Name _____ Date _____

LESSON 7.3

Practice C
For use with pages 443–450

Solve the linear system by using elimination.

1. $4x - y = -21$
$-4x + 7y = 51$

2. $-2x + 5y = 14$
$8x + 5y = 94$

3. $-y - x = 7$
$x = 6y - 28$

4. $10y - 2x = -38$
$-2x = 8y + 52$

5. $8x - 6y = -12$
$8x + 4y = 128$

6. $-15x + 4y = 43$
$4y = -3x + 25$

7. $6x - 3y = 54$
$6x = 8y - 36$

8. $2y - 3x = 10$
$7x = -2y - 50$

9. $9x = 235 - 5y$
$5y - 10x = -50$

10. $1.8x - 4.2y = -15.6$
$1.8x + 7.5y = 42.9$

11. $-7.4y - 2.2x = 47.2$
$2.8y = 2.2x + 6.4$

12. $9.5x - 7.4y = 15.7$
$7.4y - 4.2x = 42.6$

13. $\frac{2}{3}x + \frac{1}{3}y = \frac{2}{3}$
$\frac{1}{3}y + \frac{1}{3}x = \frac{5}{3}$

14. $4.5x + 0.5y = 48.5$
$2.5x = 0.5y + 14.5$

15. $3.2x = 4.8y + 8$
$6.4y = 3.2x - 19.2$

16. For $b \neq 0$, what is the solution of the system $2x + by = 22$ and $4x - by = 8$?

17. Solve for x, y, and z in the system of equations below. *Explain* your steps.

$x + 3y + 2z = 9$ Equation 1

$2z + x - 5y = -7$ Equation 2

$6y = 15 - 3x$ Equation 3

18. **Car Rental** A car rental company charges a daily rental fee plus a per mile fee over 150 miles. Two different people rent the same style of car for the same number of days. The total bill for one person's rental is $207.50 for a 5-day rental and 180 miles. The total bill for the other person's rental is $212.50 for a 5-day rental and 200 miles.

  a. Write a linear system that you can use to find the daily rental fee and the per mile fee over 150 miles. *Explain* how you got your linear system.

  b. What is the daily rental fee? What is the fee per mile over 150 miles?

19. **Greeting Cards** Two friends are making their own greeting cards. They already have ink, but they will buy the stamps and cards. The table shows the numbers of stamps and packages of cards each person is buying. Another friend, George, wants to buy 3 stamps and 3 packages of cards. How much will it cost him? *Explain*.

Customer	Stamps	Packages of cards	Total cost (dollars)
Stan	4	2	22.98
Leeza	7	2	32.73