

**LESSON**  
**7.5**
**Practice B**

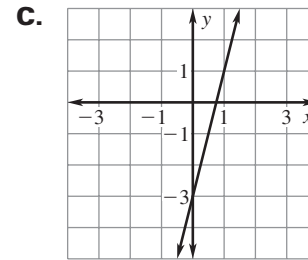
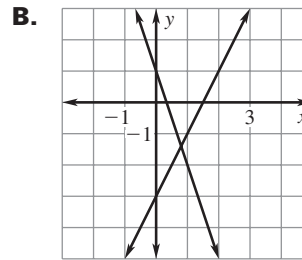
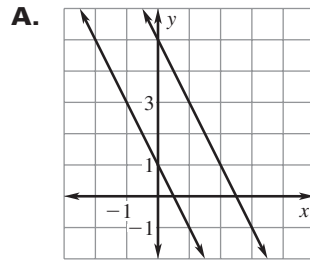
For use with pages 459–465

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*.

1.  $y + 3 = 4x$   
 $3y = 12x - 9$

2.  $2x + y = 1$   
 $2x + y = 5$

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

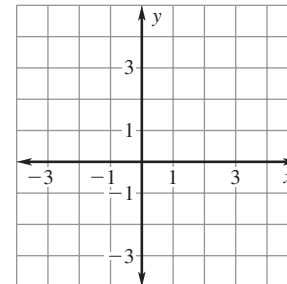
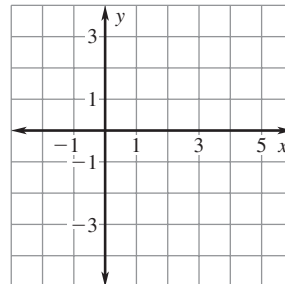
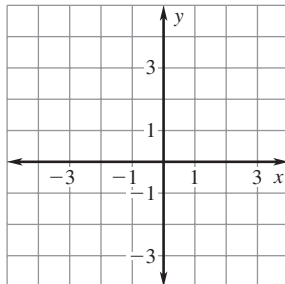


Graph the linear system. Then use the graph to tell whether the linear system has *one solution*, *no solution*, or *infinitely many solutions*.

4.  $-6x + 2y = -2$   
 $-3x + y = 2$

5.  $2y - x = -4$   
 $2x + y = 3$

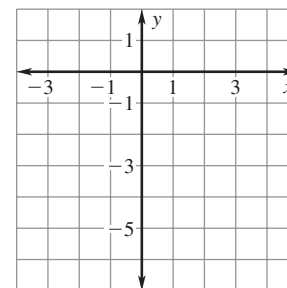
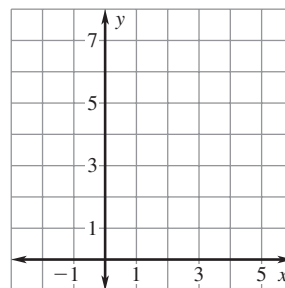
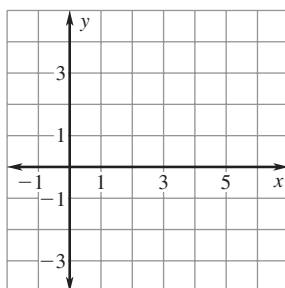
6.  $4x - y = 2$   
 $-x + 3y = 9$



7.  $x + 2y = 3$   
 $-x + 2y = -2$

8.  $3x + y = 4$   
 $x + \frac{1}{3}y = 2$

9.  $2x - y = 4$   
 $-2x + y = -4$



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

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

**10.**  $3x - 2y = 24$

$x + 2y = 8$

**11.**  $3x + 2y = 4$

$-6x - 4y = -8$

**12.**  $x + y = 50$

$-3x + 2y = 0$

**13.**  $-x + 4y = -3$

$-3x + 2y = 1$

**14.**  $-x + 3y = 9$

$2x + y = 10$

**15.**  $2x + y = 6$

$2x + y = -7$

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

**16.**  $-6x + 6y = -4$

$2x - 2y = 5$

**17.**  $y + 2x = \frac{8}{3}$

$2x + y = -10$

**18.**  $4x + 3y = 9$

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

**19.**  $4x - 6y = -1$

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

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

$-6x + 3y = 6$

**21.**  $9x - 15y = 15$

$x + \frac{3}{5}y = 1$

**22.**  $-3x + 4y = 2$

$2y = \frac{3}{2}x + 1$

**23.**  $3x + y = 4$

$x + \frac{1}{3}y = 2$

**24.**  $-4x + 3y = 2$

$4 - 6y = -8x$

- 25. Golf Clubs** A sporting goods store stocks a “better” set of golf clubs in both left-handed and right-handed sets. The set of left-handed golf clubs sells for  $x$  dollars and the set of right-handed golf clubs sells for  $y$  dollars. In one month, the store sells 2 sets of left-handed golf clubs and 12 sets of right-handed golf clubs for a total of \$1859.30. The next month, the store sells 2 sets of left-handed golf clubs and 22 sets of right-handed golf clubs for a total of \$3158.80. Is there enough information to determine the cost of each kind of set? *Explain.*

- 26. Comedy Tickets** The table below shows the ticket sales at an all-ages comedy club on a Friday night and a Saturday night.

Day	Number of adult tickets	Number of student tickets	Total sales (dollars)
Friday	30	20	910
Saturday	45	30	1365

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