

**Test Title: enVisionmath2.0 - Grade 5 - End of Year**

**Student Name :**

**Date :**



Choose Yes or No to tell if the equation is true.

$840 \div 70 = 14$  Choose.. ▼

$480 \div 30 = 16$  Choose.. ▼

$640 \div 40 = 16$  Choose.. ▼

$910 \div 30 = 31$  Choose.. ▼



Consider the expression  $25 - 10 \div 2 + 3$ .

**Part A**

Which shows a way to rewrite the expression using parentheses so that the expression equals 23?

Select all that apply.

☐ A.  $(25 - 10) \div 2 + 3 = 23$

☐ B.  $25 - 10 \div (2 + 3) = 23$

☐ C.  $(25 - 10) \div (2 + 3) = 23$

☐ D.  $25 - (10 \div 2) + 3 = 23$

**Part B**

Which shows a way to rewrite the expression using parentheses so that the expression equals 3?

☐ A.  $(25 - 10) \div 2 + 3 = 3$

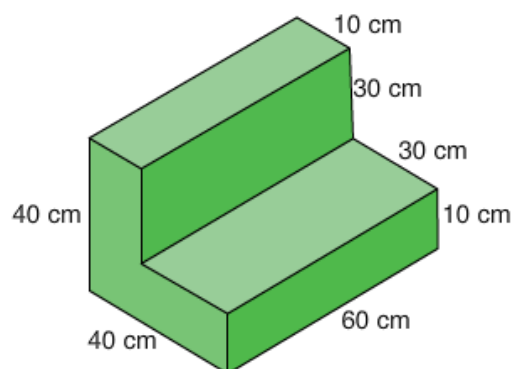
☐ B.  $25 - 10 \div (2 + 3) = 3$

☐ C.  $(25 - 10) \div (2 + 3) = 3$

☐ D.  $25 - (10 \div 2) + 3 = 3$



A specialty cake has the dimensions shown.



### Part A

Which equation can you use to solve for the volume of the cake?

- ☐ A.  $60 \times 40 \times 30 \times 10 = V$
- ☐ B.  $(30 + 60 + 10) + (30 \times 60 \times 10) = V$
- ☐ C.  $(40 \times 60 \times 10) + (30 \times 60 \times 10) = V$
- ☐ D.  $(30 \times 60 \times 10) + (30 \times 40 \times 10) = V$



### Part B

What is the volume of the cake? Enter your answer in the box.

  $\text{cm}^3$

Which products are greater than  $2\frac{5}{6}$ ? Choose all that apply.

☐ A.  $\frac{1}{8} \times 2\frac{5}{6}$

☐ B.  $2\frac{5}{6} \times 2\frac{5}{6}$

☐ C.  $2\frac{5}{6} \times 1\frac{5}{8}$

☐ D.  $\frac{5}{6} \times 2\frac{5}{6}$

☐ E.  $\frac{6}{5} \times 2\frac{5}{6}$



Choose Yes or No to tell if each statement is true.

A rhombus is a trapezoid.

A parallelogram has exactly 1 pair of parallel sides.

A rectangle is also a rhombus.

A rectangle is also a parallelogram.



A 360-foot roll of ribbon contains enough ribbon to make 85 braided bracelets.

**Part A**

Between what two whole numbers of feet will each bracelet use?

- ☐ A. Between 3 and 4 feet
- ☐ B. Between 4 and 5 feet
- ☐ C. Between 5 and 6 feet
- ☐ D. Between 6 and 7 feet

**Part B**

Use the drop-down menus to explain your answer to **Part A**.

$340 \div 85 =$  Choose.. and  $425 \div 85 =$  Choose.., so  $360 \div 85$  is between Choose... feet.



A shelf contains 28 boxes of cereal. Each box has a mass of 375 grams. Which equation can you use to find the total mass of the boxes? What is the total mass,  $m$ , in grams of all the boxes?

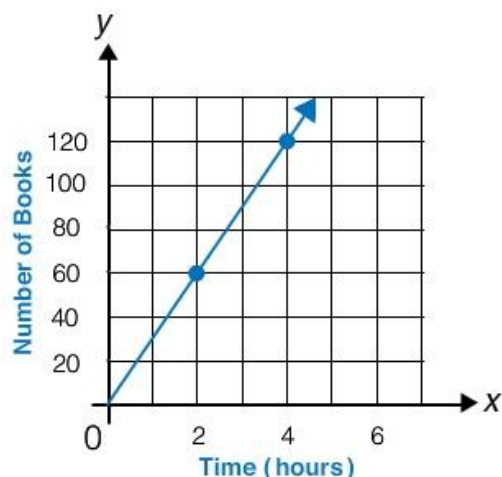
- ☐ A.  $28 + 375 = m$ ;  $m = 403$  grams
- ☐ B.  $28 \times 375 = m$ ;  $m = 1,050$  grams
- ☐ C.  $28 \times 375 = m$ ;  $m = 10,500$  grams
- ☐ D.  $28 \times 375 = m$ ;  $m = 11,500$  grams





Nick volunteers at the library shelving books.

The graph shows how many books Nick shelves one Saturday.



### Part A

How many books does Nick shelf in 2 hours? Enter your answer in the box.

 books


### Part B

What does the point (3, 90) represent on the graph?

- ☐ A.

Nick volunteers 90 hours in 3 weeks.

- ☐ B.

Nick earns \$90 in 3 weeks.

- ☐ C.

Nick shelves 90 books in 3 hours.

- ☐ D.

Nick shelves 90 books on 3 Saturdays.



Drag each number to a box on the right to match each expression on the left with its product.

8,320

832

8.32

0.832

Expression	Product
$83.2 \times 0.1$	<input type="text"/>
$8.32 \times 10^2$	<input type="text"/>
$83.2 \times 10^2$	<input type="text"/>
$832 \times 0.001$	<input type="text"/>



What is the missing decimal in the chart? How can you tell?  
Use the drop-down menus to show and explain your answer.

0.033	0.034	0.035	0.036	0.037	0.038
0.043	0.044	?	0.046	0.047	0.048
0.053	0.054	0.055	0.056	0.057	0.058

The missing number is  .

The  digit is 1  than the number above,

and the  digit is 1  than the number to its right.

On Monday, Mr. Roberts drove 42 miles.

On Tuesday, he drove 5 miles more than half the distance he drove on Monday.

Which expression shows how you could find the distance, in miles, Mr. Roberts drove on Tuesday?

- ☐ A.  $(42 - 5) \times 2$
- ☐ B.  $42 - (5 \times 2)$
- ☐ C.  $(42 \div 2) - 5$
- ☐ D.  $(42 \div 2) + 5$



Ryder is building a workbench.

The top of the workbench is a rectangular piece of plywood that is 6.25 feet long and 1.83 feet wide.

**Part A**

Round the length and width to the nearest whole number.

Then estimate the perimeter of the workbench.

Which of the following equations models this estimate of the perimeter?

- |   |  |
|---|--|
| <input type="radio"/> A. $6 + 6 + 2 + 2 = 16$ | <input type="radio"/> B. $6 \times 2 = 12$ |
| <input type="radio"/> C. $7 + 7 + 2 + 2 = 18$ | <input type="radio"/> D. $7 \times 2 = 14$ |

**Part B**

Round the length and width to the nearest tenth.

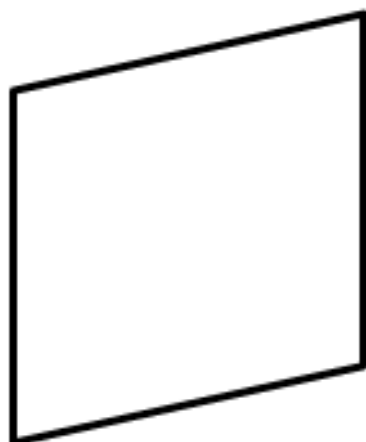
Then estimate the perimeter of the workbench.

Which of the following equations models this estimate of the perimeter?

- |   |   |
|---|---|
| <input type="radio"/> A. $6.2 + 6.2 + 1.8 + 1.8 = 16$   | <input type="radio"/> B. $6.2 \times 1.8 = 11.16$ |
| <input type="radio"/> C. $6.3 + 6.3 + 1.8 + 1.8 = 16.2$ | <input type="radio"/> D. $6.3 \times 1.8 = 11.34$ |




Select all the names that could be used to describe the figure.




☐ A. 


Parallelogram

☐ B. 

Quadrilateral

☐ C. 

Rhombus

☐ D. 

Square

☐ E. 

Trapezoid



Which statement tells how to graph the point (3, 2) on a coordinate plane?

- ☐ A.

From the origin, move 2 units up and 3 units to the left.

- ☐ B.

From the origin, move 3 units to the right and 2 units up.

- ☐ C.

From the origin, move 3 units up and 2 units to the right.

- ☐ D.

From the origin, move 2 units to the right and 3 units down.



Jackson is making brownies. He uses the following ingredients.

Ingredients	Amount for 1 Batch of Brownies
Flour	3 cups
Sugar	2 cups
Butter	$\frac{1}{3}$ cup
Cocoa Powder	$\frac{1}{4}$ cup

Jackson has 1 cup of butter. If he wants to use all the butter, how many batches of brownies can he make?

**Part A**

Which equation can you use to solve the problem?

☐ A.  $1 \div 3 = 3$

☐ B.  $1 \div \frac{1}{3} = 3$

☐ C.  $1 \times \frac{1}{3} = \frac{1}{3}$

☐ D.  $1 + \frac{1}{3} = \frac{1}{3}$

**Part B**

Jackson used all the butter to make the brownies.

If each brownie is  $\frac{1}{9}$  of a batch, how many brownies did he make?

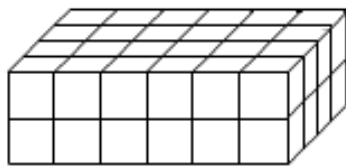
Enter your answer in the box.

brownies

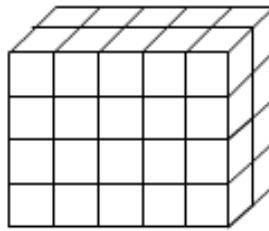




Both of the models are made up of 1-centimeter cubes.  
Which statement about these models is true?



Model A



Model B

- ☐ A.

Model A and Model B have the same volume.

- ☐ B.

The volume of Model A is less than the volume of Model B.

- ☐ C.

The volume of Model A is 6 cubic centimeters greater than the volume of Model B.

- ☐ D.

The volume of Model A and Model B combined is 88 cubic centimeters.



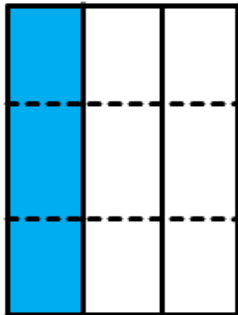
Peyton has  $\frac{1}{8}$  of a package of beads left.

She thinks she can make 3 bracelets from the beads left in the package.

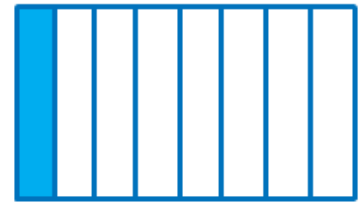
**Part A**

Which diagram shows how Peyton can divide the beads into equal portions?

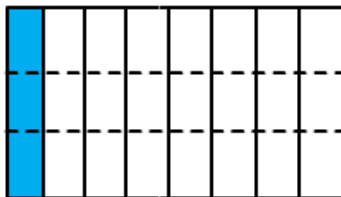
☐ A.



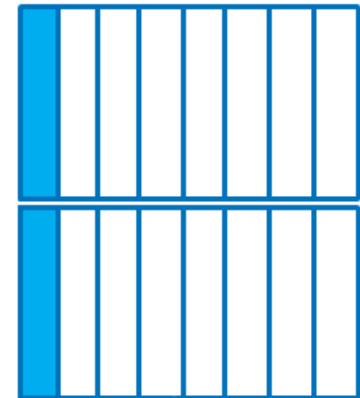
☐ B.



☐ C.



☐ D.



**Part B**

What fraction of the entire package of beads does each bracelet require?

☐ A.  $\frac{1}{8}$

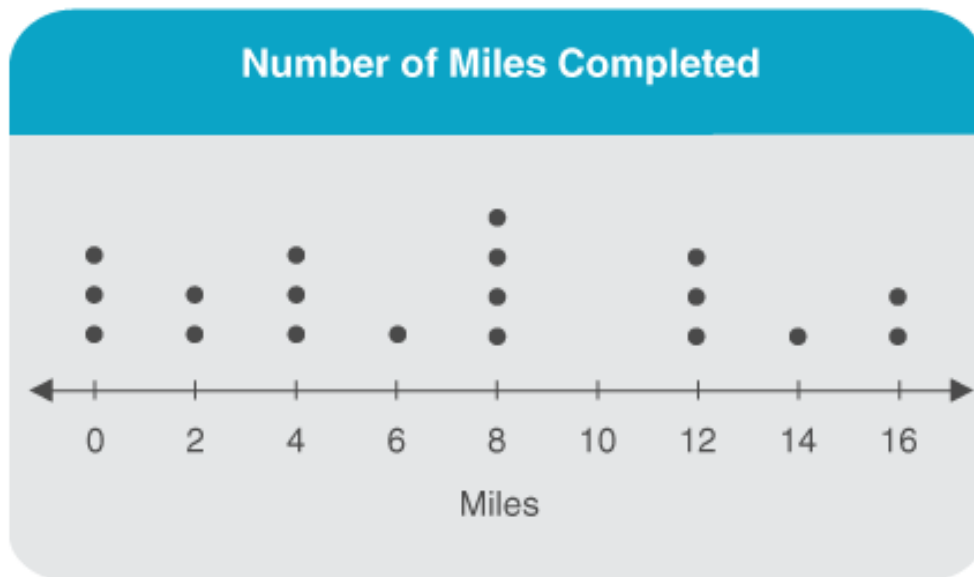
☐ B.  $\frac{1}{3}$

☐ C.  $\frac{1}{24}$

☐ D.  $\frac{3}{8}$



Use the line plot. How many students walked more than 6 miles and less than 14 miles?



- ☐ A. 11 students
- ☐ B. 9 students
- ☐ C. 7 students
- ☐ D. 4 students



Choose all equations that are true.

☐ A.  $2\frac{2}{3} \times 4 = 8\frac{2}{3}$

☐ B.  $3\frac{1}{3} \times \frac{5}{8} = 2\frac{1}{12}$

☐ C.  $6\frac{2}{3} \times 2\frac{1}{2} = 16\frac{2}{3}$

☐ D.  $1\frac{5}{12} \times 6\frac{2}{3} = 9\frac{4}{9}$

☐ E.  $4\frac{1}{2} \times 3\frac{4}{5} = 12\frac{2}{5}$



Select the correct symbol from the drop-down menus to make the statements true.

321.008  321.8

52.708  52.078

6.57  6.570

0.305  0.053



Emily uses  $1\frac{2}{3}$  cups of sugar and  $3\frac{1}{4}$  cups flour to make muffins.

She says she has  $1\frac{2}{3}$  more cups of flour than sugar. Do you agree? Explain.

☐ A.



Yes;  $3\frac{1}{4} - 1\frac{2}{3} = 1\frac{2}{3}$

☐ B.



No; the difference between  $3\frac{1}{4}$  and  $1\frac{2}{3}$  is  $1\frac{1}{2}$ , not  $1\frac{2}{3}$ .

☐ C.



No; the difference between  $3\frac{1}{4}$  and  $1\frac{2}{3}$  is  $1\frac{7}{12}$ , not  $1\frac{2}{3}$ .

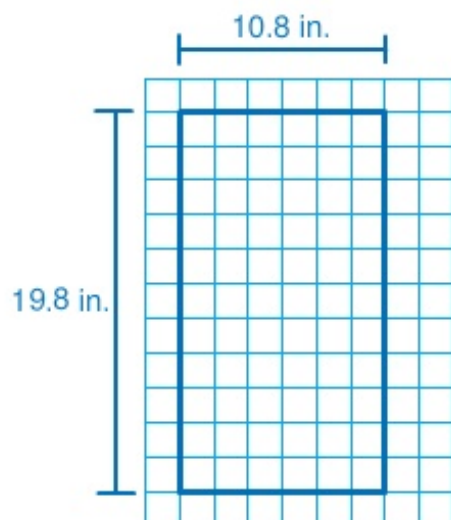
☐ D.



No; the sum of  $3\frac{1}{4}$  and  $1\frac{2}{3}$  is  $4\frac{11}{12}$ , not  $1\frac{2}{3}$ .



Gianna draws a rectangle on a piece of grid paper.  
She wants to know the side length of each grid square.

**Part A**

Which equation can Gianna use to find the side length,  $s$ , of one square?

- ☐ A.  $10.8 \div 6 = s$
- ☐ B.  $10.8 \div 9 = s$
- ☐ C.  $10.8 \times 19.8 = s$
- ☐ D.  $13 \div 19.8 = s$

**Part B**

What is the side length of one square? Enter your answer in the box.

 in.



Miriam makes two and a fourth gallons of punch for a school event. How many 4-ounce servings of punch can she serve?

- ☐ A. 40
- ☐ B. 64
- ☐ C. 70
- ☐ D. 72





Dylan keeps a fitness journal. Each week he runs 18 miles and swims 2 miles.

Weeks	Miles Run	Miles Swum
1	18	2
2	?	?
3	?	?
4	?	?
5	?	?

### Part A

What rules can you use to complete the table to show how many miles Dylan runs and swims after each week?  
Enter numbers in the boxes to complete the rules.

Miles run: Add .

Miles swum: Add .



### Part B

Drag numbers to complete the table.

6 4 36 10 90 8 54 72

Weeks	Miles Run	Miles Swum
1	18	2
2	<input type="text"/>	<input type="text"/>
3	<input type="text"/>	<input type="text"/>
4	<input type="text"/>	<input type="text"/>
5	<input type="text"/>	<input type="text"/>



### Part C

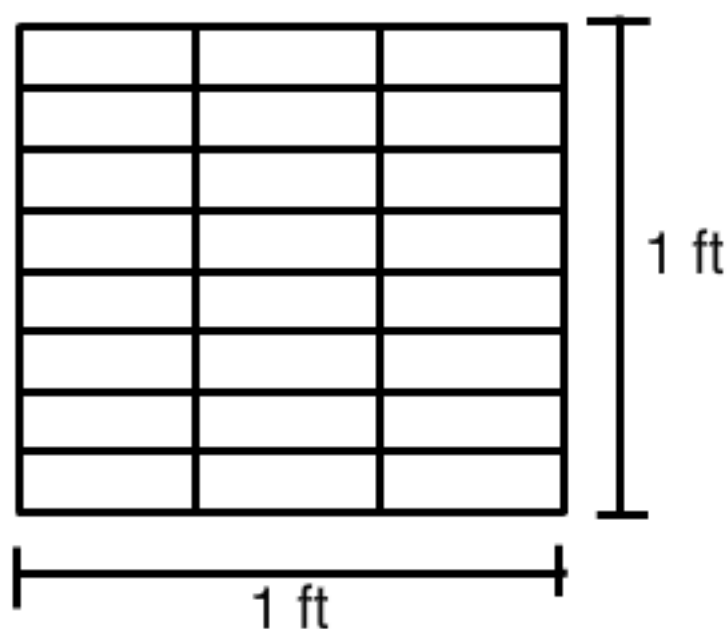
If the pattern in the table in **Part B** continues, what ordered pair would represent the number of miles run and number of miles swum after week 6? Enter your answers in the boxes.

(  ,  )



Find the area of a rectangle with side lengths  $\frac{5}{8}$  ft and  $\frac{1}{3}$  ft.


Use the drawing to help you solve the problem.




- ☐ A.  $\frac{5}{11} \text{ ft}^2$
- ☐ B.  $1\frac{11}{12} \text{ ft}^2$
- ☐ C.  $\frac{6}{11} \text{ ft}^2$
- ☐ D.  $\frac{5}{24} \text{ ft}^2$



What is the relationship between the value of the digit 3 in 4,231 and in the value of the digit 3 in the number 3,421?

- ☐ A. 

In 4,231, the value of the digit 3 is  $\frac{1}{10}$  the value of the digit 3 in 3,421.

- ☐ B. 

In 4,231, the value of the digit 3 is 10 times the value of the digit 3 in 3,421.

- ☐ C. 

In 4,231, the value of the digit 3 is  $\frac{1}{100}$  the value of the digit 3 in 3,421.

- ☐ D. 

In 4,231, the value of the digit 3 is 100 times the value of the digit 3 in 3,421.



Enter numbers in the boxes to make each equation true.

9 72 20 5

$$6 \div \frac{1}{\boxed{\phantom{00}}} = 54$$

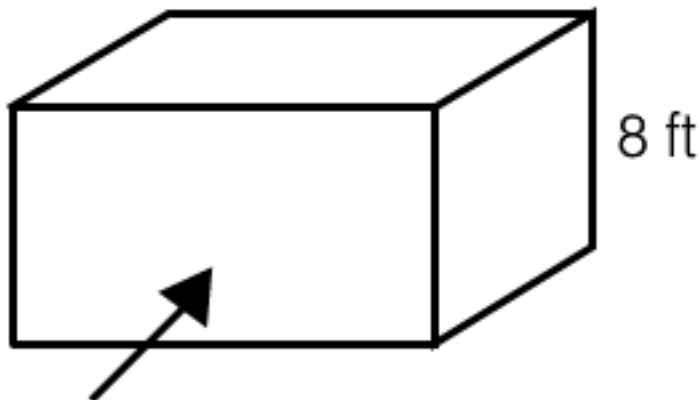
$$4 \div \frac{1}{5} = \boxed{\phantom{00}}$$

$$\boxed{\phantom{00}} \div \frac{1}{7} = 35$$

$$8 \div \frac{1}{9} = \boxed{\phantom{00}}$$



The diagram shows the dimensions of a storage container.



Area of base = 108 sq ft

Which expression can be used to find the volume of the container?

- ☐ A.  $108 \times 8$
- ☐ B.  $108 \div 8$
- ☐ C.  $108 \times 8 \times 8$
- ☐ D.  $(108 \times 2) + (8 \times 2)$



One package of cookies contains 3,460 calories. Each serving of cookies contains 72 calories. About how many servings are in the package?

**Part A**

Which expression can be used to find about how many servings are in the package?

- |   |  |
|---|--|
| <input type="radio"/> A. $3,400 \div 7$ | <input type="radio"/> B. $3,400 \div 70$ |
| <input type="radio"/> C. $3,500 \div 7$ | <input type="radio"/> D. $3,500 \div 70$ |

**Part B**

Which of the following is the best estimate for the number of servings in the package?

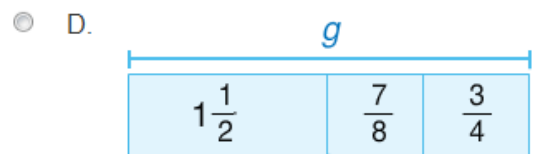
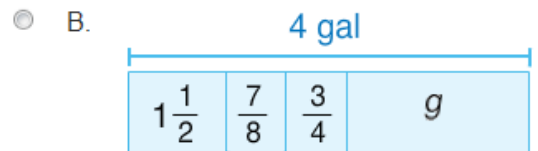
- |                             |                              |
|-----------------------------|------------------------------|
| <input type="radio"/> A. 5  | <input type="radio"/> B. 45  |
| <input type="radio"/> C. 50 | <input type="radio"/> D. 450 |



Emma made punch with  $\frac{3}{4}$  gallon of pineapple juice,  $1\frac{1}{2}$  gallons of orange juice, and  $\frac{7}{8}$  gallon of apple juice. How many gallons of ginger ale does she need to add to make a total of 4 gallons of punch?

**Part A**

Which diagram can Emma use to help find the number of gallons of ginger ale she needs?



**Part B**

How many gallons of ginger ale does Emma need to make a total of 4 gallons of punch?

- |   |   |
|---|---|
| <p><input type="radio"/> A. <math>\frac{7}{8}</math> gallon</p> <p><input type="radio"/> C. <math>3\frac{1}{8}</math> gallons</p> | <p><input type="radio"/> B. <math>1\frac{7}{8}</math> gallons</p> <p><input type="radio"/> D. 4 gallons</p> |
|---|---|