39 **This question is worth 1 credit.**

Marty types at an average rate of 25 words per minute. Write an equation that could be used to determine the average number of words, w, Marty types in t minutes.

Answer Equation _____

GO ON

40 **This question is worth 1 credit.**

What is the value of the expression $-2(-3)(4)$?

Answer _____

41 **This question is worth 1 credit.**

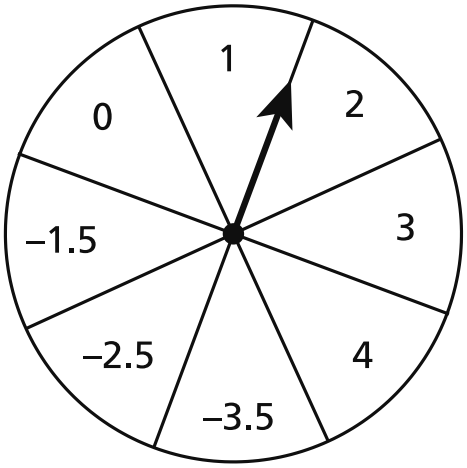
Kenneth bought a shirt that was originally priced at $55.00. After a discount, he paid $38.50. What was the percent discount of the original price of the shirt?

Answer _____ %

GO ON

42 **This question is worth 2 credits.**

Frank and his friends are playing a game with the spinner shown below.



Each player spins the arrow 5 times and adds all the numbers the spinner lands on to get their score. Frank's first three spins are listed below.

-1.5, 2, and -3.5

Frank has two more spins. What two numbers would the spinner need to land on for Frank's final score to equal 0?

Explain your answer.

43 **This question is worth 2 credits.**

Joann went for a hike. The trail she hiked was $5\frac{1}{2}$ miles and it took her $2\frac{1}{5}$ hours to complete. If Joann hiked at an average unit rate, how fast, in miles per hour, did Joann hike?

Show your work.

Answer _____ miles per hour

GO ON

44 **This question is worth 2 credits.**

A map has a scale of 1 centimeter = 50 miles. The actual distance between New York City and Washington, D.C., is 225 miles. What is the distance, in centimeters, between the two cities on the map?

Show your work.

Answer _____ centimeters

45 **This question is worth 2 credits.**

During lunch, a sandwich shop owner sold 2 types of sandwiches: turkey and roast beef. Each sandwich cost $4.99 and the total sales from all of the sandwiches sold was $219.56. There were 25 turkey sandwiches sold. How many roast beef sandwiches were sold?

Show your work.

Answer _____ roast beef sandwiches

GO ON

46 **This question is worth 2 credits.**

Write the expression $-8(4 - x) + 20$ as the sum of two unlike terms. Be sure to show the use of the properties of operations in your answer.

Show your work.

Answer _____

47 **This question is worth 2 credits.**

Jonah received a gift card to a movie theater. The gift card allows him to choose one type of movie, one snack, and one drink. His options are shown in the list below.

- Movies: drama, action, comedy
- Snacks: popcorn, chips, candy
- Drinks: water, juice

He chooses one movie, one snack, and one drink at random. What is the probability that Jonah chooses a comedy, chips, and juice? Write your answer as a fraction.

Show your work.

Answer _____

GO ON

48 **This question is worth 3 credits.**

A furniture store is advertising a 20% discount on the price of sofas. Scott chooses a sofa with a discounted price of $460.00. He must also pay an 8% sales tax. How much money will Scott save on the discounted sofa, including tax, compared to the originally priced sofa, including tax?

Show your work.

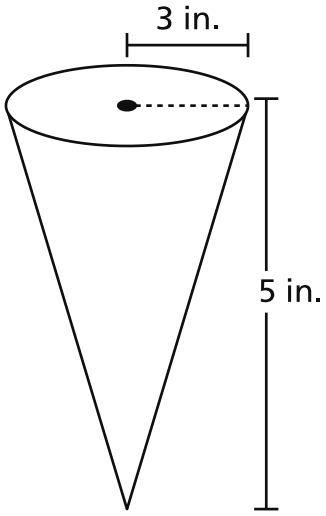
Answer $ _____

STOP

39 **This question is worth 1 credit.**

A movie theater sells popcorn in cone shaped containers as shown below.

POPCORN CONTAINER



What is the volume, in cubic inches, of the popcorn container? Round your answer to the nearest tenth.

Answer _____ cubic inches

GO ON

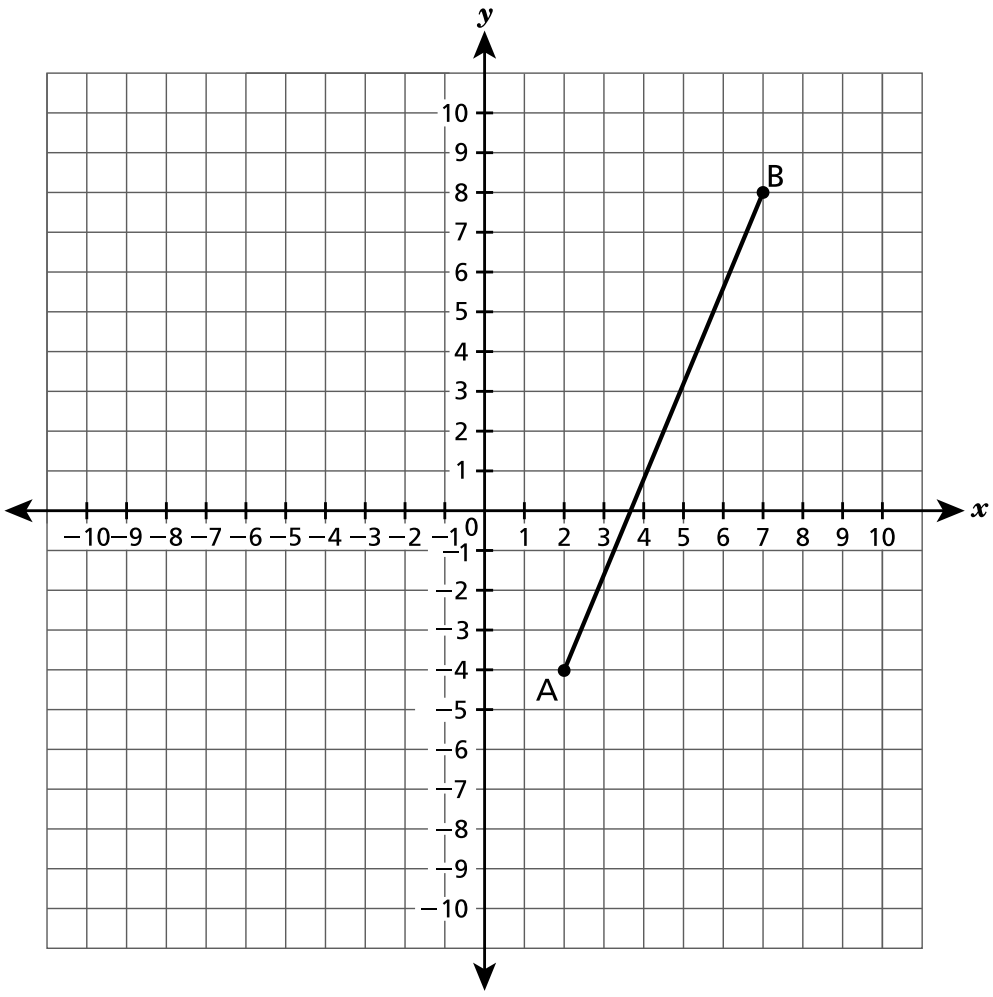
40 **This question is worth 1 credit.**

The area of a square shaped garden is 324 square feet. What is the length, in feet, of each side of the garden?

Answer _____ feet

41 **This question is worth 1 credit.**

Line segment AB is graphed on the coordinate plane shown below.



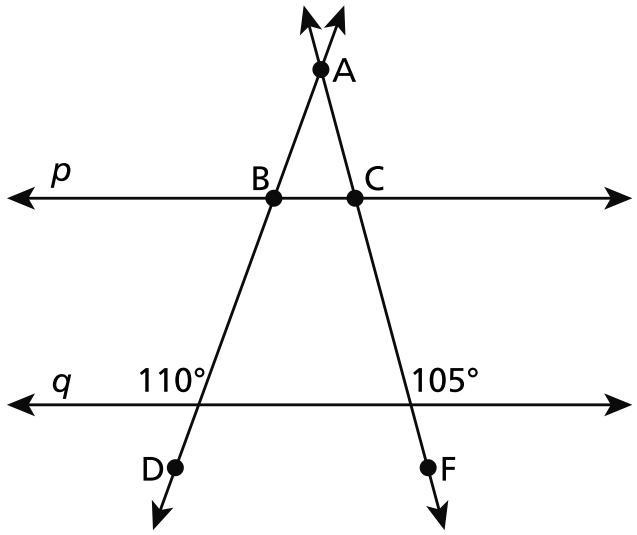
What is the length, in units, of line segment AB ?

Answer _____ units

GO ON

42 **This question is worth 2 credits.**

In the figure below, line p is parallel to line q and lines $\overleftrightarrow{AD}$ and $\overleftrightarrow{AF}$ are transversals.



What is the measure, in degrees, of $\angle BAC$?

Show your work.

Answer _____ degrees

43 **This question is worth 2 credits.**

The equation $y = 1.5x + 29$ is used to model the yearly salary, y, of an employee, in thousands of dollars, where x is the number of years the employee has worked for the company. What does the slope of the line represent in this situation?

Explain your answer.

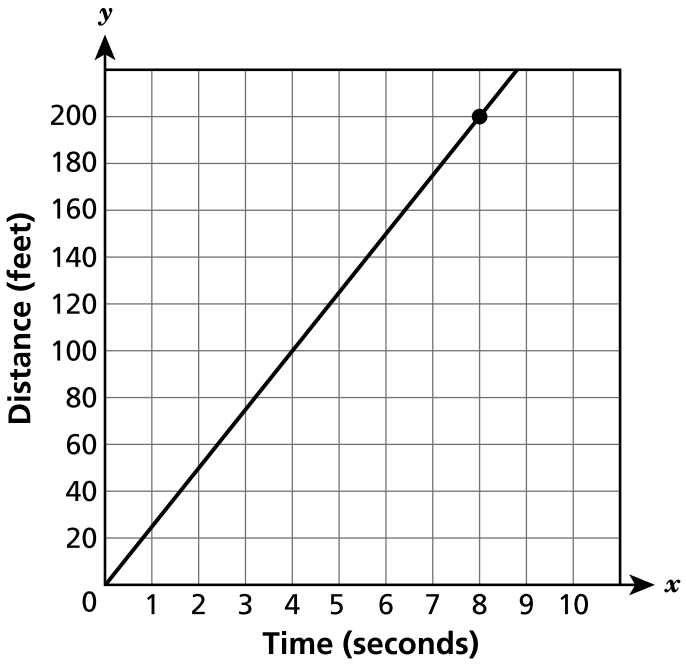
44 **This question is worth 2 credits.**

A dog owner collected data to see which of his two dogs runs at the greater speed. The graph and the table below show the relationship between the time, in seconds, and the distance, in feet, each dog ran.

DOG A

Time, *x* (seconds)	Distance, *y* (feet)
2	56
4	112
6	168
8	224

DOG B



What is the difference, in feet per second, between the speeds of the two dogs?

Show your work.

Answer _____ feet per second

45 **This question is worth 2 credits.**

Two ordered pairs of a linear function are shown below.

$$\left(2, 4\frac{1}{2}\right), \left(3, 5\frac{1}{4}\right)$$

What is the rate of change for the function?

Show your work.

Answer _____

GO ON

46 **This question is worth 2 credits.**

What value of x makes the equation shown below true?

$$\frac{1}{4}(3x - 8) + 4 = 2(x - 4)$$

Show your work.

Answer $x =$ _____

47 **This question is worth 2 credits.**

A list of numbers is shown below.

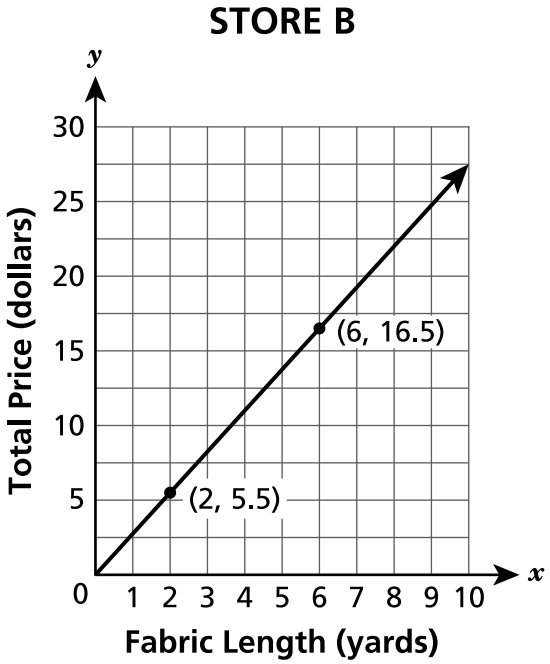
- $\sqrt{49}$
- $1.\overline{3}$
- $\sqrt{32}$
- $\frac{7}{2}$
- 1.234

Classify each number as either rational or irrational. Be sure to include how you know a number is rational.

Explain your answer.

48 **This question is worth 3 credits.**

Store A and Store B sell fabric for different prices. The equation $y = 3.5x$ represents the price, y, in dollars, for x yards of fabric at Store A. The graph below represents the price for the same type of fabric at Store B.



What is the unit rate for the price of fabric, per yard, at each store?

Store A $ _____ per yard of fabric

Store B $ _____ per yard of fabric

How much more would the price of 9 yards of fabric be at Store A than at Store B ?

Show your work.

Answer $ _____

STOP