Practice

Writing Equations in Slope-Intercept Form

Write an equation in slope-intercept form of the line with each slope and y-intercept.

1.
$$m = -3, b = 5$$

2.
$$m = 6, b = 2$$

3.
$$m = 4, b = -1$$

4.
$$m = 0, b = 4$$

5.
$$m=\frac{2}{5}, b=-7$$

6.
$$m=-\frac{3}{4}, b=8$$

7.
$$m = -\frac{4}{3}, b = -2$$

8.
$$m = -5, b = 6$$

9.
$$m=\frac{1}{2}, b=-9$$

Write an equation in slope-intercept form of the line having the given slope and passing through the given point.

10.
$$m = 3, (4, 2)$$

11.
$$m = -2, (-1, 3)$$

12.
$$m = 4, (0, -7)$$

13.
$$m = -\frac{3}{5}$$
, $(-5, -3)$ **14.** $m = \frac{1}{4}$, $(-8, 6)$

14.
$$m = \frac{1}{4}, (-8, 6)$$

15.
$$m = -\frac{2}{3}, (9, -4)$$

16.
$$m = \frac{5}{6}$$
, (6, -6)

17.
$$m = 0, (-8, -7)$$

18.
$$m = -\frac{3}{2}, (-8, 9)$$

Write an equation in slope-intercept form of the line passing through each pair of points.

19.
$$(1, 3)$$
 and $(-3, -5)$

20.
$$(0, 5)$$
 and $(3, -4)$

22.
$$(-3, 0)$$
 and $(6, -6)$

25.
$$(-3, 2)$$
 and $(3, -6)$

26.
$$(-7, -6)$$
 and $(-5, -3)$ **27.** $(6, -4)$ and $(0, 2)$

27.
$$(6, -4)$$
 and $(0, 2)$