#1

Answer the question bel	ow by	clicking on	the	correct res	ponse.
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The population of Country $X$ is 0.36 billion persons, and the population of Country $Z$ is 12 million persons. The population of Country $X$ is how many times that of Country $Z$ ?
○300
O 30

0.3

0.03

#2

Click on the answer box and type in a number. Backspace to erase.

A rectangular lawn is 40 feet wide and 65 feet long. If a bag of fertilizer covers 10,400 square feet, what is the maximum number of times the lawn can be completely fertilized using a single bag of fertilizer?

#3

Answer the question	below by	clicking on	the	correct re	sponse.
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Marta has \$88 in a jar. If she adds \$6 each week to the money alrea	dv in the i	iar without withdrawi	na anu
money, in how many weeks will she have a total of \$142 in the jar?	, ,	A THE POST OF THE	ig any

07

0 8

O 9

O 10

#4

Answer the question below by clicking on the correct response.

### DISTANCE BETWEEN CITIES (in miles)

	Boston	Dallas	Denver	Omaha	Seattle
Boston	******	1,753	1,998	1,469	3,016
Dallas	1,753	montena	784	662	2,131
Denver	1,998	784	_	541	1,341
Omaha	1,469	662	541	***************************************	1,692
Seattle	3,016	2,131	1,341	1,692	Vi-mata

The table shows the distances between selected cities. Joni will travel directly from Boston to Seattle. Gerry will travel from Boston to Denver and then from Denver to Seattle. How many more miles will Gerry travel than Joni?

_(DAMES	
1	272
1	220

O 657

01,018

O 1,341

#5

### Click on each box and type in a number. Backspace to erase.

In a collection of writing utensils consisting of pens and pencils, 64% of the writing utensils are pens. What is the ratio of pens to pencils in the collection?

Give your answer as a fraction.



#6

Answer the question below by clicking on the correct response.

Which of the following represents the *x*-intercept and the *y*-intercept of the graph of the equation 3x - 4y = 12 in the *xy*-plane?

O(-4,0) and (0,3)

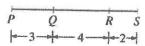
 $\bigcirc$  (-3,0) and (0,4)

(3,0) and (0, -4)

 $\bigcirc$  (4,0) and (0, -3)

#7

Answer the question below by clicking on the correct response.



On line segment PS shown, point X, not shown, is the midpoint of segment PR, and point Y, not shown, is the midpoint of segment RS. Which of the following line segments has the greatest length?

- OQY
- O QR
- OXY
- OXR

#8

### Answer the question below by clicking on the correct response.

#### **BOSTON BROWN BREAD**

	AL EXPERIMENTAL CONTRACTOR
$2\frac{1}{2}$ cups whole-wheat flour	2 teaspoons baking soda
1 4 cups rye flour	2 cups buttermilk
l cup commeal	3/4 cup molasses
2½ teaspoons baking powder	$1\frac{2}{3}$ cups raisins
1 1/4 teaspoons salt	
And the second s	

The recipe shown makes 2 loaves of Boston brown bread. If $2\frac{1}{4}$ cups of molasses are used and all other ingredients are increased proportionally, how many loaves of Boston brown bread will be made?
<b>3</b>
O4
<b>O</b> 5
O6

#9

Click on each box and type in a number. Backspace to erase.

When the linear equation 2x - 5y = -20 is graphed in the xy-plane, what is the slope of the line? Give your answer as a fraction.



#10

### Answer the question below by clicking on the correct response.

For inventory purposes, a manufacturing company assigns a 3-character code to each different item produced. The first character of the code must be a letter from the 26-letter English alphabet. The second and third characters must each be a digit from 0 to 9, but the digit cannot be repeated. How many different 3-character codes can be assigned?

720

2,340

2,600

15,600

#11

### Answer the question below by clicking on the correct response.

For inventory purposes, a manufacturing company assigns a 3-character code to each different item produced. The first character of the code must be a letter from the 26-letter English alphabet. The second and third characters must each be a digit from 0 to 9, but the digit cannot be repeated. How many different 3-character codes can be assigned?

720 2,340 2,600

O 15,600

#### #11

#### Click on your choices.

Which of the following equations demonstrate the associative property of addition or the associative property of multiplication?

Select all that apply.

$$\square v + 2 = 2 + v$$

$$\square 4(w+1) = 4w+4$$

$$\Box$$
 (2+x)+5=2+(x+5)

$$\square w = yw$$

$$\square \times (yz) = (xy)z$$

#12

Answer the question below by clicking on the correct response.

$$\frac{1}{2}n\left( n-3\right)$$

The expression shown gives the number of diagonals in a polygon with n sides, where n is an integer. Which of the following expressions is equivalent to the expression shown?

$$\bigcirc \frac{n^2}{2} + 3$$

$$\bigcirc \frac{n^2}{2} - 3$$

$$\bigcirc \frac{n^2}{2} + \frac{3n}{2}$$

$$\bigcirc \frac{n^2}{2} - \frac{3n}{2}$$

#### #13

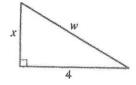
#### Click on your choices.

Which of the following pairs of fractions are equivalent?

Select all that apply.

#14

Answer the question below by clicking on the correct response.



Based on the information in the right triangle shown, which of the following expressions is equivalent to  $\boldsymbol{x}$ ?

- $\bigcirc w-4$
- $\bigcirc$ w+4
- $O\sqrt{w^2-16}$
- $O\sqrt{w^2+16}$

#15

### Click on your choices.

Which of the following sets of ordered pairs (x, y) define y as a function of x? Select **all** that apply.

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