LESSON 7.3

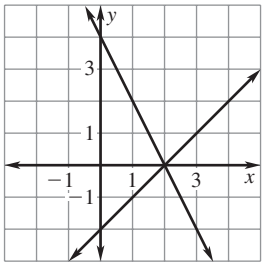
NAME _____ DATE _____

Practice A

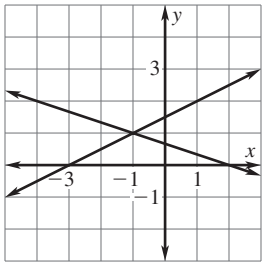
For use with pages 411–417

Use linear combinations to solve the system of linear equations. Use the graph to check your solution.

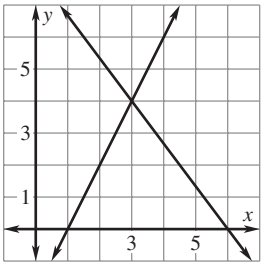
1. $2x + y = 4$
$x - y = 2$



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



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



Use linear combinations to solve the system of linear equations.

4. $x + y = 5$
$x - y = 7$

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

6. $x - 4y = 14$
$-x + 3y = -11$

7. $2x - y = -3$
$-5x + y = 9$

8. $3x + y = 6$
$-3x + 4y = 9$

9. $2x - 3y = -16$
$x + 3y = 10$

10. $x + 3y = -3$
$x - 4y = 11$

11. $-2x + 3y = 14$
$x - 4y = -12$

12. $5x + 2y = 5$
$3x + y = 2$

13. $2x - y = 1$
$2x + 5y = -5$

14. $4x - 5y = -18$
$5x + 4y = -2$

15. $2x + 5y = -22$
$4x - 3y = 8$

16. $4x = -3 + y$
$y = -6x - 7$

17. $x = 2y + 9$
$2y = 3x - 19$

18. $5y - 3x = -4$
$3x + 4y = 13$

19. $4x = 5y + 6$
$3y + 2x = -8$

20. $3y = 5x + 15$
$6x = 2y - 18$

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

Electricians **In Exercises 22–24, use the following information.**

The yellow pages identify two different local electrical businesses. Business A charges $50 for a service call, plus an additional $40 per hour for labor. Business B charges $30 for a service call, plus an additional $45 per hour for labor.

22. Let x represent the number of hours of labor and let y represent the total charge. Write a system of equations you could solve to find the lengths of a service call for which both businesses charge the same amount.

23. Solve the system.

24. Which company would you use? Why?

Travel Agency **In Exercises 25 and 26, use the following information.**

A travel agency offers two Boston outings. Plan A includes hotel accommodations for three nights and two pairs of baseball tickets worth $645. Plan B includes hotel accommodations for five nights and four pairs of baseball tickets worth $1135.

25. Let x represent the cost of one night's hotel accommodation and let y represent the cost of one pair of baseball tickets. Write a system of equations you could solve to find the cost of one night's hotel accommodation and one pair of baseball tickets.

26. Solve the system.