Chapter 4 Review
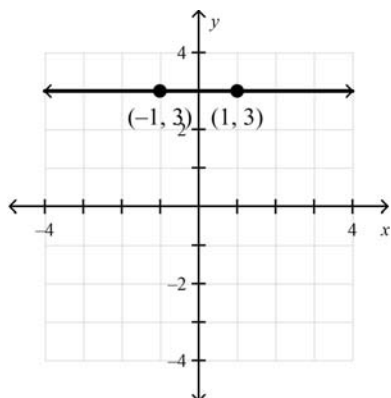
Multiple Choice
Identify the choice that best completes the statement or answers the question.

Find the slope of the line.

_____ 1.

    a.   1   c. -1
    b. -0 d. -2

Find the slope and the *y*-intercept of the graph of the linear equation.

_____ 2. $-4y + 2x = -16$

    a.   slope: $\frac{1}{2}$; *y*-intercept: 4   c.   slope: 2; *y*-intercept: $\frac{1}{2}$

    b.   slope: $-\frac{1}{16}$; *y*-intercept: $\frac{1}{2}$ d.   slope: $\frac{1}{2}$; *y*-intercept: -16

_____ 3. A line passes through the point $(1,3)$ and has a slope of 2. Which of these points also lies on this line?
    a. $(1,5)$ c. $(3,5)$
    b. $(2,6)$ d. $(3,7)$

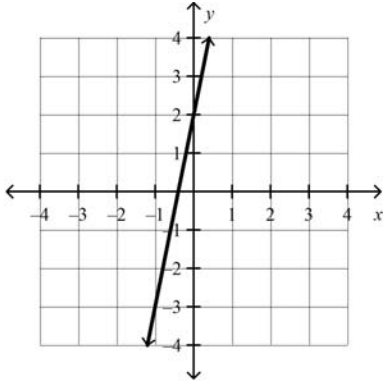_____ 4. A line contains the points $(0,9)$ and $(6,6)$. Which point is also on this line?
    a. $(2,5)$ c. $(-8,5)$
    b. $(4,7)$ d. $(4,4)$

_____ 5. Vivian charges $4 for bracelets and $5 for earrings. Her cost to make *x* bracelets and *y* earrings is $60. The equation $4x + 5y = 60$ represents this situation. The graph of this equation is a line. What is the slope of the line?
    a. -4 c.   0.8
    b. -0.8 d.   12

Which linear equation represents the graph?

_____ 6.

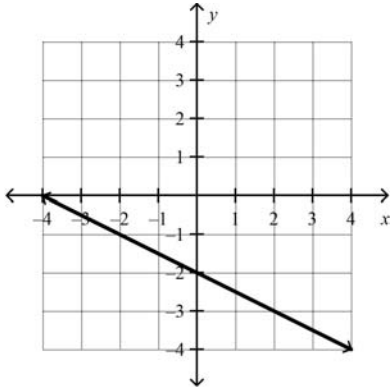a. $y = \dfrac{1}{5}x + 3$ c. $y = 5x - 2$

b. $y = 5x + 2$ d. $y = -\dfrac{1}{5}x - 3$
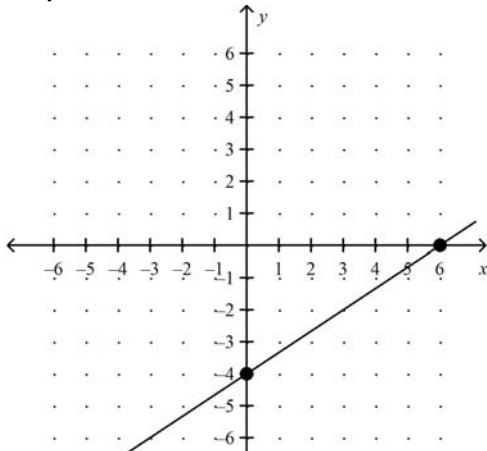
_____ 7.

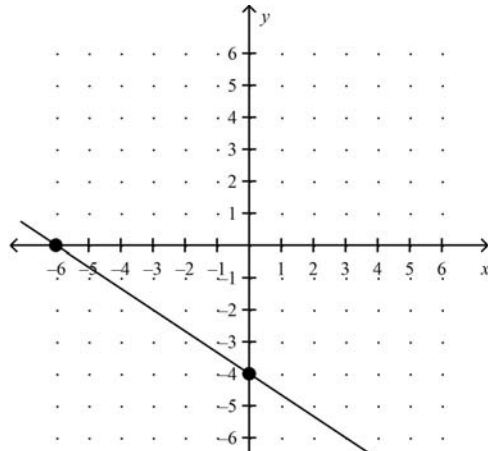a. $y = -2x + 2$ c. $y = \dfrac{1}{2}x - 2$

b. $y = 2x + 2$ d. $y = -\dfrac{1}{2}x - 2$

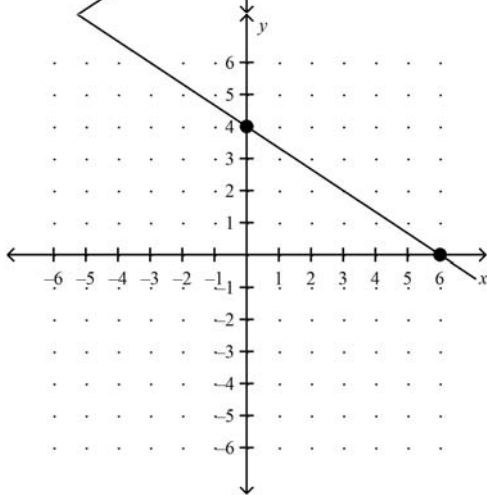_____ 8. Match the equation with its graph.

$10x - 15y = -60$

a.

c.

b.

d.

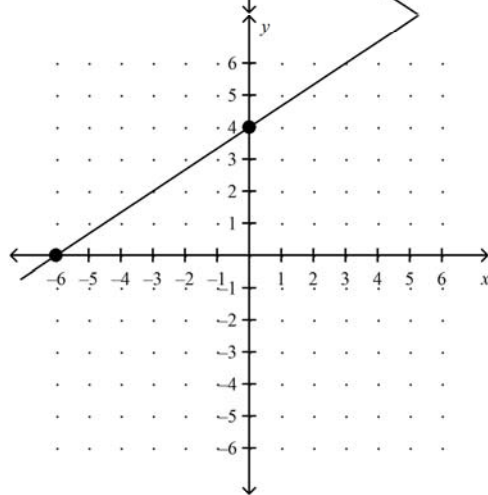**Write the linear equation in slope-intercept form.**

_____ 9. $-\dfrac{1}{5}x + y = 12$

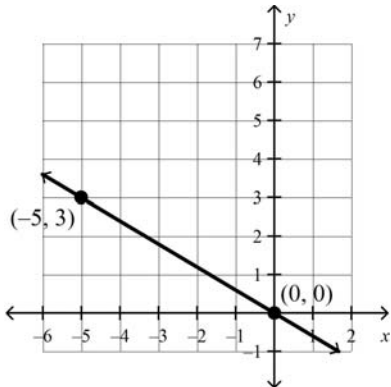a. $y = \dfrac{1}{5}x - 12$ c. $x = 5y - \dfrac{12}{5}$

b. $y = 5x + 12$ d. $y = \dfrac{1}{5}x + 12$

Write an equation of the line in slope-intercept form.

____ 10.

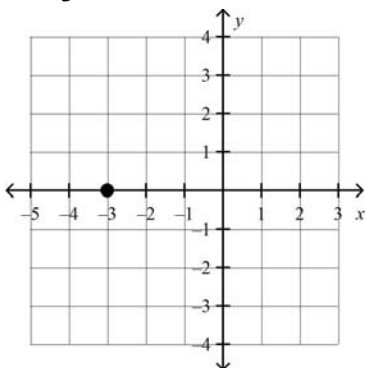a. $y = -\dfrac{3}{5}x$

c. $y = -\dfrac{3}{5}x + 3$

b. $y = -\dfrac{5}{3}x + 3$

d. $y = -\dfrac{5}{3}x$

Use point-slope form to write an equation of the line with the given slope that passes through the given point.

____ 11. $m = \dfrac{4}{3}$
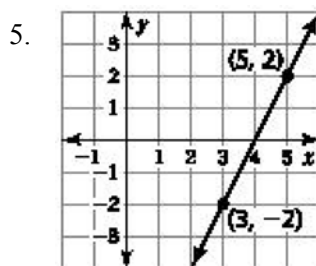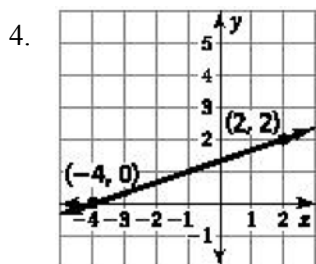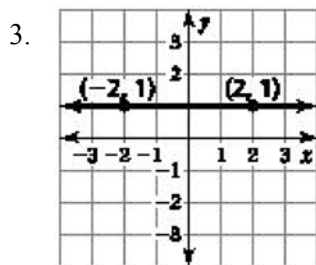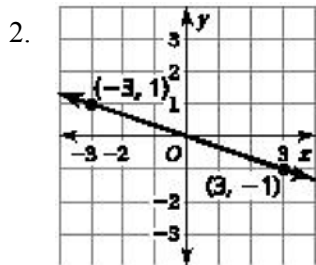

a. $y + 3 = \dfrac{4}{3}(x - 0)$
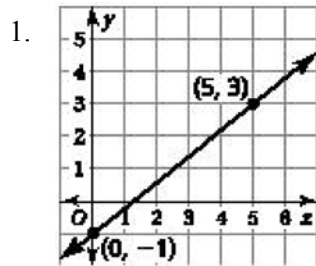
c. $y - 3 = \dfrac{4}{3}(x + 0)$

b. $y - 0 = \dfrac{4}{3}(x - 3)$
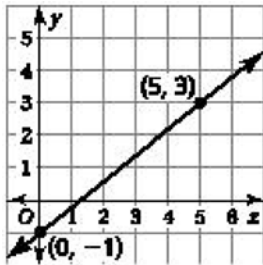
d. $y - 0 = \dfrac{4}{3}(x + 3)$

Numeric Response

Find the slope of the line.

1.

2.

3.

4.

5.

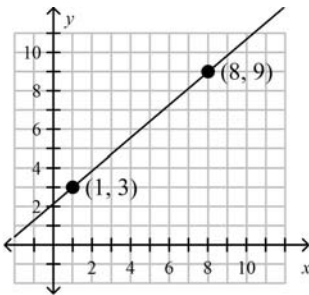6. What is the slope of a line that is perpendicular to the line in below?

7. The graph of a function is a straight line that goes through the points $(3, 3)$, $(5, 7)$, and $(6, y)$. What is the value of y?

Short Answer

    Find the slope of the line.

1.

    Write in slope-intercept form an equation of the line that passes through the given points.

2. $(9,-5), (6,4)$

    Find the slope and the *y*-intercept of the graph of the linear equation.

3. $y - 2.5 = -5x$

    Write in point-slope form an equation of the line that passes through the given point and has the given slope.

4. $(4,-2); m = \dfrac{1}{4}$

5. How can you find the *y*-intercept of the graph of $4x + 6y = 20$ without graphing the equation?

Chapter 4 Review
Answer Section

MULTIPLE CHOICE

    1. B
    2. A
    3. D
    4. B
    5. B
    6. B
    7. D
    8. D
    9. D
  10. A
  11. D

NUMERIC RESPONSE

    1. 4/5
    2. -1/3
    3. 0
    4. 1/3
    5. 2
    6. -5/4
    7. 9

SHORT ANSWER

    1. $\dfrac{6}{7}$

    2. $y = -3x + 22$

    3. slope: –5; y-intercept: 2.5

    4. $y + 2 = \dfrac{1}{4}(x - 4)$

    5. Solve the equation for y and write it in the slope-intercept form $y = mx + b$. The value b is the y-intercept.