4-2 Practice

Writing Equations in Standard and Slope-Intercept Form

Write an equation in point-slope form for the line that passes through each point with the given slope.

1.
$$(2, 2), m = -3$$

2.
$$(1, -6), m = -1$$

3.
$$(-3, -4)$$
, $m = 0$

4. (1, 3),
$$m = -\frac{3}{4}$$

5.
$$(-8, 5), m = -\frac{2}{5}$$

6.
$$(3, -3), m = \frac{1}{3}$$

Write each equation in standard form.

7.
$$y - 11 = 3(x - 2)$$

8.
$$y - 10 = -(x - 2)$$

9.
$$y + 7 = 2(x + 5)$$

10.
$$y - 5 = \frac{3}{2}(x + 4)$$

11.
$$y + 2 = -\frac{3}{4}(x+1)$$

12.
$$y - 6 = \frac{4}{3}(x - 3)$$

13.
$$y + 4 = 1.5(x + 2)$$

14.
$$y - 3 = -2.4(x - 5)$$

15.
$$y - 4 = 2.5(x + 3)$$

Write each equation in slope-intercept form.

16.
$$y + 2 = 4(x + 2)$$

17.
$$y + 1 = -7(x + 1)$$

18.
$$v - 3 = -5(x + 12)$$

19.
$$y-5=\frac{3}{2}(x+4)$$

20.
$$y - \frac{1}{4} = -3(x + \frac{1}{4})$$

21.
$$y - \frac{2}{3} = -2(x - \frac{1}{4})$$

- **22. CONSTRUCTION** A construction company charges \$15 per hour for debris removal, plus a one-time fee for the use of a trash dumpster. The total fee for 9 hours of service is \$195.
 - **a.** Write the point-slope form of an equation to find the total fee y for any number of hours x.
 - **b.** Write the equation in slope-intercept form.
 - **c.** What is the fee for the use of a trash dumpster?
- **23. MOVING** There is a daily fee for renting a moving truck, plus a charge of \$0.50 per mile driven. It costs \$64 to rent the truck on a day when it is driven 48 miles.
 - **a.** Write the point-slope form of an equation to find the total charge y for a one-day rental with x miles driven.
 - **b.** Write the equation in slope-intercept form.
 - c. What is the daily fee?