## **Practice 2-2**

**Linear Equations** 

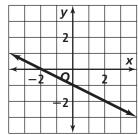
Find the slope of each line.

1. 
$$2x - 5y = 0$$

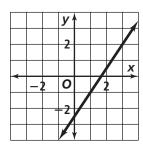
**2.** 
$$5x - y = -7$$

**3.** 
$$x - \frac{2}{3}y = \frac{1}{4}$$

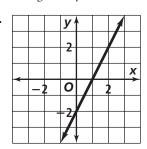




5



6



7. through 
$$(4, -1)$$
 and  $(-2, -3)$ 

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

Write in point-slope form the equation of the line through each pair of points.

**10.** 
$$\left(\frac{1}{2}, \frac{2}{3}\right)$$
 and  $\left(-\frac{3}{2}, \frac{5}{3}\right)$ 

**11.** 
$$(-3, -2)$$
 and  $(1, 6)$ 

Graph each equation.

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

**13.** 
$$\frac{x}{3} - \frac{y}{6} = 1$$

**14.** 
$$y = -\frac{3}{2}x + \frac{1}{2}$$

Write in standard form an equation of the line with the given slope through the given point.

**15.** slope = 
$$-4$$
;  $(2, 2)$ 

**16.** slope = 
$$\frac{2}{5}$$
; (-1, 3)

**17.** slope = 
$$0$$
;  $(3, -4)$ 

Find the slope and the intercepts of each line.

**18.** 
$$3x - 4y = 12$$

**19.** 
$$y = -2$$

**20.** 
$$f(x) = \frac{4}{5}x + 7$$

**21.** 
$$x = 5$$

Write an equation for each line. Then graph the line.

**22.** through 
$$(-1,3)$$
 and parallel to  $y = 2x + 1$ 

**23.** through (2, 2) and perpendicular to 
$$y = -\frac{3}{5}x + 2$$

**24.** through 
$$(-3, 4)$$
 and vertical

**25.** through 
$$(4, 1)$$
 and horizontal