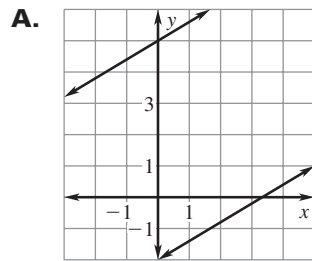


LESSON
7.5
Practice C

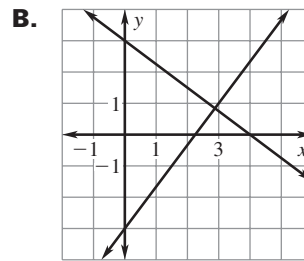
For use with pages 459–465

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*.

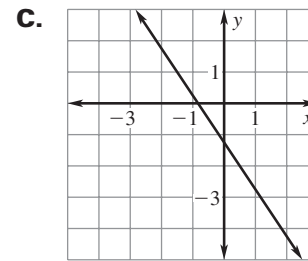
1. $6x + 4y = -5$
 $3x + 2y = -\frac{5}{2}$



2. $3x + 4y = 12$
 $-4x + 3y = -9$

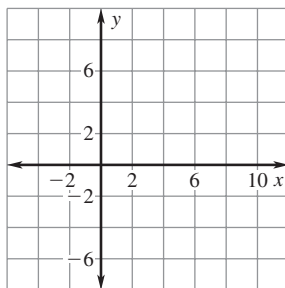


3. $y = \frac{3}{5}x + 5$
 $-3x + 5y = -10$

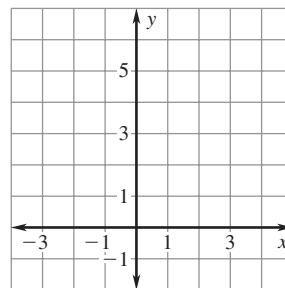


Graph the linear system. Then use the graph to tell whether the linear system has *one solution*, *no solution*, or *infinitely many solutions*.

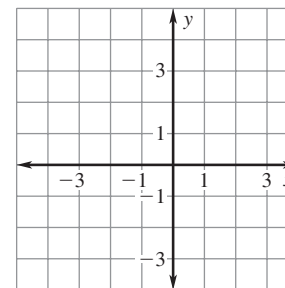
4. $4y = 3x + 20$
 $4y + 12 = 5x$



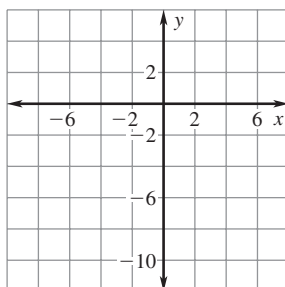
5. $3x + 2y = 8$
 $-2x + 3y = 6$



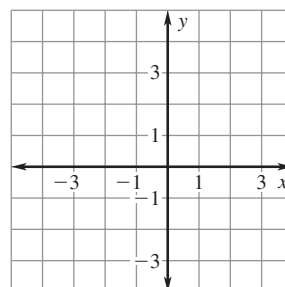
6. $3y - 4x = 6$
 $y = \frac{4}{3}x + 2$



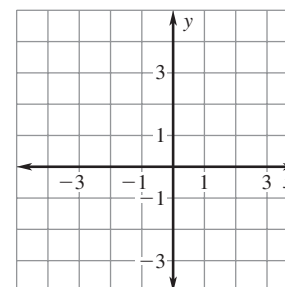
7. $3x + 4y = -24$
 $\frac{1}{3}y + \frac{1}{4}x = 1$



8. $2x + 3y = -1$
 $-2x + 3y = 1$



9. $-5x + 2y = 3$
 $4y - 10x = 8$



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

Solve the linear system by using substitution or elimination.

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

11. $4x + 3y = 2$
 $2x + \frac{3}{2}y = 1$

12. $x + 8y = 16$
 $-3x + 8y = -8$

13. $-2x + 5y = -10$
 $5y - 2x = 5$

14. $-2x + 3y = -\frac{1}{2}$
 $3x + 2y = 4$

15. $2y - 10x = -8$
 $2y - x = 4$

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

16. $4y = 12x - 1$
 $-12x + 3y = -1$

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

18. $-2x + 3y = 4$
 $3x - 2y = 5$

19. $5y - 4x = 3$
 $10y = 8x + 6$

20. $y - \frac{1}{4}x = -2$
 $x - 2y = 8$

21. $3y + 5x = 1$
 $-5x - 3y = 1$

22. $2y - x = 3$
 $2x + y = 6$

23. $-3x + 4y = -4$
 $4x + 3y = 2$

24. $4y = -5x + 3$
 $2y + \frac{5}{2}x = \frac{3}{2}$

- 25. Restaurant Sales** The table below shows the number of each of the specials that has been sold on a Friday night and a Saturday night.

Day	Number of vegetarian specials	Number of chicken specials	Total sales (dollars)
Friday	28	44	964.40
Saturday	21	33	723.30

- a.** Let x represent the cost (in dollars) of the vegetarian special and let y represent the cost (in dollars) of the chicken special. Write a linear system that models the situation.
- b.** Solve the linear system.
- c.** Can you determine how much each kind of special costs? Why or why not?
- 26. Retail Prices** Two employees at a store are given the task of putting price tags on items. One person starts pricing items at a rate of 10 items per minute. The second person starts 10 minutes after the first person and prices items at a rate of 8 items per minute.
- a.** Let y be the number of items priced x minutes after the first person starts pricing. Write a linear system that models the situation.
- b.** Solve the linear system.
- c.** Does the solution of the linear system make sense in the context of the problem? *Explain.*