

Name: \_\_\_\_\_

## Ch 7. 3 Solving Systems with Elimination

**Solve the linear system using the method of your choice.**

$$\begin{aligned} 1. \quad & 6x + 9y = 3 \\ & x + 4y = -2 \end{aligned}$$

$$\begin{aligned} 2. \quad & -x = 10 \\ & 2x + 7y = 1 \end{aligned}$$

$$\begin{aligned} 3. \quad & -3x + y = -4 \\ & y = x - 6 \end{aligned}$$

$$\begin{aligned} 4. \quad & 4x - 6 = 2y \\ & -3x + 2y = -3 \end{aligned}$$

$$\begin{aligned} 5. \quad & -3x + 5y = -10 \\ & -3x + 6y = -12 \end{aligned}$$

$$\begin{aligned} 6. \quad & 2x + 3y = 8 \\ & 2x - 3y = -4 \end{aligned}$$

$$\begin{aligned} 7. \quad & 4x - 3y = -4 \\ & -3x + 5y = -8 \end{aligned}$$

$$\begin{aligned} 8. \quad & 1.8x + 3y = 3 \\ & -2x - 2.5y = -5 \end{aligned}$$

$$\begin{aligned} 9. \quad & x - y = 2 \\ & 3x + y = -10 \end{aligned}$$

Solve the system.

10. A sporting goods store sells right-handed and left-handed baseball gloves. In one month, 12 gloves were sold for a total revenue of \$561. Right-handed gloves cost \$45 and left-handed gloves cost \$52.

Solve the system to determine the number for the right and left handed glove.

11. You are buying the meat for a cookout. You need to buy 8 packages of meat. A package of hotdogs costs \$1.60 and a package of hamburgers costs \$5. You spend a total of \$23.

Solve the system to determine the number packages bought.

12. *Southern Cuisine* Your family goes to a Southern-style restaurant for dinner. There are 6 people in your family. Some order the chicken dinner for \$14 and some order the steak dinner for \$17. If the total bill was \$99 how many people ordered each dinner?