

**LESSON**  
**7.5**
**Practice A**
*For use with pages 459–465*
**Identify the slope of the linear equation.**

1.  $y - 3x = 8$

2.  $4x + 2y = 6$

3.  $9x - 3y = 15$

**Match the linear system with its graph. Then use the graph to tell whether the linear system has *one solution*, *no solution*, or *infinitely many solutions*.**

4.  $-3x + y = 2$

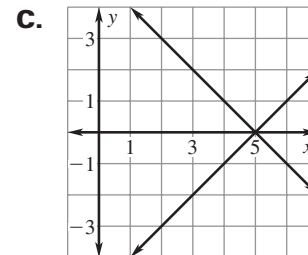
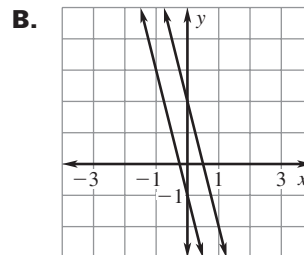
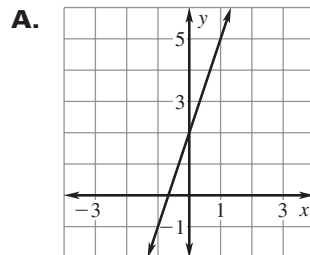
$-6x + 2y = 4$

5.  $x - y = 5$

$x + y = 5$

6.  $4x + y = 2$

$-4x - y = 1$


**Graph the linear system. Then use the graph to tell whether the linear system has *one solution*, *no solution*, or *infinitely many solutions*.**

7.  $x + y = -4$

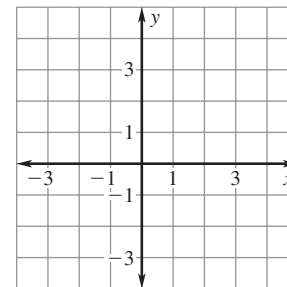
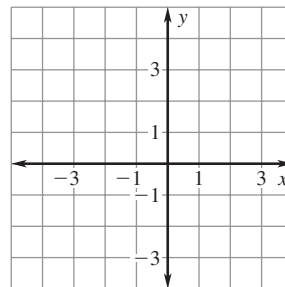
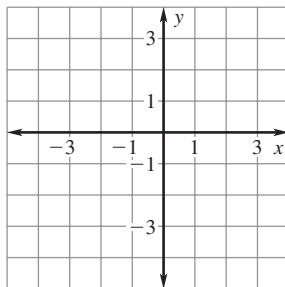
$y = -x + 1$

8.  $y - 2x = 3$

$x + y = 2$

9.  $2x + 2y = 4$

$y = -x + 2$



10.  $3x - y = 1$

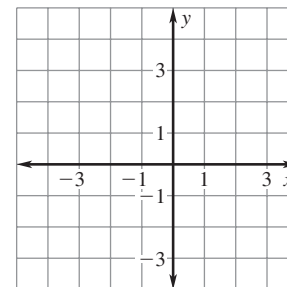
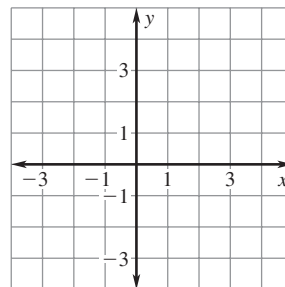
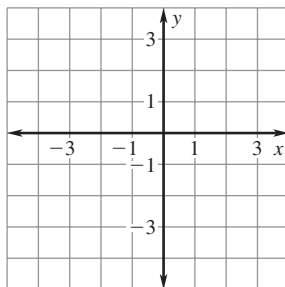
$2x + y = -2$

11.  $4x + 2y = 8$

$3x - y = 3$

12.  $2x - 4y = 4$

$x + 2 = 2y$



**LESSON**  
**7.5**
**Practice A** *continued*  
 For use with pages 459–465

**Solve the linear system by using substitution or elimination.**

**13.**  $-5x + 5y = -10$   
 $3x - 3y = 5$

**14.**  $4x - 4y = -18$   
 $7x - 7y = -4$

**15.**  $2x - 5y = 0$   
 $\frac{5}{2}x - y = 0$

**16.**  $-4x + 3y = 1$   
 $3x - 4y = 1$

**17.**  $4x - y = 2$   
 $-12x + 3y = 0$

**18.**  $2x + 4y = 1$   
 $6x + 12y = 3$

**Without solving the linear system, tell whether the linear system has *one solution, no solution, or infinitely many solutions.***

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

**20.**  $y = 6x + 4$   
 $y = -6x - 10$

**21.**  $y = 3x - 5$   
 $y = \frac{6}{2}x - 5$

**22.**  $y - 3x = 8$   
 $3x + y = 8$

**23.**  $3y + 6x = 8$   
 $2x + y = -10$

**24.**  $4x + 3y = 9$   
 $\frac{3}{4}x + y = 3$

**25.**  $4x - 6y = -1$   
 $-\frac{3}{2}x + y = \frac{1}{4}$

**26.**  $-\frac{2}{3}x + y = 2$   
 $-6x + 3y = 6$

**27.**  $9x - 15y = 15$   
 $x + \frac{3}{5}y = 1$

- 28. Water Park** A water park charges a fee for admission to the park and a fee to rent a tube for the day. One admission to the water park costs  $x$  dollars and a tube rental for the wave pool costs  $y$  dollars. A group pays \$263.25 for admission for 15 people and 8 tube rentals. Another group pays \$358 for admission for 20 people and 13 tube rentals. Is there enough information to determine the cost of one admission to the water park? *Explain.*

- 29. Movie Tickets** The table below shows the ticket sales at a small theater on a Thursday night and a Friday night.

| Day      | Number of adult tickets | Number of children's tickets | Total sales (dollars) |
|----------|-------------------------|------------------------------|-----------------------|
| Thursday | 45                      | 10                           | 425                   |
| Friday   | 225                     | 50                           | 2125                  |

- a.** Let  $x$  represent the cost (in dollars) of one adult ticket and let  $y$  represent the cost (in dollars) of one children's ticket. Write a linear system that models the situation.
- b.** Solve the linear system.
- c.** Can you determine how much each kind of ticket costs? Why or why not?