EXAMPLE 1

on p. 427 for Exs. 6–11 **6.** TAKS **REASONING** Which ordered pair is a solution of the linear system

$$x + y = -2$$
 and $7x - 4y = 8$?

$$(-2, 0)$$

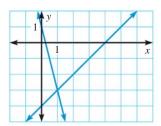
B
$$(0, -2)$$

7. \bigstar TAKS REASONING Which ordered pair is a solution of the linear system 2x + 3y = 12 and 10x + 3y = -12?

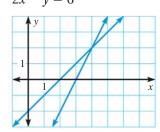
$$(-3, 3)$$

SOLVING SYSTEMS GRAPHICALLY Use the graph to solve the linear system. Check your solution.

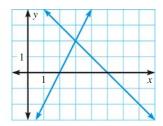
8.
$$x - y = 4$$
 $4x + y = 1$



9.
$$-x + y = -2$$
 $2x - y = 6$

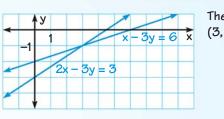


10.
$$x + y = 5$$
 $-2x + y = -4$



11. **ERROR ANALYSIS** *Describe* and correct the error in solving the linear system below.

$$x - 3y = 6$$
 Equation 1
 $2x - 3y = 3$ Equation 2



The solution is (3, -1).

X

EXAMPLE 2

on p. 428 for Exs. 12–26 **GRAPH-AND-CHECK METHOD** Solve the linear system by graphing. Check your solution.

12.
$$y = -x + 3$$
 $y = x + 1$

13.
$$y = -x + 4$$
 $y = 2x - 8$

14.
$$y = 2x + 2$$
 $y = 4x + 6$

$$\begin{array}{c}
 15. \\
 x - y = 2 \\
 x + y = -8
\end{array}$$

16.
$$x + 2y = 1$$

 $-2x + y = -4$

17.
$$3x + y = 15$$

 $y = -15$

18.
$$2x - 3y = -1$$

 $5x + 2y = 26$

19.
$$6x + y = 37$$

 $4x + 2y = 18$

20.
$$7x + 5y = -3$$

 $-9x + y = -11$

21.
$$6x + 12y = -6$$
 $2x + 5y = 0$

22.
$$2x + y = 9$$
 $2x + 3y = 15$

23.
$$-5x + 3y = 3$$

 $4x + 3y = 30$

24.
$$\frac{3}{4}x + \frac{1}{4}y = \frac{13}{2}$$

 $x - \frac{3}{4}y = \frac{13}{2}$

25.
$$\frac{1}{5}x - \frac{2}{5}y = -\frac{8}{5}$$

 $-\frac{3}{4}x + y = 3$

26.
$$-1.6x - 3.2y = -24$$

 $2.6x + 2.6y = 26$

27. TAKS REASONING Find values for *m* and *b* so that the system $y = \frac{3}{5}x - 1$ and y = mx + b has (5, 2) as a solution.

28. WRITING Solve the linear system shown by graphing. *Explain* why it is important to check your solution.

$$y = 4x - 1.5$$
 Equation 1
 $y = -2x + 1.5$ Equation 2