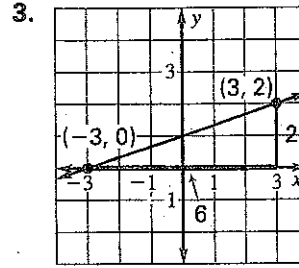
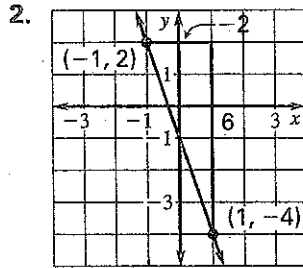
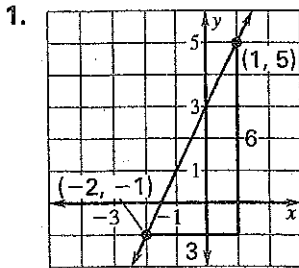


**Practice A**

For use with pages 276–284

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



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

4.  $(2, 5), m = 3$

5.  $(1, 4), m = 2$

6.  $(-2, 0), m = \frac{1}{2}$

7.  $(3, 7), m = 1$

8.  $(-5, 8), m = -4$

9.  $(0, -4), m = 9$

10.  $(1, 1), m = 0$

11.  $(-3, -4), m = -2$

12.  $(6, -10), m = 5$

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

13.  $y = 5x + 4, (0, 0)$

14.  $y = 2x - 6, (2, 3)$

15.  $y = 3x - 11, (9, 6)$

16.  $y = -1x + 2, (8, -7)$

17.  $y = 7x - 1, (1, -2)$

18.  $y = \frac{1}{2}x + 8, (2, -7)$

19.  $y = 3x - 9, (-5, -4)$

20.  $y = -7x + 1, \left(-\frac{1}{2}, -\frac{1}{3}\right)$

21.  $y = \frac{2}{3}x + 9, (4, -8)$

**Classified Ads** In Exercises 22 and 23, use the following information.

It costs \$2.00 per day to place a one-line ad in the classifieds plus a flat service fee. One day costs \$3.00 and four days costs \$9.00.

22. Write a linear equation in point-slope form that gives the cost in dollars,  $y$ , in terms of the number of days the ad appears,  $x$ .

23. Find the cost of a six-day ad.

**Travel** In Exercises 24 and 25, use the following information.

You are driving from Grand Rapids, Michigan, to Detroit, Michigan. You leave Grand Rapids at 4:00 P.M. At 5:10 P.M. you pass through Lansing, Michigan, a distance of 65 miles.

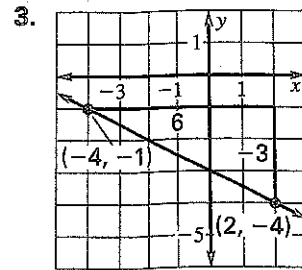
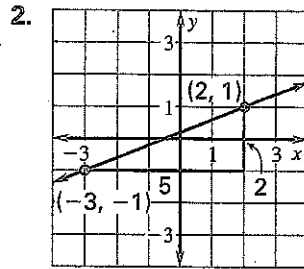
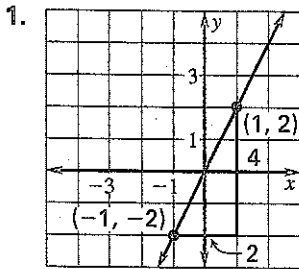
24. Write a linear equation that gives the distance in miles,  $d$ , in terms of time,  $t$ . Let  $t$  represent the number of minutes since 4.00 P.M.

25. Approximately what time will you arrive in Detroit if it is 150 miles from Grand Rapids?

## Practice B

For use with pages 276–284

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



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

4.  $(-3, 24), m = -2$

5.  $(-4, -2), m = -5$

6.  $(0, -3), m = \frac{2}{3}$

7.  $(6, -5), m = -4$

8.  $(-7, 6), m = 0$

9.  $(-3, -5), m = 6$

10.  $(-12, 1), m = -6$

11.  $(-14, 21), m = -\frac{1}{3}$

12.  $(16, 4), m = -\frac{2}{3}$

Rewrite the equation in slope-intercept form.

13.  $y - 2 = 1(x + 3)$

14.  $y + 9 = 4(x - 3)$

15.  $y - \frac{1}{2} = 2(x - 6)$

16.  $y + 4 = 5(x + 2)$

17.  $y - 3 = -2(x + 1)$

18.  $y - 5 = 3(x - 4)$

19.  $y + 11 = -3(x - 9)$

20.  $y + 6 = \frac{1}{2}(x - 12)$

21.  $y - \frac{2}{3} = 4(x + \frac{5}{12})$

**Classified Ads** In Exercises 22 and 23, use the following information.

It costs \$1.50 per day to place a one-line ad in the classifieds plus a flat service fee. One day costs \$3.50 and four days costs \$8.00.

22. Write a linear equation in point-slope form that gives the cost in dollars,  $y$ , in terms of the number of days the ad appears,  $x$ .

23. Find the cost of a six-day ad.

**Travel** In Exercises 24 and 25, use the following information.

You are flying from Houston to Chicago. You leave Houston at 7:30 A.M. At 8:35 A.M. you fly over Little Rock, a distance of 455 miles.

24. Write a linear equation that gives the distance in miles,  $y$ , in terms of time,  $x$ . Let  $x$  represent the number of minutes since 7:30 A.M.

25. Approximately what time will you arrive in Chicago if it is 950 miles from Houston?