Vocabulary Check

1. **CCSS** **Be Precise** Define *linear equation*. Give an example of a linear equation. (Lesson 1)

   A linear equation is an equation with a graph that is a straight line.

   Sample answer: $y = 8x$

2. Describe the difference between the graph of a set of discrete data and the graph of a set of continuous data. (Lesson 4) **Sample answer: The graph of discrete data has space between the points while the graph of continuous data does not.**
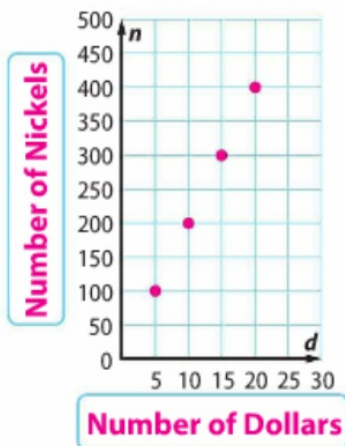
Skills Check and Problem Solving

3. There are 20 nickels in one dollar. (Lesson 2)

   a. Write an equation to find the number of nickels *n* in any

   Show your work.

   number of dollars *d*. $n = 20d$

   b. Make a table to find the number of nickels in 5, 10, 15, or 20 dollars. Then graph the ordered pairs.

d	20d	n
5	20(5)	100
10	20(5)	200
15	20(5)	300
20	20(5)	400

   Number of Nickels vs Number of Dollars

Find each function value.

Find each function value. (Lesson 3)

4. $f(8)$ if $f(x) = 15x$

   <u>120</u>

5. $f(2)$ if $f(x) = 2x - 5$

   <u>−1</u>

6. $f(4)$ if $f(x) = -3x + 15$

   <u>3</u>

7. **CCSS** **Reason Inductively** A campground rents bicycles by the hour. The total cost y to rent a bicycle, including deposit, is presented by the function $y = \frac{1}{3}x + 12$. (Lessons 2 and 4)

  a. Graph the function.

  b. What do the domain and range of the function represent?

   <u>Sample answer: The domain is the hours that a</u>

   <u>bicycle is rented and the range is the total cost.</u>

  c. Is the function continuous or discrete? <u>discrete</u>

Total Cost ($) vs. Hours Rented