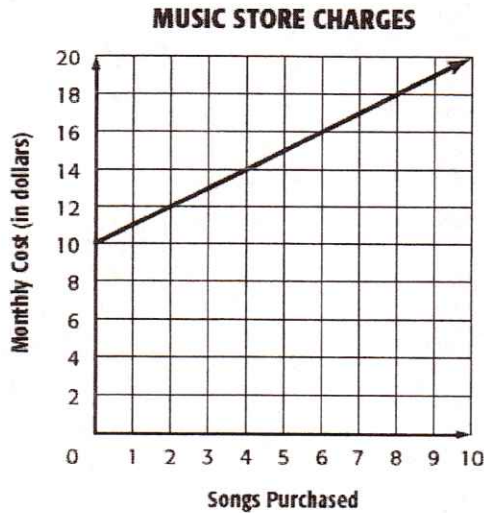


Circle the letter of the answer you choose.

- 1 The graph below displays the amount a music download store customer pays per month.

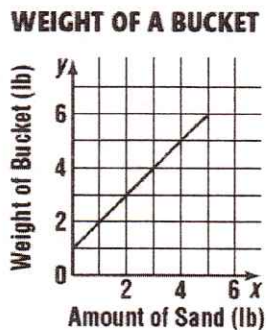


What does the y-intercept indicate?

- A. The cost of a song is \$10.
- B. The cost of a song is \$2.
- C. The subscription fee is \$10.
- D. The subscription fee is \$2.

[Lesson 3-2]

- 2 The graph below shows the weight of a bucket as it is filled with sand.

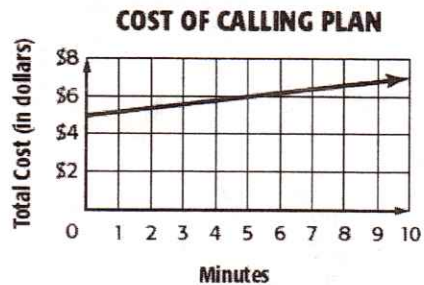


What is the weight of the empty bucket?

- F. 0 pounds
- G. 1 pound
- H. 2 pounds
- I. 6 pounds

[Lesson 3-2]

- 3 The graph below shows the monthly cost of a long-distance calling plan.

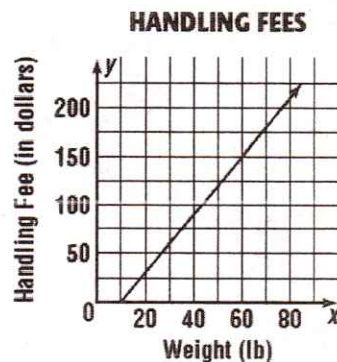


What does the slope of the graph represent?

- A. the cost of zero minutes of calls
- B. the cost per additional minutes of long-distance calls
- C. the total cost of long-distance calls
- D. the number of minutes \$1 can buy

[Lesson 3-2]

- 4 The graph below shows the handling fee a company charges based on the weight of the package.



According to the graph, which of the following statements is true?

- F. A package that weighs less than 10 pounds has a \$10 handling fee.
- G. The handling fee increases \$1 for every 10 pounds.
- H. The handling fee increases \$10 for every 1 pound.
- I. There is no handling fee for packages that weigh 10 pounds or less.

5.

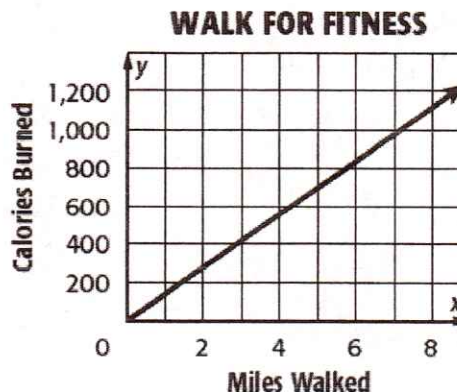
Haruki has \$20 in his savings account. Each week he will add \$5 to it. He wants to draw a graph that shows how much money is in his savings account over time, starting with \$20. What is the equation of the line?

- F. $y = 25x$
- G. $y = 20x + 5$
- H. $y = 5x + 20$
- I. $y = 5x$

[Lesson 3-2] MA.8.A.1.2

6.

Linda saw the following graph in a fitness magazine.



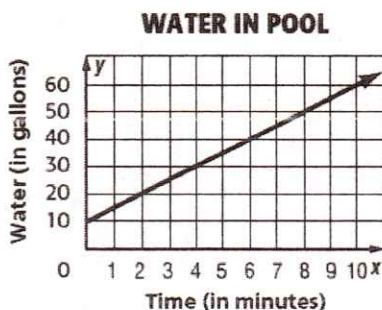
Which does the slope of the graph represent?

- A. total calories burned
- B. total distance walked
- C. calories burned per mile walked
- D. miles walked per hour

[Lesson 3-2] MA.8.A.1.2

7.

Ramon is adding water to his swimming pool. The graph below shows the amount of water in the pool as more water is added.



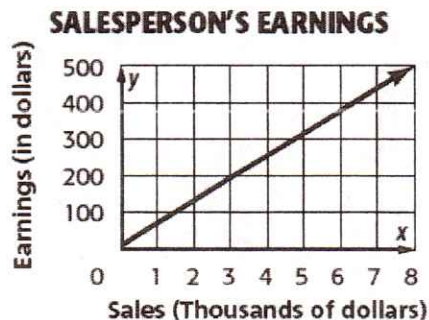
What does the y-intercept represent?

- A. the additional gallons of water added per minute
- B. the total time needed to fill the pool
- C. the amount of water in the pool before more water was added
- D. the total amount of water needed to fill the pool

[Lesson 3-2] MA.8.A.1.2

8.

The graph below shows a salesperson's earnings, which are based on the amount of sales.



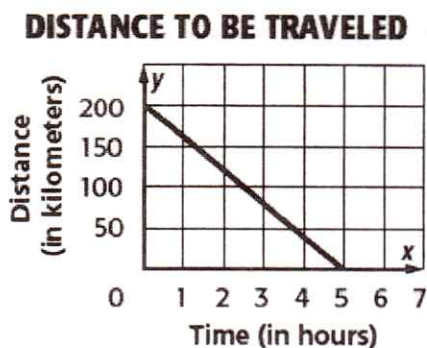
Which of the following represents earnings per thousand dollars in sales?

- A. the x-intercept
- B. the y-intercept
- C. the slope
- D. the range

[Lesson 3-1] MA.8.A.1.2

9.

Frank is planning to drive his car on the Overseas Highway, the scenic road that connects the islands in the Florida Keys to the Florida mainland. The graph below shows the approximate distance to be traveled from the time Frank leaves Key West to the time he reaches his destination near Miami.



What does the slope indicate?

- A. Frank's speed is about 60 kilometers per hour.
- B. Frank's speed is about 40 kilometers per hour.
- C. Frank's speed is about 30 kilometers per hour.
- D. Frank's speed is about 20 kilometers per hour.

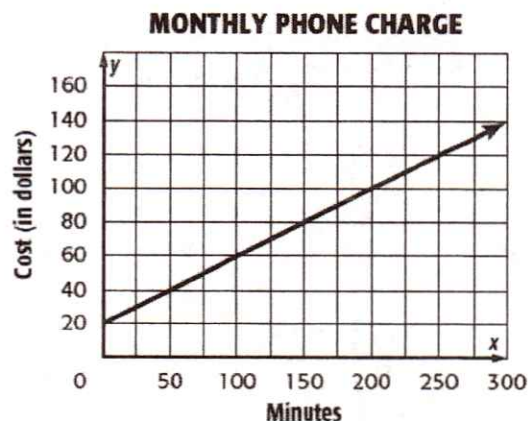
[Lesson 3-1] MA.8.A.1.2

11. The table shows the cost for a clothing store to buy jeans and khakis. The total cost for Saturday's shipment, \$1800, is represented by the function $15x + 20y = 1800$. Find and interpret the x - and y -intercepts.

	Jeans	Khakis
Cost per Pair (\$)	15	20
Amount Shipped	x	y

10.

The graph below represents the amount Samira pays for her cell phone service: a monthly fee plus a charge for each minute she uses her phone.



What does the y -intercept indicate?

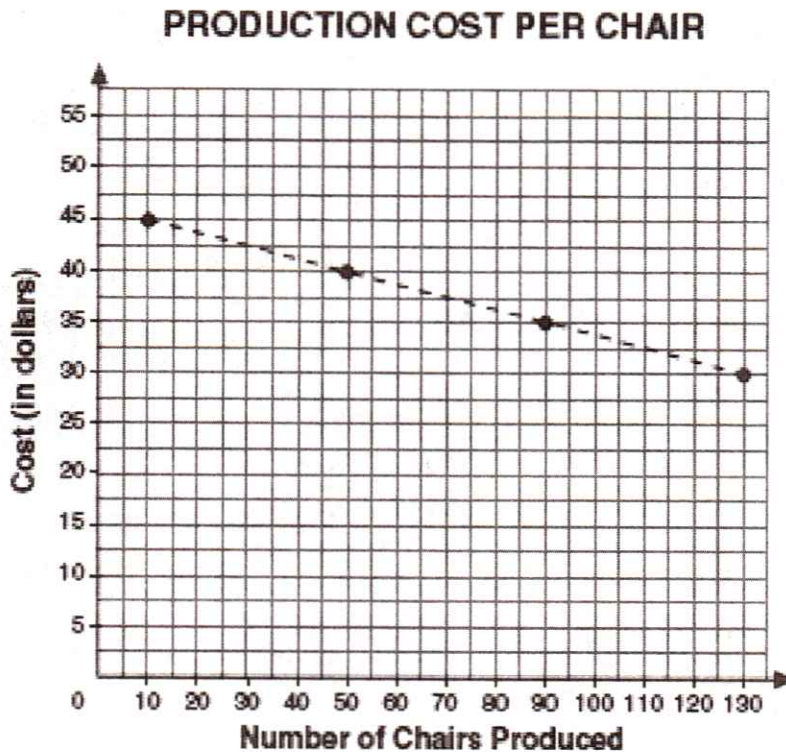
- A. Her monthly fee is \$0.
- B. Her rate per minute is \$0.40.
- C. Her monthly fee is \$20.
- D. Her rate per minute is \$0.20.

[Lesson 3-1] MA.8.A.1.2

12. A taxi fare y can be determined by the equation $y = 0.50x + 3.50$, where x is the number of miles traveled. Graph the equation. Find the cost of traveling 8 miles. What is the slope and y -intercept? Interpret the slope and y -intercept.

13.

The production manager of a furniture manufacturing company plotted values on the graph below to show how the production cost per chair decreases as the number of chairs produced increases. The slope of the dashed line segment joining these points is $-\frac{1}{8}$.



Which statement does this slope of the dashed line segment represent?

- A. Each chair produced decreases the cost per chair by \$5.
- B. Each chair produced decreases the cost per chair by \$8.
- C. For every 8 chairs produced, the cost per chair decreases by \$1.
- D. For every 10 chairs produced, the cost per chair decreases by \$5.

14. For working 3 hours, Carmen earns \$18.00. For working 5 hours, she earns \$30. For working 6 hours, she earns \$36.00. Make a table of the information and then graph it with hours on the horizontal axis and money earned on the vertical axis. Draw a line through the points.

What is the slope of the line?

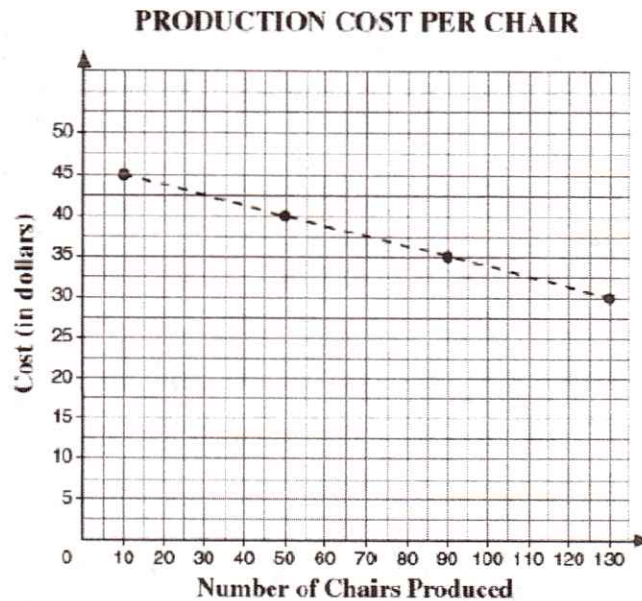
What does the slope of the line represent?

15. South Seminole Middle School wants to make \$4,740 from yearbooks. Print yearbooks x cost \$60 and digital yearbooks y cost \$15. This can be represented by the function $60x + 15y = 4,740$.

Find the x - and y -intercepts. Interpret the x - and y -intercepts.

16.

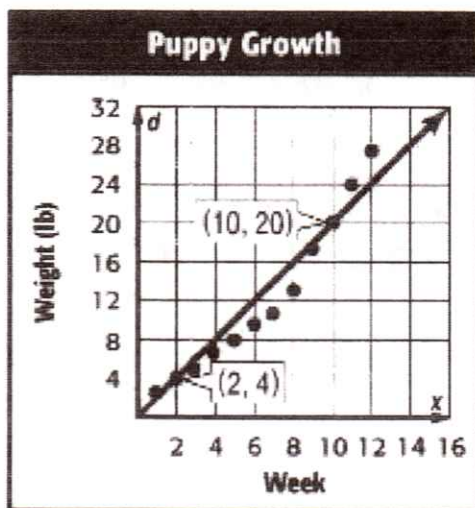
The manager of a furniture manufacturing company plotted values on the graph below to show how the production cost per chair decreases as the number of chairs produced increases. The slope of the dashed line segment joining these points is $-\frac{1}{8}$.



What does the slope of the dashed segment represent?

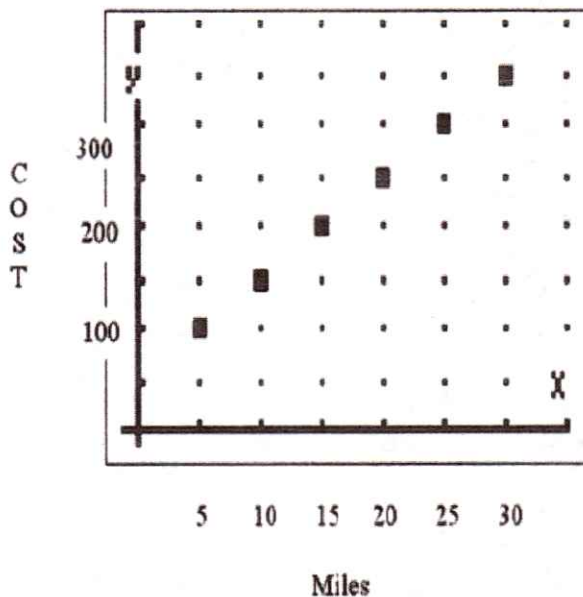
- Each chair produced decreases costs by \$5.
- Each chair produced decreases costs by \$8.
- For every 8 chairs produced, costs decrease by \$1.
- For every 10 chairs produced, costs decrease by \$5.

17. Lenny charted the growth rate of his new puppy for several weeks. He measured the weight of the puppy in pounds and plotted the values on the graph below. He drew a trend line passing through points (2,4) and (10,20) on the graph to estimate the puppy's weight during any week. What is the slope of the line and what does it represent?



18.

A limo rental company charges a flat rate of \$50 plus a mileage fee. Below is the graph of the limo charges. Explain what the slope represents.



- The cost increases by \$100 for each mile the limo is driven.
- The number of miles driven increases by 5 miles for each \$10 increase in cost.
- The cost increases by \$50 for each 5 miles the limo is driven.
- There is no relationship between mileage and cost.

19. Student Council is selling spirit T-shirts during spirit week. It costs \$20 for the design and \$5 to print each shirt. The cost y to print x shirts is given by $y = 5x + 20$.

How many shirts can be printed for \$50?

What is the slope?

Interpret the slope.

What is the y -intercept?

Interpret the y -intercept.

20. The total number of legs, 1,500, on four-legged and two-legged animals in a zoo can be represented by the function $4x + 2y = 1,500$. Find and interpret the x - and y -intercepts.