

A stylized map of Louisiana in shades of purple and white, serving as a background for the title.

# Louisiana Believes

## **iLEAP Test Items**

### **Grade Mathematics**

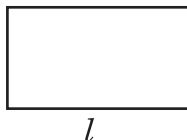
### **Spring 2014**

Released June 2014



Use the information below to answer questions on the Math test.

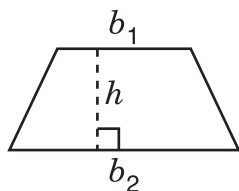
### Rectangle



$$\text{Area} = l \cdot w$$

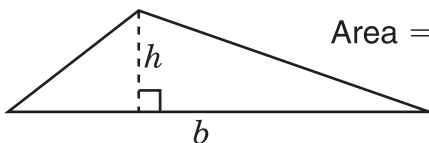
$$\text{Perimeter} = 2 \cdot (l + w)$$

### Trapezoid



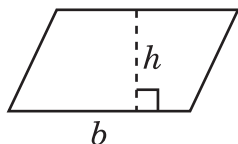
$$\text{Area} = \frac{1}{2} \cdot h \cdot (b_1 + b_2)$$

### Triangle



$$\text{Area} = \frac{1}{2} \cdot b \cdot h$$

### Parallelogram



$$\text{Area} = b \cdot h$$

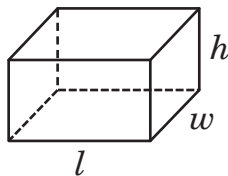
**Mean:** In a collection of data, the sum of all the data divided by the number of data

**Median:** The middle number or average of the two middle numbers in a collection of data when the data are arranged in order

**Mode:** The number or numbers that occur most often in a collection of data

**Range:** The difference between the greatest and the least numbers in a collection of data

### Rectangular Prism

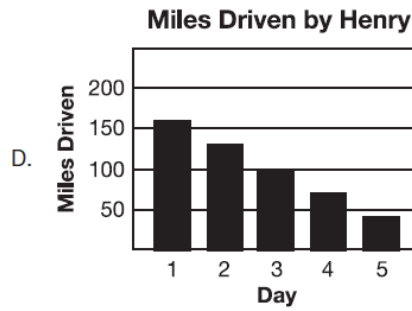
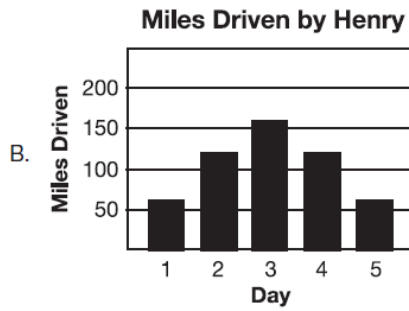
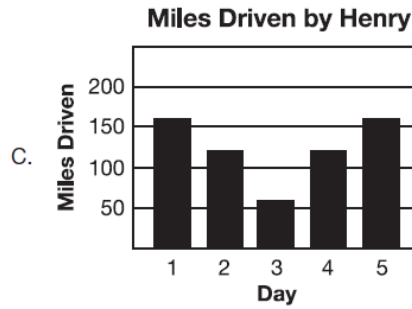
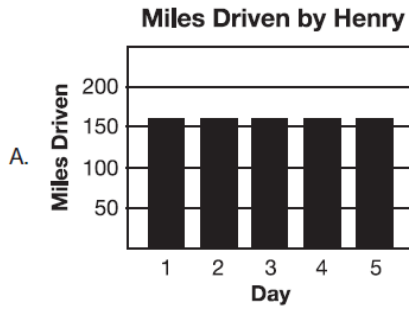


$$\text{Volume} = l \cdot w \cdot h$$

$$\text{Volume} = B \cdot h$$

$$B = l \cdot w$$

Henry is a bus driver. He drove the same route every day for five days. He kept track of the number of miles he drove each day. Which bar graph would **most likely** show the shape of the distribution of the number of miles Henry drove each day?



This item measures aspects of 6.SP.2  
No Calculator  
Key: A

The table below shows the record-low temperatures, in degrees Fahrenheit (°F), for five states.

**Record-Low Temperatures**

State	Temperature (°F)
Arkansas	−29
Louisiana	−16
Mississippi	−19
Oklahoma	−31
Texas	−23

Which inequality correctly compares two of the record-low temperatures from the table?

- A.  $-16 < -19$
- B.  $-23 < -29$
- C.  $-29 < -31$
- D.  $-31 < -23$

This item measures aspects of 6.NS.7  
No Calculator  
Key: D

A dime weighs 2.268 grams and a quarter weighs 5.67 grams. How much more does a quarter weigh than a dime?

- A. 3.402 grams
- B. 3.418 grams
- C. 7.938 grams
- D. 12.860 grams

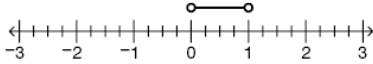
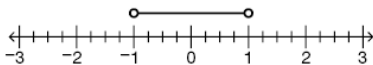
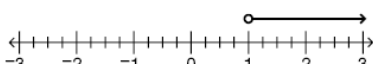
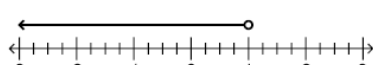
This item measures aspects of 6.NS.3  
No Calculator  
Key: A

A pet store has 24 hamsters, 36 rabbits, and 42 mice. The store wants to put all the pets into smaller, equal-sized groups of the same type of pet. What is the **greatest** number of pets that can be in each group?

- A. 3
- B. 4
- C. 6
- D. 12

This item measures aspects of 6.NS.4  
No Calculator  
Key: C

The average high temperature on the first day of January in Don's hometown in Canada is 1 degree Fahrenheit. This year, the high temperature on the first day of January was less than 1 degree Fahrenheit. Which number line shows all the possible temperatures it could have been that day?

- A. 
- B. 
- C. 
- D. 

This item measures aspects of 6.EE.8

No Calculator

Key: D

Tia, Lacy, and Ursula shared a hotel room while on a band trip to Chicago. The hotel room cost \$92.55. Each of the 3 girls contributed the same amount to pay for the room. How much did each girl pay for the hotel room?

- A. \$30.83
- B. \$30.85
- C. \$38.05
- D. \$38.50

This item measures aspects of 6.NS.3  
No Calculator  
Key: B



Amal, Trina, Josie, and Mya each have the same number of folders. The list below shows the fraction of each girl's folders that is yellow.

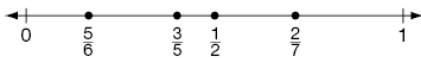
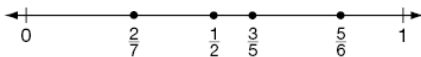
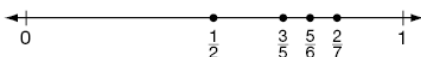
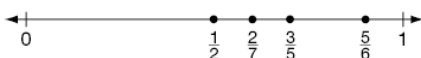
- $\frac{1}{2}$  of Amal's folders are yellow
- $\frac{2}{7}$  of Trina's folders are yellow
- $\frac{5}{6}$  of Josie's folders are yellow
- $\frac{3}{5}$  of Mya's folders are yellow

This item measures aspects of 6.NS.6

No Calculator

Key: B

Which number line correctly shows the fraction of each girl's folders that is yellow?

- A. 
- B. 
- C. 
- D. 

Ms. Rachel's age can be represented using the following expression.

$$2(6^2 + 3)$$

How old is Ms. Rachel?

- A. 27 years old
- B. 30 years old
- C. 75 years old
- D. 78 years old

This item measures aspects of 6.EE.1

No Calculator

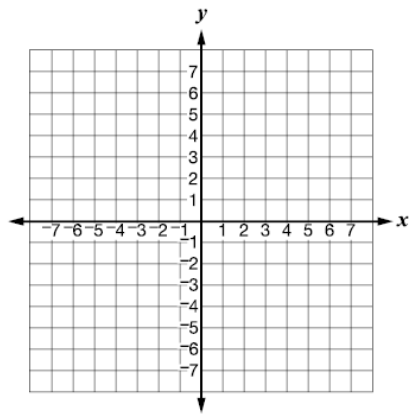
Key: D

Tina collected data on the numbers of puppies in several litters. The range of the data she collected is 5. Which statement **must** be true about the data Tina collected?

- A. The average number of puppies in the litters is 5.
- B. The most common number of puppies in a litter is 5.
- C. The difference between the largest and the smallest numbers of puppies in a litter is 5.
- D. Half of the litters have 5 puppies or fewer, and half of the litters have 5 puppies or more.

This item measures aspects of 6.SP.5  
No Calculator  
Key: C

Quinn wants to draw a picture on a coordinate plane.



This item measures aspects of 6.G.3  
No Calculator  
Key: D

If Quinn plots the following points and connects them in order, what shape will he make?

(4, 2)  
(-3, 2)  
(-6, -3)  
(7, -3)  
(4, 2)

- A. square
- B. rectangle
- C. rhombus
- D. trapezoid

This week Shauna practiced her saxophone for 25 minutes less than 3 times the number of minutes she practiced it last week. If she practiced for  $m$  minutes last week, which expression represents how many minutes she practiced this week?

- A.  $3m - 25$
- B.  $3 - 25m$
- C.  $25 - 3m$
- D.  $25m - 3$

This item measures aspects of 6.EE.2  
No Calculator  
Key: A

Carin has  $\frac{2}{3}$  of a bottle of paint. She uses  $\frac{1}{6}$  of a bottle to paint one model airplane. How many model airplanes can Carin paint with  $\frac{2}{3}$  of a bottle of paint?

- A. 1
- B. 4
- C. 9
- D. 11

This item measures aspects of 6.NS.1  
No Calculator  
Key: B

Use the table below to answer question

**Maria's Packages**

Package	Mass (grams)
1	57.491
2	56.089
3	57.278
4	56.507

This item measures aspects of 6.NS.7  
No Calculator  
Key: D

Maria mailed four packages. Which list shows the masses of the packages in order from **heaviest** to **lightest**?

- A. 56.089, 56.507, 57.278, 57.491
- B. 56.507, 57.491, 57.278, 56.089
- C. 57.491, 56.507, 57.278, 56.089
- D. 57.491, 57.278, 56.507, 56.089

Four numbers are listed below.

-0.92   0.85   -10.00   46.00

Which inequality correctly compares these numbers?

- A.  $-0.92 < -10.00 < 46.00 < 0.85$
- B.  $0.85 < -0.92 < -10.00 < 46.00$
- C.  $-10.00 < -0.92 < 0.85 < 46.00$
- D.  $-0.92 < -10.00 < 0.85 < 46.00$

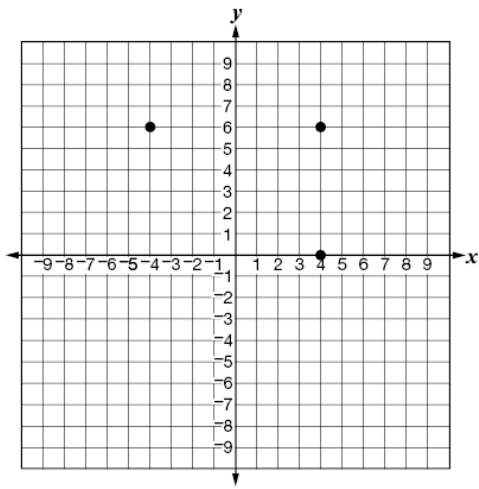
This item measures aspects of 6.NS.7

No Calculator

Key: C



A puppy buried three objects in the backyard at the locations shown in the coordinate grid.

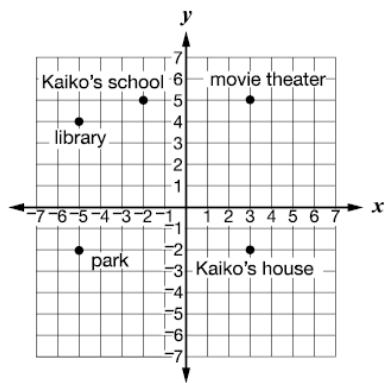


This item measures aspects of 6.G.3  
No Calculator  
Key: C

If each object is buried at one vertex of the same rectangle, where should the puppy bury the next object to complete the rectangle?

- A. (4, 0)
- B. (0, 3)
- C. (-4, 0)
- D. (0, -4)

Kaiko made a map of his town on the grid below.



This item measures aspects of 6.NS.8  
No Calculator  
Key: D

Which pair of locations has the shortest distance between them?

- A. park and library
- B. park and Kaiko's house
- C. movie theater and Kaiko's house
- D. movie theater and Kaiko's school

For an art project, Henri is drawing a picture on a rectangular piece of paper. The length of the paper must be 4 times its width,  $w$ . Which equation can be used to find the length,  $l$ , of the paper?

- A.  $l = 4w$
- B.  $w = 4l$
- C.  $w = 4 + l$
- D.  $l = 4 - w$

This item measures aspects of 6.EE.7  
No Calculator  
Key: A

Jay has a string that is  $\frac{1}{2}$  yard long. He divides it into pieces that are  $\frac{1}{8}$  yard long for an art project. How many pieces of string does Jay have now?

- A. 3
- B. 4
- C. 10
- D. 16

This item measures aspects of 6.NS.1  
No Calculator  
Key: B

The table below shows the amounts of money Mason earned and spent over 4 days.

Mason's Money	
Day	Earned and Spent
Monday	earned \$8
Tuesday	earned \$4
Wednesday	spent \$9
Thursday	earned \$3

This item measures aspects of 6.NS.5  
No Calculator  
Key: B

Which list represents the changes to the amount of money Mason has?

- A. 8, 4, 9, 3
- B. 8, 4, -9, 3
- C. -8, -4, 9, -3
- D. -8, -4, -9, -3

Marla read a total of 4 books for a class. There were 3 books that each had the same number of pages,  $x$ , and 1 book that had 87 pages. Which expression represents the total number of pages that Marla read for her class?

- A.  $3x + 87$
- B.  $3(x + 87)$
- C.  $3(87) + x$
- D.  $3(87) + 3x$

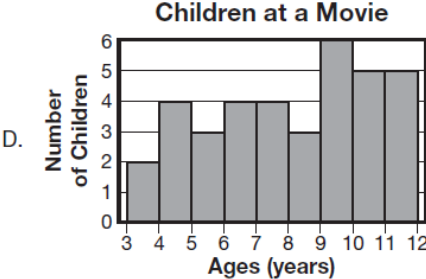
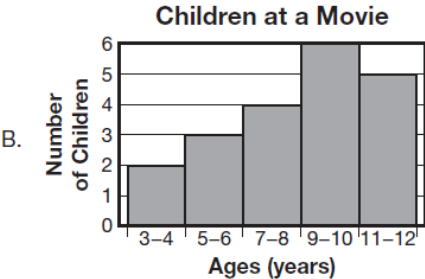
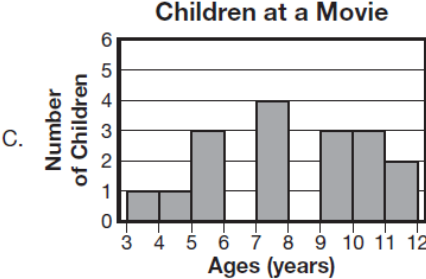
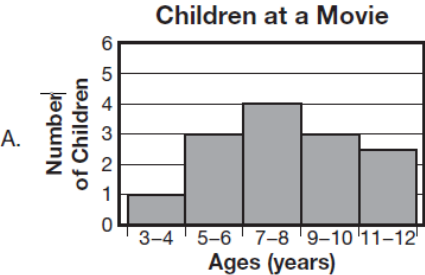
This item measures aspects of 6.EE.6  
No Calculator  
Key: A

The table shows the number of children, ages 3 to 12, who attended a movie.

Children at a Movie

Age (years)	3	4	5	6	7	8	9	10	11	12
Number of Children	1	1	3	0	4	0	3	3	2	3

Which histogram **best** represents the information in the table?



This item measures aspects of 6.SP.4  
No Calculator  
Key: B

Sam's dog weighs 48.5 pounds. Sam's dog weighs 3.2 times more than Kayla's dog. Which equation can be used to find  $k$ , the weight of Kayla's dog, in pounds?

- A.  $3.2k = 48.5$
- B.  $\frac{3.2}{k} = 48.5$
- C.  $3.2 + k = 48.5$
- D.  $48.5 - k = 3.2$

This item measures aspects of 6.EE.7  
No Calculator  
Key: A



A panda in the zoo was fed 28,392 pounds of bamboo in one year. The panda was fed the same number of pounds of bamboo each week. There are 52 weeks in one year. Which correctly shows how many pounds of bamboo the panda was fed each week for one year?

A.

$$\begin{array}{r}
 546 \text{ pounds} \\
 52 \overline{) 28,392} \\
 \underline{- 260} \phantom{0} \\
 239 \phantom{0} \\
 \underline{- 208} \phantom{0} \\
 312 \phantom{0} \\
 \underline{- 312} \\
 0
 \end{array}$$

C.

$$\begin{array}{r}
 1,703.44 \text{ pounds} \\
 52 \overline{) 28,392} \\
 \underline{- 52} \phantom{0} \\
 363 \phantom{0} \\
 \underline{- 364} \phantom{0} \\
 192 \phantom{0} \\
 \underline{- 156} \\
 44
 \end{array}$$

B.

$$\begin{array}{r}
 546.4 \text{ pounds} \\
 52 \overline{) 28,392} \\
 \underline{- 260} \phantom{0} \\
 239 \phantom{0} \\
 \underline{- 204} \phantom{0} \\
 352 \phantom{0} \\
 \underline{- 312} \\
 40
 \end{array}$$

D.

$$\begin{array}{r}
 5,678 \text{ pounds} \\
 52 \overline{) 28,392} \\
 \underline{- 25} \phantom{0} \\
 33 \phantom{0} \\
 \underline{- 30} \phantom{0} \\
 39 \phantom{0} \\
 \underline{- 35} \phantom{0} \\
 42 \phantom{0} \\
 \underline{- 42} \\
 0
 \end{array}$$

This item measures aspects of 6.NS.2  
No Calculator  
Key: A

At the movies, popcorn costs \$5 per box and drinks cost \$2. The total cost can be determined by using the expression  $5p + 2d$ , where  $p$  is the number of boxes of popcorn and  $d$  is the number of drinks. What is the cost of 6 boxes of popcorn and 4 drinks?

- A. \$32
- B. \$38
- C. \$42
- D. \$80

<p>This item measures aspects of 6.EE.2 No Calculator Key: B</p>
--

The crocodile at the zoo is 9 feet longer than twice the length,  $a$ , of the alligator at the zoo. The expression below represents the length of the crocodile.

$$2a + 9$$

Which expression also represents the length of the crocodile?

- A.  $2 + a + 9$
- B.  $2(a + 9)$
- C.  $9 + 2a$
- D.  $9(2a + 1)$

This item measures aspects of 6.EE.3

No Calculator

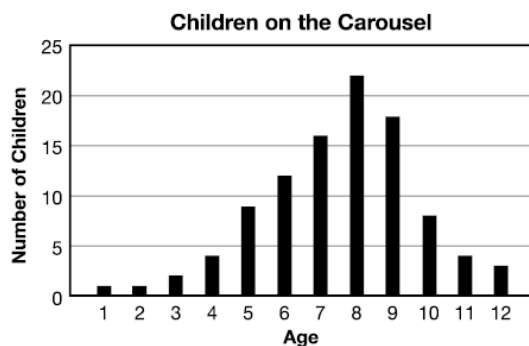
Key: C

Tom babysits on the weekends. He charges \$9 per hour for babysitting. Which equation represents how much Tom charges ( $c$ ), in dollars, when he babysits for  $h$  hours?

- A.  $c = 9 + h$
- B.  $h = 9 + c$
- C.  $c = 9h$
- D.  $h = 9c$

This item measures aspects of 6.EE.9  
No Calculator  
Key: C

Vin records the ages of children who rode the carousel at the county fair one afternoon. His findings are in the graph below.



This item measures aspects of 6.SP.2  
No Calculator  
Key: B

Based on the graph, which sentence best describes the distribution of Vin's data?

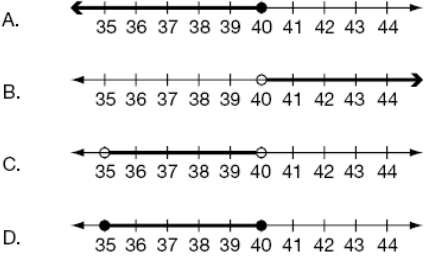
- A. The ages range from 1 to 22.
- B. The data clusters around 8 years old.
- C. Half of the children are older than 8 years old.
- D. Half of the children are 6 years old or younger.

Susan wants to ride her bicycle from Franklin, Louisiana, to New Iberia, which is 21 miles away. She plans on completing the bike ride in 3 hours. At what average speed should she travel?

- A. 6 miles per hour
- B. 7 miles per hour
- C. 18 miles per hour
- D. 24 miles per hour

This item measures aspects of 6.RP.3b  
No Calculator  
Key: B

Casey worked no more than 40 hours each week. Which graph **best** represents the number of hours Casey worked each week?



This item measures aspects of 6.EE.8  
No Calculator  
Key: A

Which situation could best be represented by a negative number?

- A. 3 feet above sea level
- B. 7 degrees Celsius below 0
- C. a gain of 5 yards in football
- D. a deposit of \$9 into a bank account

This item measures aspects of 6.NS.5  
Calculator  
Key: B



Pecan trees in Louisiana need to have fertilizer applied each spring to ensure their health. Use this table to answer the question below.

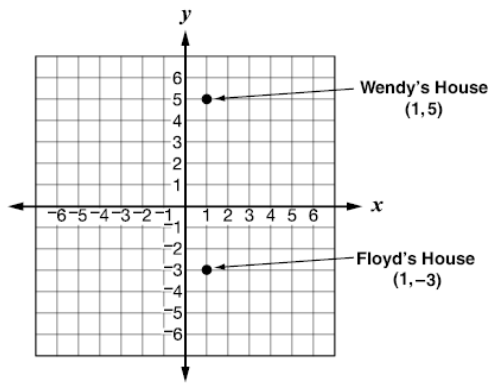
Pecan Tree Fertilizing Guidelines	
Trunk Diameter (inches)	Amount of Fertilizer (pounds)
2	6
5	15
8	24

How much fertilizer does a pecan tree with a trunk diameter of 12 inches require?

- A. 12 pounds
- B. 24 pounds
- C. 33 pounds
- D. 36 pounds

This item measures aspects of 6.RP.3  
Calculator  
Key: D

The location of Wendy's and Floyd's houses are shown on the coordinate plane below.



The length of the side of each square in the coordinate plane represents 1 block. How far is Wendy's house from Floyd's house?

- A. 2 blocks
- B. 4 blocks
- C. 8 blocks
- D. 10 blocks

This item measures aspects of 6.NS.8

Calculator

Key: C

Holden bought 2 magazines for  $m$  dollars each. He spent a total of \$5.00 on the magazines. The equation below can be solved to find out how much he spent on each magazine.

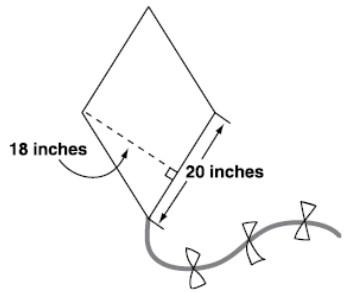
$$2m = 5$$

Which statement tells how much Holden spent on each magazine?

- A. Holden spent \$0.40 on each magazine.
- B. Holden spent \$2.50 on each magazine.
- C. Holden spent \$3.00 on each magazine.
- D. Holden spent \$7.00 on each magazine.

This item measures aspects of 6.EE.5  
Calculator  
Key: B

The diagram below shows the kite Bob is making. The opposite sides of the kite are parallel.



What is the area of the kite?

- A. 76 square inches
- B. 180 square inches
- C. 360 square inches
- D. 720 square inches

This item measures aspects of 6.G.1  
Calculator  
Key: C

Miki works less than 40 hours per week. Which inequality represents  $x$ , the number of hours Miki works per week?

- A.  $x \geq 40$
- B.  $x \leq 40$
- C.  $x > 40$
- D.  $x < 40$

This item measures aspects of 6.EE.8  
Calculator  
Key: D

The number of hits Jada had in each of her last 7 softball games are listed below.

3, 5, 4, 1, 2, 3, 5

What is the range of the number of hits?

- A. 2
- B. 3
- C. 4
- D. 5

This item measures aspects of 6.SP.3  
Calculator  
Key: C

Glenda paid \$24 for 6 books. What is the rate that Glenda paid for each book?

- A. \$4 per book
- B. \$6 per book
- C. \$12 per book
- D. \$18 per book

This item measures aspects of 6.RP.2

Calculator

Key: A

For dinner last night Mattie ate 35 peas and 5 carrots. Which explanation about the ratio of peas to carrots is true?

- A. For every 1 pea Mattie ate, she ate 7 carrots.  
The ratio of peas to carrots Mattie ate is 1:7.
- B. For every 5 peas Mattie ate, she ate 7 carrots.  
The ratio of peas to carrots Mattie ate is 5:7.
- C. For every 7 peas Mattie ate, she ate 1 carrot.  
The ratio of peas to carrots Mattie ate is 7:1.
- D. For every 7 peas Mattie ate, she ate 5 carrots.  
The ratio of peas to carrots Mattie ate is 7:5.

<p>This item measures aspects of 6.RP.1</p> <p>Calculator</p> <p>Key: C</p>
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Use the table below to answer question

$x$	$y$
1	4
2	8
3	12
4	16
5	20

Which equation describes the relationship shown in the table?

- A.  $y = x + 3$
- B.  $y = 2x + 2$
- C.  $y = 3x$
- D.  $y = 4x$

This item measures aspects of 6.EE.9

Calculator

Key: D

Jasmine has a T-shirt with a design on the front of it. The design is shown below.



This item measures aspects of 6.RP.3  
Calculator  
Key: B

Jasmine has a second T-shirt with a design that has a total of 20 stars on it. Both T-shirts have the same percentage of black stars. How many black stars are on Jasmine's second T-shirt?

- A. 3
- B. 5
- C. 15
- D. 25

To find the cost of tickets to see a team play, a person can use the expression  $45x$ , where  $x$  represents the number of tickets being purchased. If a group of 16 people bought tickets for a game, what would be the total cost?

- A. \$61
- B. \$456
- C. \$720
- D. \$4,516

This item measures aspects of 6.EE.2  
Calculator  
Key: C

Which question will result in a variety of data?

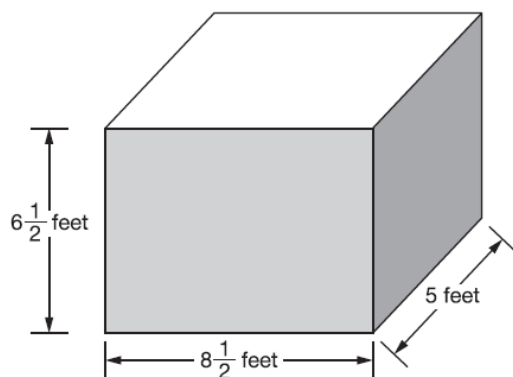
- A. How many feet are in a mile?
- B. How old are the trees in a national forest?
- C. What is the length of the Mississippi River?
- D. How old was Abraham Lincoln when he became president?

This item measures aspects of 6.SP.1

Calculator

Key: B

Use the diagram below to answer question



This item measures aspects of 6.G.2  
Calculator  
Key: D

The diagram shows the concrete base planned for a statue in a park. What volume of concrete will be needed for the base?

- A.  $221\frac{1}{2}$  cubic feet
- B. 241 cubic feet
- C.  $241\frac{1}{4}$  cubic feet
- D.  $276\frac{1}{4}$  cubic feet

Marianne is running in a race. This table shows the time and distance she has already run.

Time (seconds)	1	2	3	4
Distance (meters)	3.5	7.0	10.5	14.0

If she continues at the same rate, how many meters will she have run after 12 seconds?

- A. 17.5 meters
- B. 42.0 meters
- C. 50.0 meters
- D. 420.0 meters

This item measures aspects of 6.RP.3  
Calculator  
Key: B

Use the table below to answer question

Motor Scooter Rental Cost

Number of Hours	Total Cost (dollars)
1	30
2	40
3	50
4	60

This item measures aspects of 6.EE.9  
Calculator  
Key: A

The table shows the total cost, in dollars, for renting a motor scooter. Which equation models the relation between the total cost,  $y$ , and the number of hours,  $x$ , the motor scooter is rented?

- A.  $y = 10x + 20$
- B.  $y = 10x + 30$
- C.  $y = 20x + 10$
- D.  $y = 30x + 10$

Cory sold 6 baseball cards to a collector for a total of \$90. He sold each card for the same price. What is the unit rate for Cory's baseball cards?

- A. \$6 per card
- B. \$15 per card
- C. \$30 per card
- D. \$84 per card

<p>This item measures aspects of 6.RP.2 Calculator Key: B</p>
---



Ingrid is 3 times as old as Ernest. The sum of their ages is 24. This is represented by the equation  $e + 3e = 24$ , where  $e$  is Ernest's age. How old is Ernest?

- A. 3
- B. 6
- C. 12
- D. 21

<p>This item measures aspects of 6.EE.5 Calculator Key: B</p>
---

The table below shows the amount of time, in minutes, Drew spent on the swings at a playground last week.

**Drew's Time on the Swings**

Day	Time (minutes)
Sunday	8
Monday	7
Tuesday	10
Wednesday	0
Thursday	11
Friday	13
Saturday	0

This item measures aspects of 6.SP.3  
Calculator  
Key: A

What is the mean amount of time, in minutes, Drew spent on the swings?

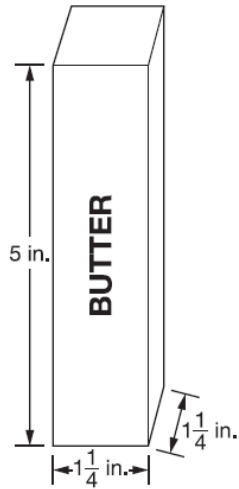
- A. 7
- B. 8
- C. 9.8
- D. 10

Mel spent \$12.50 buying apples. The apples cost \$2.50 per pound. Which equation can be used to find  $p$ , the number of pounds of apples Mel bought, **and** how many pounds of apples did he buy?

- A.  $2.50 + p = 12.50$   
He bought 10 pounds of apples.
- B.  $12.50 + p = 2.50$   
He bought 10 pounds of apples.
- C.  $2.50p = 12.50$   
He bought 5 pounds of apples.
- D.  $12.50p = 2.50$   
He bought 0.2 pounds of apples.

<p>This item measures aspects of 6.EE.7 Calculator Key: C</p>
---

Fran has a stick of butter in the shape of a rectangular prism. The lengths of the sides of the stick of butter are shown below.



This item measures aspects of 6.G.2  
Calculator  
Key: C

What is the volume of the stick of butter?

- A.  $6\frac{1}{4}$  cubic inches
- B.  $7\frac{1}{2}$  cubic inches
- C.  $7\frac{13}{16}$  cubic inches
- D.  $9\frac{4}{5}$  cubic inches

A bean plant has grown to a height of 24 centimeters after 6 weeks. The equation below can be used to find the rate of growth,  $r$ , in centimeters per week, of the bean plant.

$$6r = 24$$

What is the rate of growth,  $r$ , in centimeters per week, of the bean plant?

- A. 4
- B. 18
- C. 30
- D. 144

This item measures aspects of 6.EE.7  
Calculator  
Key: A

Patrick and his 5 brothers are saving money to buy a computer game that costs \$144. The expression  $6m$  can be used to show how much they have saved. If  $m = \$18$ , how much more do they need to buy the game?

- A. \$144
- B. \$108
- C. \$36
- D. \$24

This item measures aspects of 6.EE.2  
Calculator  
Key: C

The fifth-grade classes are helping with fall cleanup by raking yards. At noon, 8 classes have finished raking and 7 classes are still raking. What is the ratio of classes finished raking to classes still raking?

- A. 7:15
- B. 8:15
- C. 7:8
- D. 8:7

This item measures aspects of 6.RP.1  
Calculator  
Key: D

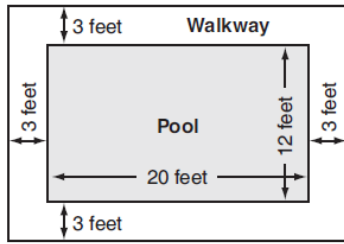
Every month Jerry is charged a flat fee of \$20.00 for his phone service. There is an additional charge of \$0.05 per minute for every minute he spends on long-distance phone calls. If Jerry talked for  $m$  number of long-distance minutes, which expression represents his total charges for that month?

- A.  $20m + 0.05$
- B.  $20 - 0.05m$
- C.  $20 + 0.05m$
- D.  $20m - 0.05$

<p>This item measures aspects of 6.EE.6</p> <p>Calculator</p> <p>Key: C</p>
---



Mae is building a walkway that extends 3 feet around a pool on all sides.



This item measures aspects of 6.G.1  
Calculator  
Key: D

What is the total area of the walkway and the pool?

- A. 105 square feet
- B. 228 square feet
- C. 369 square feet
- D. 468 square feet

Tracy is helping her father on his tree farm. She can plant 4 trees in an hour.

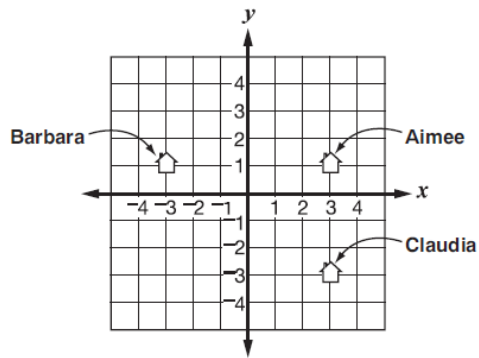
Number of Hours Worked	1	2	3	4
Number of Trees Planted	4	8	12	16

If she continues at this same rate, how many hours would it take her to plant 72 trees?

- A. 4 hours
- B. 17 hours
- C. 18 hours
- D. 19 hours

This item measures aspects of 6.RP.3  
Calculator  
Key: C

Aimee's two closest friends, Barbara and Claudia, live nearby. Each unit on the graph represents 1 block. One day Aimee went from her house to Barbara's house. The next day she went from her house to Claudia's house. Each day, she took the shortest path and stayed on the gridlines.



How many more blocks did Aimee go to reach Barbara's house than to reach Claudia's house?

- A. 2
- B. 4
- C. 6
- D. 10

This item measures aspects of 6.NS.8  
Calculator  
Key: A

Barry earned \$175 for 14 hours of gardening. How much money did Barry earn per hour?

- A. \$3.50
- B. \$12.50
- C. \$14.00
- D. \$17.50

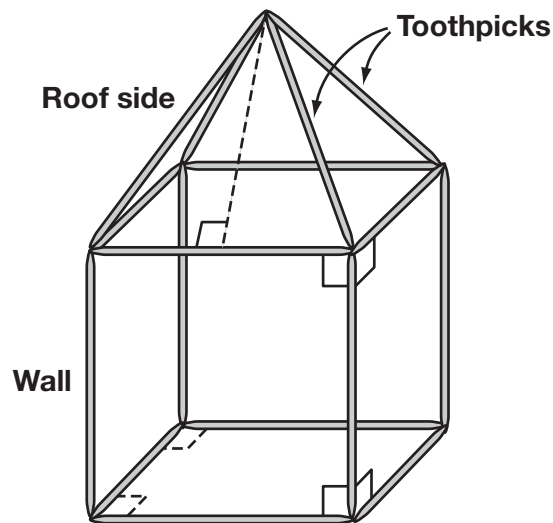
This item measures aspects of 6.RP.3b  
Calculator  
Key: B

Write your answers to questions 61 and 62 on the lines and in the spaces provided. The questions have more than one part. Show all the work you do to find your answers. Even if you cannot answer all parts, answer as many as you can. You may still get points for answering part of a question. Be sure to write clearly.



**You MAY use a calculator for this session.**

**61.** Marvin built this model of a house using toothpicks of the same length.

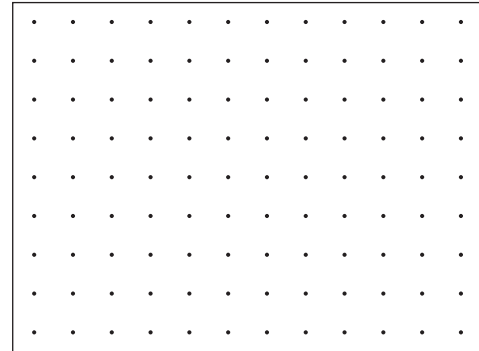


**A.** How many toothpicks did he use to build the model?

- B.** Marvin is going to cover the walls and roof of the model with paper. What shape should Marvin cut out to cover one wall of the model? Draw the two-dimensional shape on the dot paper below.

**Name of shape:**

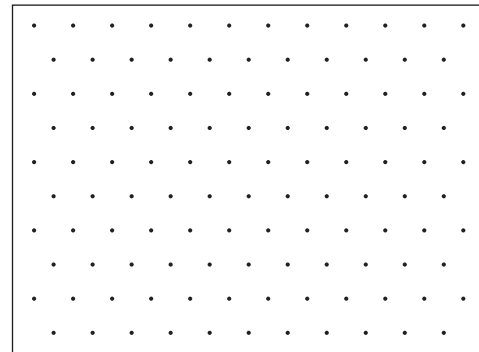
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- C.** What shape should Marvin cut out to cover one side of the roof? Draw the two-dimensional shape on the dot paper below.

**Name of shape:**

---



- D.** Marvin is going to use green paper to cover the walls and brown paper to cover the roof. Will Marvin use more green paper or brown paper to cut out the shapes needed to fully cover the model? Explain your answer.

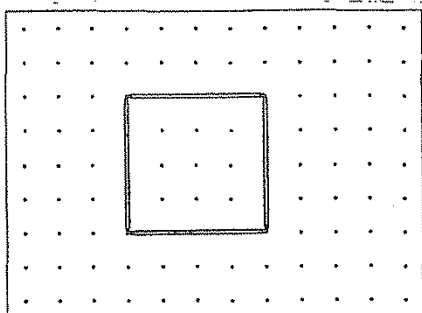
## Grade 6 Math

<b>4</b>	The student earns 6 points.
<b>3</b>	The student earns 4 or 5 points.
<b>2</b>	The student earns 3 or 2 points.
<b>1</b>	The student earns 1 point. <b>OR</b> The student shows minimal knowledge of polyhedra and the shape(s) of their faces.
<b>0</b>	The student's response is incorrect or irrelevant to the skill or concept being measured.
<b>B</b>	No Response.

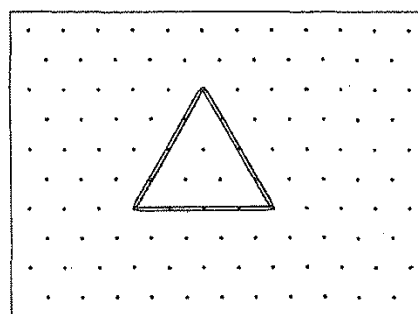
### Correct Answers:

**Part A.** 16 toothpicks

**Part B.** Square



**Part C.** Triangle



**Part D.** Green paper. The area of each square needed for the walls is more than the area of each triangle needed for the roof, and he will cut out 4 of each.

## Grade 6 Math

### **Points Assigned:**

**Part A.** 1 point

1 point for the correct number of toothpicks

**Part B.** 2 points

2 points for an accurate drawing and correct name for the shape

**OR**

1 point for an accurate drawing with no name of shape, or incorrect name of shape

**OR**

1 point for the correct name for the shape with an incorrect drawing or no drawing

**Part C.** 2 points

2 points for an accurate drawing and correct name for the shape

**OR**

1 point for an accurate drawing with no name of shape, or incorrect name of shape

**OR**

1 point for the correct name for the shape with an incorrect drawing or no drawing

**Part D.** 1 point

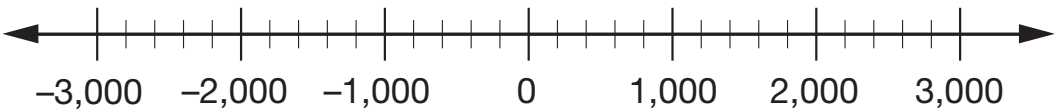
1 point for the correct color of paper and a valid explanation of why the answer is correct



62. The finances of four adults are described below.

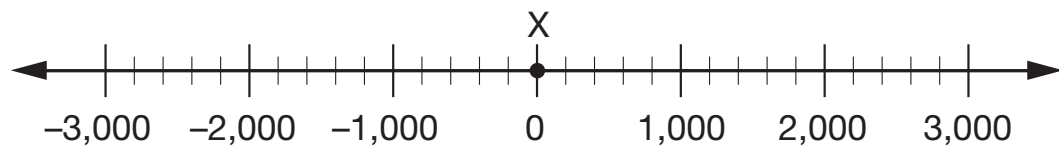
Label	Description
P	Paula owes the bank \$1,600, which she used to pay for a new roof.
Q	Quenton saves \$2,800, which he earned working in a restaurant.
R	Rachel borrows \$400 from her sister to fix her car.
S	Sabastián takes out a student loan for \$2,400 to help pay for college.

- A. Use the table information to draw points representing each person’s finances on the number line. Be sure to label each point.

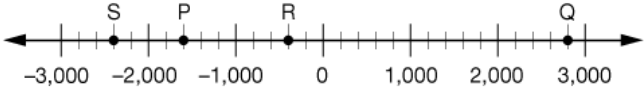


- B. Zoe has \$800 in savings. Ana’s finances can be represented by the number that is the opposite of the number that represents Zoe’s finances. Write the number that represents Ana’s finances and a sentence that could explain her finances.

- C.** Xavier's finances are represented by the point X shown on the number line.



Write a sentence that could explain Xavier's finances.

<b>Scoring Rubric</b>	
<b>4</b>	The student earns 4 points.
<b>3</b>	The student earns 3 points.
<b>2</b>	The student earns 2 points.
<b>1</b>	The student earns 1 point OR demonstrates minimal understanding of the concept being measured.
<b>0</b>	The student's response is incorrect or irrelevant to the skill or concept being measured.
<b>B</b>	The student provides no response.
<b>Sample Answer:</b>	
<p>Part A.</p> 	
Part B. Ana has $-\$800$ because she owes her grandmother $\$800$ .	
Part C. Xavier has no money, but he also has no debts.	
<b>Points Assigned:</b>	
<p>Part A. 2 points  2 points for all four points correctly placed and identified on the number line  <b>OR</b>  1 point for 2–3 points correctly placed and identified on the number line</p> <p>Part B. 1 point  1 point for writing <math>-800</math> and having a correct and complete explanation</p> <p>Part C. 1 point  1 point for having a correct and complete explanation</p>	