## 2-3

## **Practice**

Form G

Linear Functions and Slope-Intercept Form

Find the slope of the line through each pair of points.

**2.** 
$$\left(\frac{1}{2}, \frac{2}{3}\right)$$
 and  $\left(\frac{3}{2}, \frac{5}{3}\right)$ 

**3.** 
$$(-3, -2)$$
 and  $(1, 6)$ 

**4.** 
$$(4, -1)$$
 and  $(-2, -3)$ 

**5.** 
$$(3, -5)$$
 and  $(1, 2)$ 

**7.** 
$$(-3, -3)$$
 and  $(-1, -3)$ 

**8.** 
$$\left(\frac{1}{2}, \frac{1}{2}\right)$$
 and  $(-2, -4)$ 

Write an equation for each line.

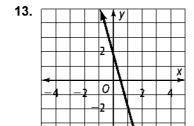
**9.** 
$$m = -4$$
 and the *y*-intercept is 3.

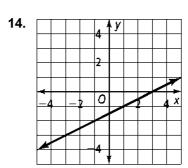
**10.** 
$$m = \frac{2}{5}$$
 and the y-intercept is  $\frac{17}{5}$ .

**11.** 
$$m = 0$$
 and the y-intercept is  $-4$ .

**12.** 
$$m = -1$$
 and the y-intercept is 2.

Find the slope and y-intercept of each line.





## 2-3

## Practice (continued)

Form G

Linear Functions and Slope-Intercept Form

Find the slope and y-intercept of each line.

**15.** 
$$3x - 4y = 12$$

**16.** 
$$v = -2$$

**17.** 
$$f(x) = \frac{5}{4}x + 7$$

**18.** 
$$x = 5$$

**19.** 
$$4x - 3y = -6$$

**20.** 
$$g(x) = -3x - 17.5$$

Graph each equation.

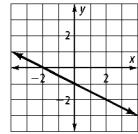
**21.** 
$$4x + 3y = 12$$

**22.** 
$$\frac{x}{3} - \frac{y}{6} = 1$$

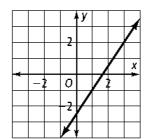
**23.** 
$$y = -\frac{3}{2}x + \frac{1}{2}$$

Find the slope and y-intercept of each line.

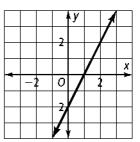
24.



25.



26.



- **27.** The equation e = 1200 + 11t represents your elevation e in feet for each minute t you hike from a trailhead.
  - **a.** If you graphed this equation, what would the slope represent? Explain.
  - **b.** Are you hiking uphill or downhill? Explain.