Name _____ Date _____

LESSON 7.4

LESSON 7.4 Practice C

For use with pages 451–457

Solve the linear system by using elimination.

1. $-3x + 5y = 28$
$9x + 4y = 68$

2. $2x + 7y = -13$
$-3x + 14y = -5$

3. $4x + 7y = -43$
$-3x + 6y = -69$

4. $8x - 6y = -140$
$3x + 5y = 20$

5. $4x + 9y = -53$
$-6x - 4y = 32$

6. $-6x + 12y = 48$
$-7x + 18y = 84$

7. $3x + 9y = 27$
$14x + 6y = 18$

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

9. $10x - 8y = 28$
$12x + 5y = 92$

10. $6x - 11y = -93$
$15x + 13y = 132$

11. $-15x + 4y = -2$
$13x - 10y = -44$

12. $9x - 8y = -3$
$14x - 12y = -6$

Solve the linear system by using any algebraic method.

13. $0.4x + 0.1y = 0.7$
$x - y = 3$

14. $4x - 3y = 7$
$1.5x + y = 9$

15. $1.5x + 2.6y = -12.7$
$-4.5x + 0.3y = 21.9$

16. $x + y = 7$
$\frac{1}{4}x - \frac{1}{4}y = \frac{5}{4}$

17. $4x + y = -\frac{7}{4}$
$5x - 2y = -3$

18. $\frac{2}{3}x - \frac{1}{4}y = -\frac{11}{3}$
$\frac{1}{3}x + \frac{3}{5}y = \frac{16}{15}$

19. Find the values of a and b so that the linear system has a solution of (2, 4).

$ax - by = 0$ Equation 1
$bx - ay = -6$ Equation 2

20. **Lift Tickets** Two families go skiing on a Saturday. One family purchases two adult lift tickets and four youth lift tickets for \$166. Another family purchases four adult lift tickets and five youth lift tickets for \$263. Let x represent the cost in dollars of one adult lift ticket and let y represent the cost in dollars of one youth lift ticket.

a. Write a linear system that represents this situation.

b. Solve the linear system to find the cost of one adult and one youth lift ticket.

c. How much would it cost two adults and five youths to ski for a day?

21. **Asian Cuisine** A group of your friends goes to a restaurant that features different Asian foods. There are eight people in your group. Some of the group order the Thai special for \$14.25 and the rest of the group order the Szechwan special for \$13.95. If the total bill was \$113.10, how many people ordered each dinner?

22. **Getting to School** You walk 1.75 miles to school at an average speed r (in miles per hour). On the way back home, you are walking with a friend and your average speed is $\frac{3}{4}r$. The round trip took a total of 90 minutes. Find the average speed for each leg of your trip.