Name _____ Date _____

5.3 Practice A

In Exercises 1–6, solve the system of linear equations by elimination. Check your solution.

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

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

3. $2x - 5y = -7$
$-2x + 3y = 1$

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

5. $2x - 3y = 9$
$5x + 3y = 12$

6. $-4x - y = 11$
$4x + 4y = -20$

In Exercises 7–12, solve the system of linear equations by elimination. Check your solution.

7. $x + y = 7$
$5x + 2y = 8$

8. $7x - 6y = 9$
$5x + 2y = 19$

9. $2x - 7y = 5$
$x - y = 10$

10. $3x + 4y = -1$
$-2x - 5y = 10$

11. $-5x + 12y = 8$
$2x - 8y = 0$

12. $-10x + 3y = -30$
$15x - 8y = 45$

13. You and your friend are buying throw blankets with your names embroidered on them. The cost of the throw blanket is x dollars and the cost of each embroidered letter is y dollars. Your name has 6 letters and the total cost is \$29. Your friend's name has 3 letters and the total cost is \$24.50. Find the cost of the throw blanket and the cost of each embroidered letter.

In Exercises 14–16, solve the system of linear equations using any method. Explain why you chose the method.

14. $2x - 5y = 1$
$2x = 9 - 3y$

15. $4x - 6 = -2y$
$x + 9 = y$

16. $6x + 5y = 14$
$3x + 10y = -8$

17. You are ordering T-shirts for the Spanish Club. The table shows the orders for 45 students in the club.

Small	Medium	Large
11	x	y

a. How many students ordered medium and large shirts?

b. The number of students who ordered a medium T-shirt was two less than the number of students who ordered a large T-shirt. Write a system of linear equations that represents the number of students who ordered medium and large T-shirts.

c. Solve the system of linear equations.

d. You are ordering 10 additional medium and large T-shirts for new members who might join the club. Based on your answers in part (c), how many of each size would you order? Explain.