

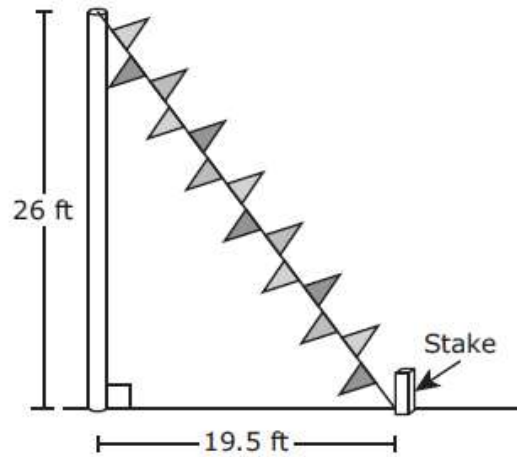
Make a Path

Starting with the largest number in the top row and only moving **up**, **down**, **left**, or **right**, make a path to the bottom row so each number is larger than the previous number.

$\sqrt{0.33}$	$\frac{\sqrt{9}}{3}$	$1.9 \cdot 10^{-1}$	18%	$\frac{3}{8}$
0.25	$\frac{\pi^2}{9}$	$\frac{4}{3}$	150%	$149 \cdot 10^{-2}$
$\frac{\pi}{3}$	0.02	$\frac{\sqrt{4}}{2}$	$\sqrt{9}$	$\frac{3}{4}$
$\sqrt{0.02}$	45%	4.52	π	314%
100%	$\frac{9^2}{\pi}$	$1.9 \cdot 10^2$	$\sqrt{\pi}$	0.314

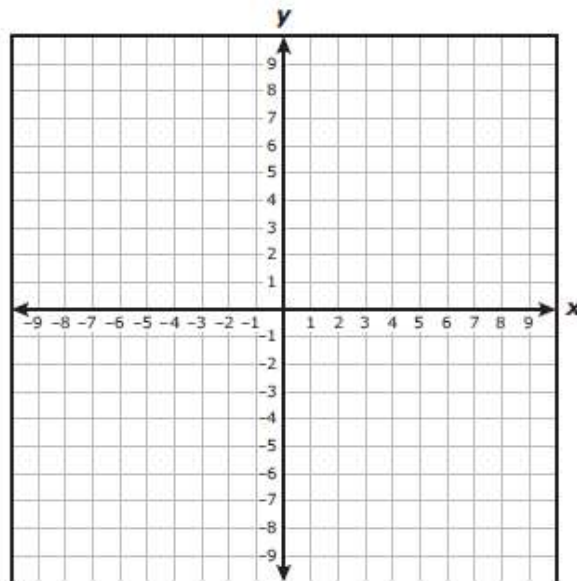
Add 'Em Up

The manager of a car dealership wants to attach a rope with flags to the top of a pole and to a stake in the ground, as shown in the diagram.



Based on the diagram, what is the distance in feet from the top of the pole to the bottom of the stake?

Point $J(-4, -6)$ and point $K(4, 4)$ are located on a coordinate grid.



Which measurement is closest to the distance between point J and point K in units?

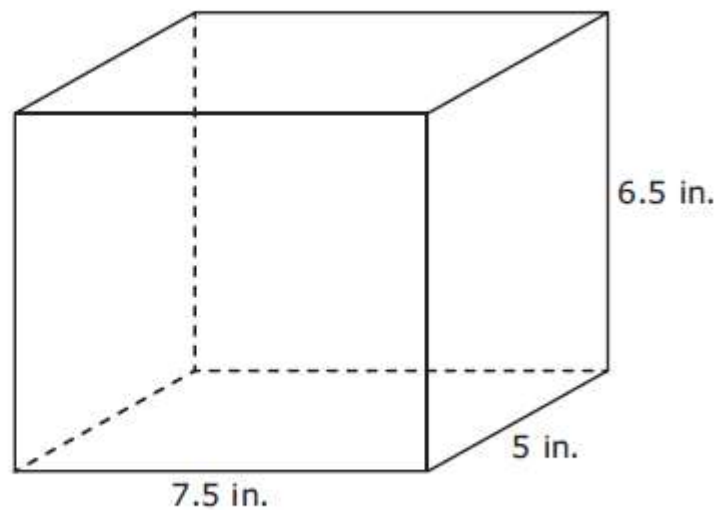
- F 18 units
- G 6 units
- H 13 units
- J 9 units

A rectangle's perimeter and its area have the same numerical value. The width of the rectangle is 3 units. What is the length of the rectangle in units?

Paula completely covered a square wall using 87.5 ft^2 of wallpaper without any overlap. Which measurement is closest to the side length of this wall in feet?

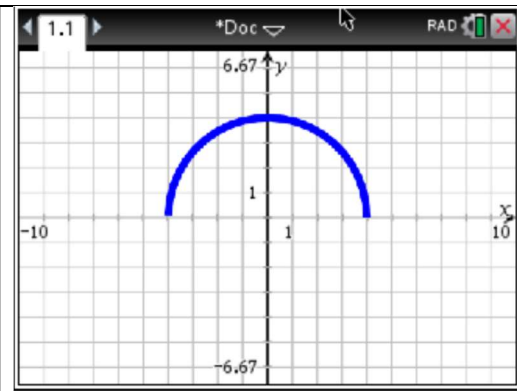
- A 22 ft
- B 44 ft
- C 9 ft
- D 7 ft

A rectangular prism and its dimensions are shown in the diagram.

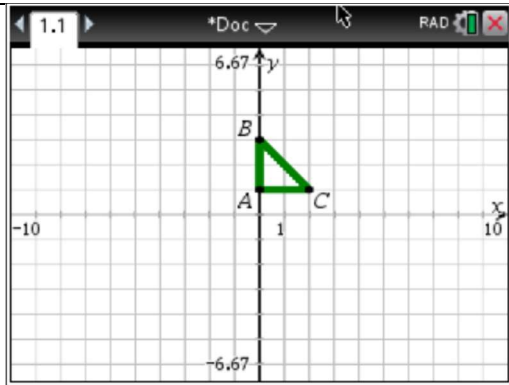


What is the total surface area of this prism in square inches?

What's the Picture?



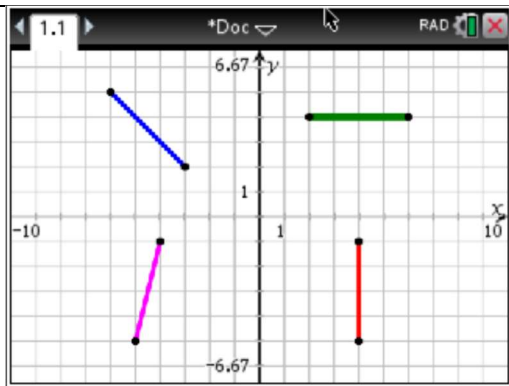
Transform the semicircle using the rule $(x, y) \rightarrow (x, -y)$.



Triangle ABC is shown on the coordinate grid. Triangle ABC is dilated with the origin as the center of dilation to create triangle $A'B'C'$ which is larger than triangle ABC .

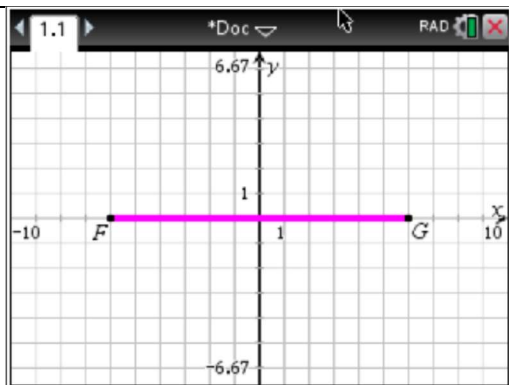
Choose the true statement.

- Because the scale factor is less than 1, the rule used for the dilation is $(x, y) \rightarrow \left(\frac{1}{2}x, \frac{1}{2}y\right)$.
- Because the scale factor is greater than 1, the rule used for the dilation is $(x, y) \rightarrow (2x, 2y)$.

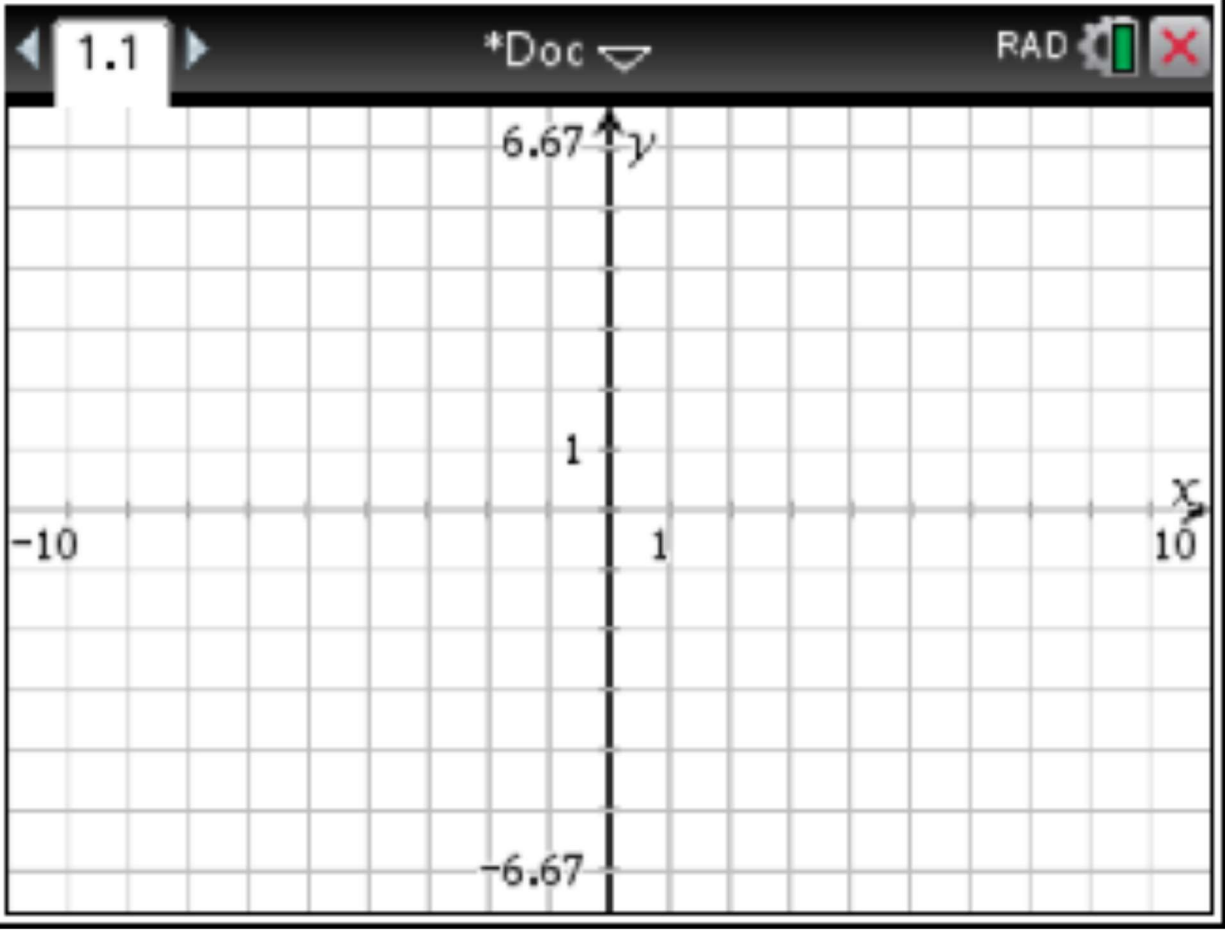


Each quadrant of the coordinate grid contains a relation.

Transform the relation that is NOT a function using the rule $(x, y) \rightarrow (x - 4, y + 5)$.



Use the rule $(x, y) \rightarrow \left(\frac{2}{3}x, \frac{2}{3}y\right)$ to dilate segment FG . The origin is the center of dilation.



Solve It #1

The table shows the number of gallons of gasoline in a car's gas tank after the car has been driven x miles.

Gasoline Usage

Miles Driven, x	Gallons of Gasoline in Tank, y
0	15
10	14.6
20	14.2
35	13.6
60	12.6
75	12

When these data are graphed on a coordinate grid, the points all lie on the same line. What are the slope and y -intercept of this line?

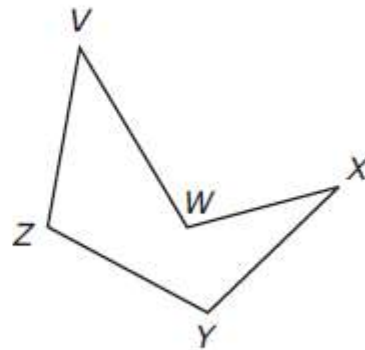
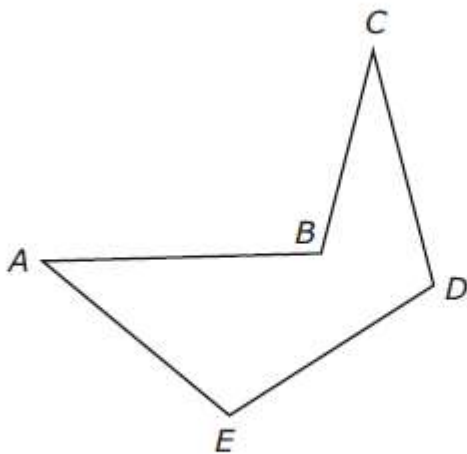
20

Slope = $-\frac{1}{25}$, y -intercept = 15

13

Slope = -25 , y -intercept = 15

Figure $ABCDE$ is similar to figure $VWXYZ$.



Which proportion must be true?

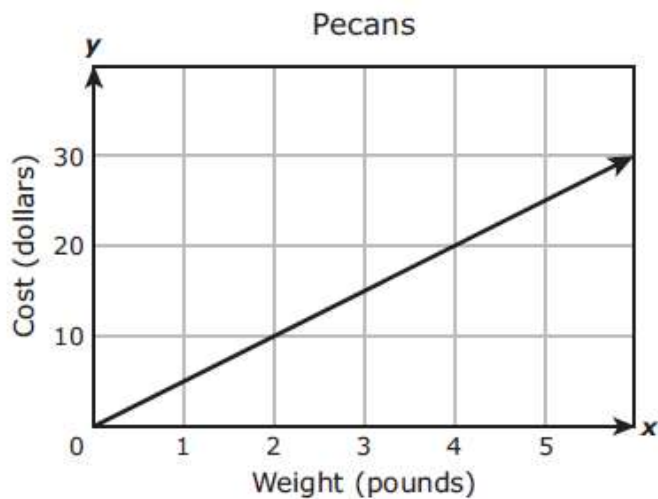
15

$$\frac{AB}{VW} = \frac{YZ}{DE}$$

35

$$\frac{AB}{VW} = \frac{CD}{XY}$$

The graph shows the relationship between the cost of some pecans and the weight of the pecans in pounds.



Which function best represents the relationship shown in the graph?

	$y = 5x$
	$y = \frac{1}{2}x$

Use your answers to the Set 1 problems to solve for x .

$$\bigcirc - x = \square - \square x$$

Solve It #2

Which set of ordered pairs represents y as a function of x ?

6

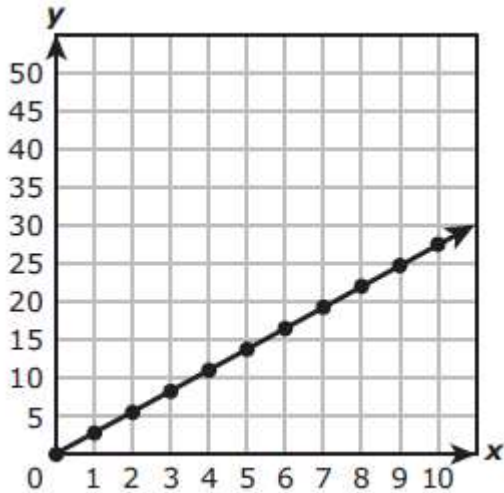
$\{(2, 5), (3, 1), (2, 1), (4, 7)\}$

2

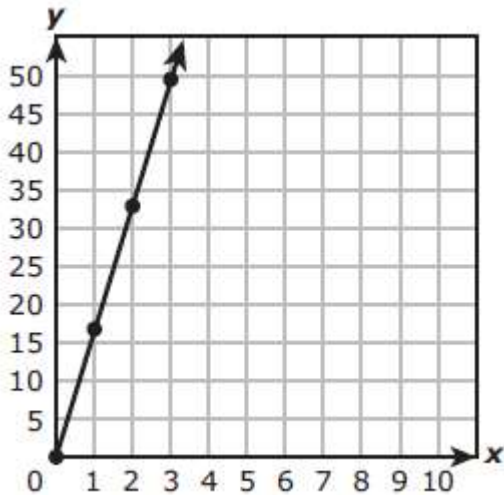
$\{(3, 2), (4, 3), (5, 2), (2, 6)\}$

Leonor pays a total of \$16.50 for every 6 shirts she has dry-cleaned. Which graph models a relationship with the same unit rate?

13

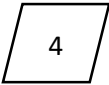
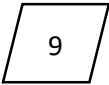


24



Melissa is saving \$25 that she earned for washing her mom's car. She earns \$10 every week for doing chores, which she also saves.

Which function can be used to find t , the amount of money Melissa will have saved at the end of n weeks of doing chores?

	$t = 10n + 25$
	$t = 25n + 10$

Use your answers to the set 2 problems to solve for y .

$$\bigcirc y - \text{trapezoid} = y + \text{parallelogram}$$

Put it Together

<hr/>	<hr/>
x	y