8
D	3

Question 32 : 1563246

The fraction strips can be used to help you find equivalent fractions.



Which list shows only fractions equivalent to two-fourths?

A	$\frac{1}{2}, \frac{3}{6}, \frac{4}{8}$
B	$\frac{1}{2}, \frac{4}{6}, \frac{6}{8}$
C	$\frac{2}{3}, \frac{2}{6}, \frac{2}{8}$
D	$\frac{2}{3}, \frac{5}{6}, \frac{7}{8}$

Question 33 : 1565130

Lonnie has 56 invitations. She will arrange the invitations in 7 equal stacks. How many invitations will be in each stack?

A	9
B	8
C	63
D	49

Question 34 : 1561537

Which of the following is used to measure capacity?

A	
B	

C	
D	

Question 35 : 1565124

On Friday, Safina drove 416 miles. On Saturday, she drove 178 miles. What is the difference between the numbers of miles Safina drove on these two days?

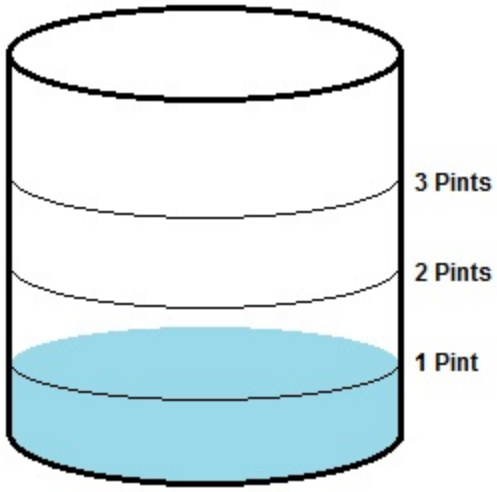
A	594 miles
B	348 miles
C	238 miles
D	362 miles

Question 36 : 1563237

Which statement is true?

A	46,534 is greater than 46,543.
B	46,534 is less than 46,543.

Question 37 : 607126



How many pints of water are in the container above?

A	2 pints
B	3 pints
C	4 pints
D	1 pint

Question 38 : 1566658

Becca, Madison and Ava equally shared the water balloons shown in the picture.

What fraction of the water balloons did each of them get?

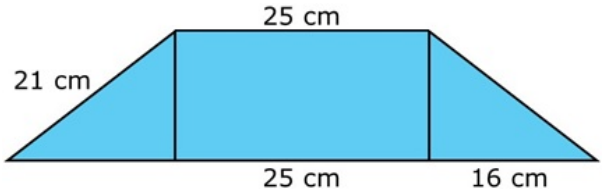
A	$\frac{6}{12}$	B	$\frac{4}{6}$
C	$\frac{4}{12}$	D	$\frac{1}{6}$

Question 39 : 1563286

What number does point Z represent on the ruler?

A	$8\frac{3}{8}$	B	$8\frac{7}{8}$
C	$8\frac{1}{2}$	D	$8\frac{3}{4}$

Question 40 : 2000303



Shayla made a sign using two congruent triangles and a rectangle. What is the perimeter of the sign in centimeters?

☐ cm

Question 41 : 1563290

Vanessa spent 15 minutes on science homework and 25 minutes on math homework. What is the total amount of time Vanessa spent on science and math homework?

A	45 minutes
B	10 minutes
C	30 minutes
D	40 minutes

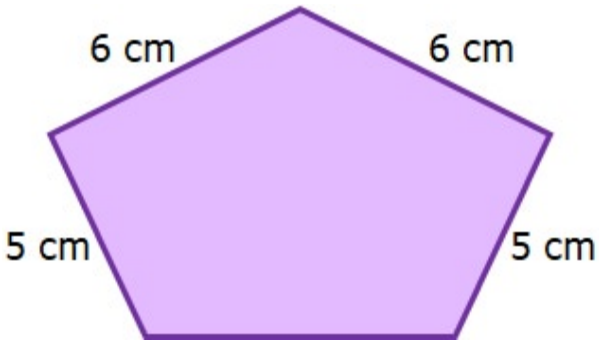
Question 42 : 1563242

Tina read one-fourth of her book each day on Friday, Saturday, and Sunday. Which equation can be used to find the fraction of the book she read on these three days?

A	$\frac{1}{7}+\frac{1}{7}+\frac{1}{7}=\frac{3}{7}$	B	$\frac{1}{4}+\frac{1}{4}+\frac{1}{4}=\frac{3}{12}$
C	$\frac{1}{4}+\frac{1}{4}+\frac{1}{4}=\frac{3}{4}$	D	$\frac{1}{7}+\frac{1}{7}+\frac{1}{7}=\frac{3}{12}$

Question 43 : 1565134

The lengths of four sides of a polygon are shown below.



The perimeter of the polygon is 29 centimeters. What is the missing length?

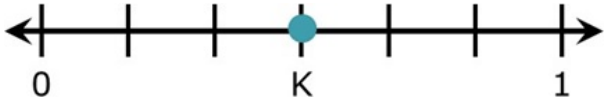
A	11 cm
B	22 cm
C	7 cm
D	6 cm

Question 44 : 1563241

What fraction does point S represent on the number line?

A	$\frac{6}{8}$	B	$\frac{6}{9}$
C	$\frac{5}{3}$	D	$\frac{5}{8}$

Question 45 : 1563240



What fraction does point K represent on the number line?

A	$\frac{4}{6}$	B	$\frac{3}{6}$
C	$\frac{3}{8}$	D	$\frac{4}{7}$

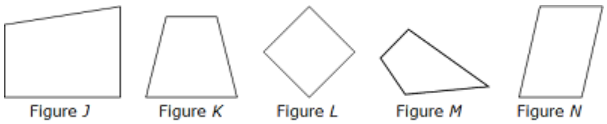
Question 46 : 91005

Workers bring skills to their jobs. These skills are called "human capital" because they add value to how well a worker can perform their job. Which of these skills would NOT be considered human capital for an office manager?

A	how to surf
B	how to balance a budget
C	how to use internet services
D	how to write a business letter

Question 47 : 1568733

A group of figures is shown.



Which of these figures appear to be a trapezoid?

A	Figures J, K, and M
B	Figures K and M
C	Figures L and N
D	Figures J and K

Question 48 : 1563260
Which equation is NOT correct?

A	53 ÷ 9 = 6
B	3 × 7 = 21
C	7 × 6 = 42
D	36 ÷ 9 = 4

Question 49 : 1563275
Nina and Gina are sisters. Last year, they each missed a different number of school days.

• Nina missed four days.

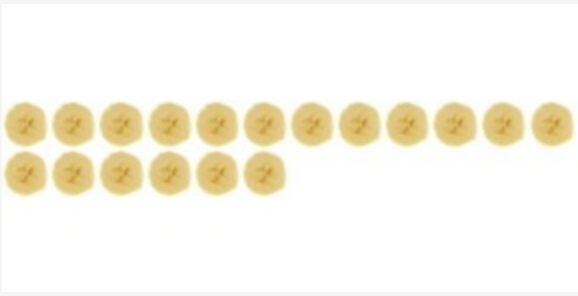
• Gina missed twice as many days as Nina.

Which equation can be used to find the number of school days Gina missed?

A	4 × 2 = ☐
B	4 + 2 = ☐
C	4 ÷ 2 = ☐
D	4 – 2 = ☐

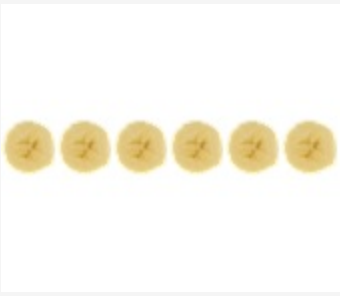
Question 50 : 1563274
Randy has 12 bananas. He cut each banana into 6 slices. Which array can be used to find the number of banana slices he has?

A



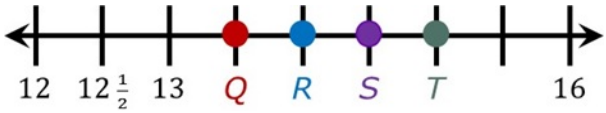
B

C



D

Question 51 : 1563287



Which point best represents 14 on the number line above?

A	Point*Q*	B	Point*S*
C	Point*T*	D	Point*R*

Question 52 : 1563255

Hayden has coins that total exactly $0.98. Which set of coins could be Hayden's?

A

B

C

D

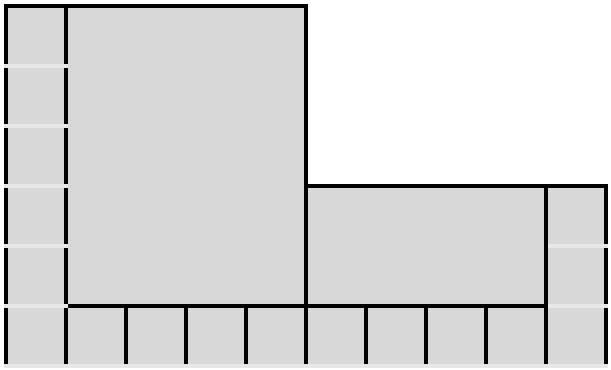
Question 53 : 2000265

Mrs. Hinojosa bought 8 bags of lollipops for the concession stand. Each bag contained 76 lollipops.

How many lollipops did Mrs. Hinojosa buy? Type the answer in the space shown.

Question 54 : 1565453

A floor plan with two rectangular sections is shown.



= 1 square foot

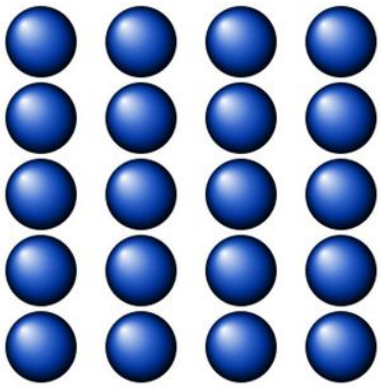
What is the total area of the floor in square feet?

A	45 square feet
B	38 square feet
C	68 square feet
D	90 square feet

Question 55 : 1547021

Multiplicative Comparisons

Use the model below to help answer both questions.



Which of these verbal statements BEST represents the model shown?

A	4 is 5 times as many as 20
B	6 is 4 times as many as 24
C	20 is 5 times as many as 4
D	24 is 6 times as many as 4

Choose the TWO ways in which the quantity shown by the array can be represented.

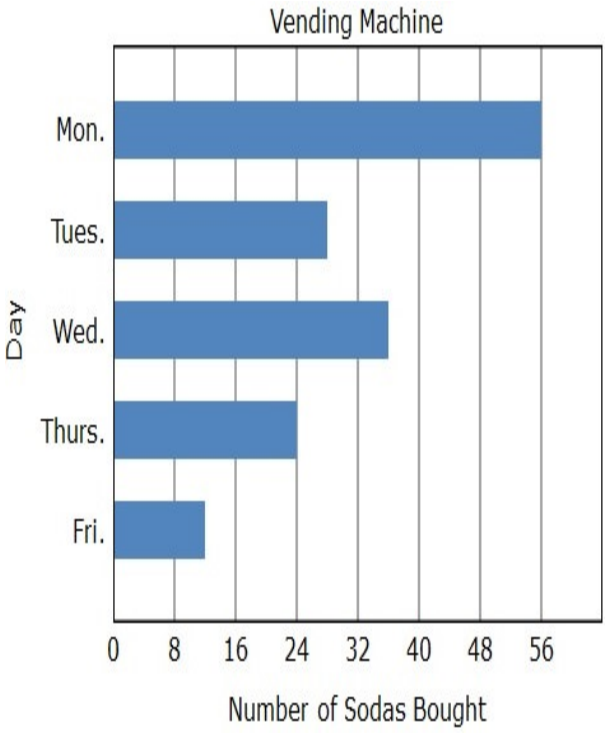
A	$24 = 6 \times 4$
B	$20 = 4 \times 5$

C	6 times as many as 4 is 24
D	5 is 4 times as many as 20
E	five groups of four is twenty

This question requires at least 2 answers.

Question 56 : 1565434

The bar graph shows the number of sodas bought from a vending machine each day last week.



Which table best represents the data in the graph?

A

Vending Machine

Day	Number of Sodas Bought
Monday	56
Tuesday	32
Wednesday	40
Thursday	24
Friday	16

B

Vending Machine

Day	Number of Sodas Bought
Monday	56
Tuesday	24
Wednesday	32
Thursday	24
Friday	8

C

Vending Machine

Day	Number of Sodas Bought
Monday	56
Tuesday	26
Wednesday	34
Thursday	24
Friday	10

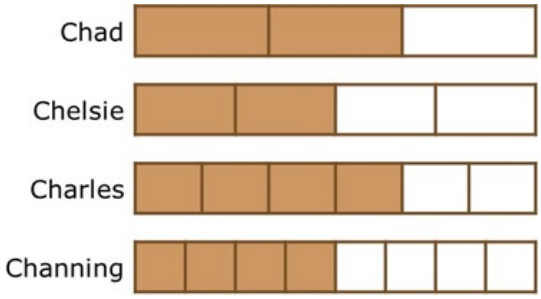
D

Vending Machine

Day	Number of Sodas Bought
Monday	56
Tuesday	28
Wednesday	36
Thursday	24
Friday	12

Question 57 : 1563249

Four friends bought the same candy bar. The models are shaded to show how much candy bar each friend has left.

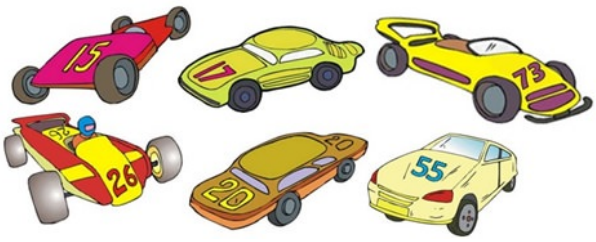


Which statement is true?

A	Charles and Channing have the same amount of candy bar left, because four-sixths equals four-eighths.
B	Chelsie has less candy bar left than Channing, because two-fourths is less than four-eighths.
C	Charles has more candy bar left than Channing, because four-sixths is greater than four-eighths.
D	Chelsie and Chad have the same amount of candy bar left, because two-thirds equals two-fourths.

Question 58 : 1565127

Phillip has these six toy cars.

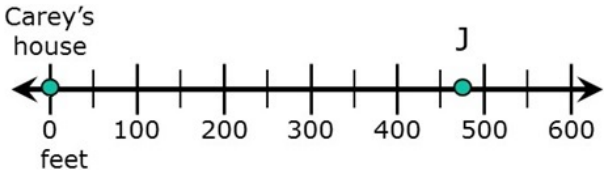


Which list shows only the odd car numbers?

A	15, 17, 55, 73	B	15, 17, 55
C	15, 20, 55	D	15, 20, 26, 55

Question 59 : 1563235

Carey's house is walking distance from Jeri's house. The number line represents the distance Carey walks from her house to point J, the location of Jeri's house.

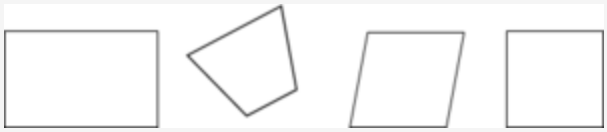


About how many feet does Carey walk to Jeri's?

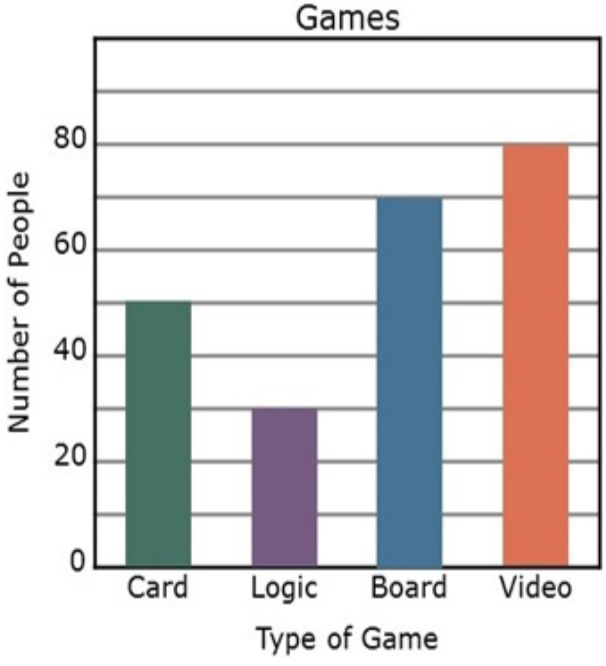
A	400, because point J is less than halfway between 400 and 500
B	600, because point J is more than halfway between 400 and 600
C	300, because point J is less than halfway between 300 and 500
D	500, because point J is more than halfway between 400 and 500

Question 60 : 1568731

Which of the following sets has a figure other than a rhombus, parallelogram, trapezoid, rectangle, or square?

A	
B	
C	
D	

Question 61 : 1565445



The graph shows the results of a survey about what type of game people like best. Based on the graph, which statement is true?

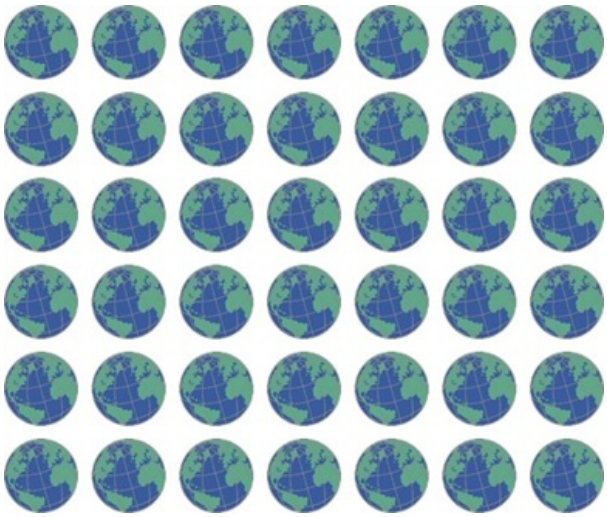
A	A total of 220 people were surveyed.
B	A total of 110 people chose either card games or board games.
C	A total of 240 people were surveyed.
D	A total of 80 people chose either card games or logic games.

Question 62 : 1000025

Which place value statement about 7,777 is true?

A	The 7 in the thousands place represents 7,000 because 7 times 1,000 equals 7,000.
B	The 7 in the hundreds place represents 777 because 7 times 111 equals 777.
C	The 7 in the tens place represents 70 because 7 times 10 equals 700.
D	The 7 in the ones place represents 70 because 7 times 10 equals 70.

Question 63 : 1563256

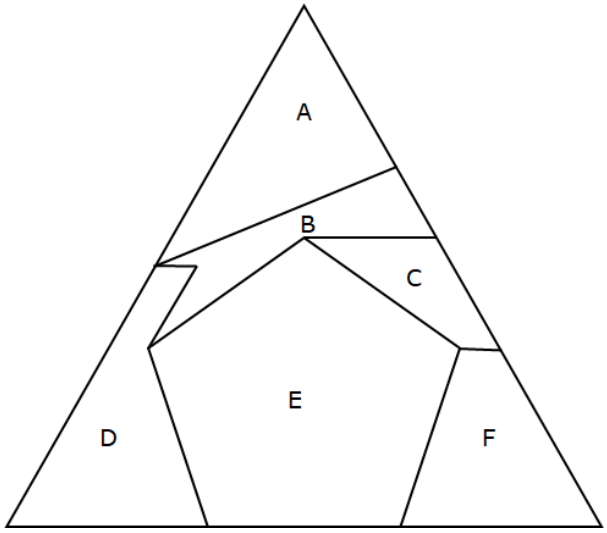


How many globes are in the array?

A	26, because 6 + 7 + 6 + 7 = 26	B	42, because 6 × 7 = 42
C	13, because 6 + 7 = 13	D	49, because 7 × 7 = 49

Question 64 : 1568730

A figure is divided into 6 sections, as shown below.



Which of these shows a correct way to group these 6 sections?

A	1 triangle, 3 quadrilaterals, 1 pentagon, and 1 hexagon
B	1 triangle, 2 quadrilaterals, 2 pentagons, and 1 hexagon
C	1 triangle, 2 quadrilaterals, and 3 pentagons
D	1 triangle, 3 quadrilaterals, and 2 pentagons

Question 65 : 1563257

One row of ketchup bottles is shown.

How many bottles are in 4 rows?

A	13	B	32
C	36	D	42

Question 66 : 1563291

Alicia walked to school. She left her house at 7:19. The walk to school took 12 minutes. What time did Alicia arrive at school?

A	7:32
B	7:31
C	7:33
D	7:26

Question 67 : 1565128

Which statement about the number 56 is true?

A	It is odd, because the digit in the tens place is odd.
B	It is even, because the digit in the tens place is even.
C	It is even, because it can be divided by 2 evenly.
D	It is odd, because it can be divided by 3 evenly.

Question 68 : 1563264

Lana has 54 pieces of candy to put in 9 gift bags. She will put an equal number of pieces in each bag. Which number sentence can be used to find the number of pieces of candy in each bag?

A	54 − 9 = 45
B	54 ÷ 9 = 6
C	54 + 9 = 63
D	54 × 9 = 486

Question 69 : 1563273

Over the summer, Loren earned $413 at a part-time job. She spent $134 on new school clothes. Then, she got a $35 check for her birthday. Which number sentence can be used to find the amount of money Loren has?

A	413 + 134 − 35 = ☐
B	413 − 134 + 35 = ☐
C	413 + 134 + 35 = ☐
D	413 − 134 − 35 = ☐

Question 70 : 1563268

$$4 \times 24 = 96$$

Which equation is in the same fact family as the equation above?

A	96 × 4 = 384
B	96 × 24 = 2,304
C	24 ÷ 4 = 6
D	96 ÷ 4 = 24

Question 71 : 1000026

Which place value statement about 222,222 is true?

A	The 2 in the hundred thousands place represents 222,000 because 222 times 100,000 equals 222,000.
B	The 2 in the ten thousands place represents 20,000 because 2 times 10,000 equals 200,000.
C	The 2 in the hundred thousands place represents 200,000 because 2 times 100,000 equals 200,000.
D	The 2 in the thousands place represents 20,000 because 2 times 10,000 equals 20,000.

Question 72 : 228193

Every year for Christmas, Melissa and Madison's grandmother gives them each $100. For the past three years, Melissa has put her $100 into a savings account. Madison usually spends her $100 on games, toys, and movies. Which statement best argues why Melissa most likely puts her money in a savings account?

A	She thinks Madison will ask to borrow her money when she runs out.
B	She is saving for something to buy later that she cannot afford now.
C	Her money will lose value over time if she does not keep it in a bank.
D	If she does not put the money in a bank, she will have to pay tax on it.