

Elimination

Solve each system by elimination.

$$\begin{aligned} 1) \quad & -3x + 6y = -9 \\ & 3x + y = -12 \end{aligned}$$

$$\begin{aligned} 2) \quad & -3x + 2y = 2 \\ & -2x - 2y = -12 \end{aligned}$$

$$\begin{aligned} 3) \quad & 5x - y = 18 \\ & -5x - 5y = 0 \end{aligned}$$

$$\begin{aligned} 4) \quad & x - 3y = -12 \\ & 3x + 3y = -12 \end{aligned}$$

$$\begin{aligned} 5) \quad & x + 2y = -4 \\ & -x + y = -8 \end{aligned}$$

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

$$\begin{aligned} 7) \quad & -5x - y = 6 \\ & 5x + 2y = -2 \end{aligned}$$

$$\begin{aligned} 8) \quad & 3x - 5y = -15 \\ & 2x + 5y = 15 \end{aligned}$$

$$\begin{aligned} 9) \quad & 5x - y = 16 \\ & -5x - 6y = -9 \end{aligned}$$

$$\begin{aligned} 10) \quad & -3x - y = -11 \\ & -5x + y = -5 \end{aligned}$$

$$\begin{aligned} 11) \quad & -3x - 3y = -15 \\ & -2x + 3y = -5 \end{aligned}$$

$$\begin{aligned} 12) \quad & x + 4y = 8 \\ & 4x - 4y = -8 \end{aligned}$$

Elimination Word Problems

- 1) Stefan and Danielle each improved their yards by planting hostas and ornamental grass. They bought their supplies from the same store. Stefan spent \$131.50 on 11 hostas and 9 bunches of ornamental grass. Danielle spent \$169.90 on 11 hostas and 13 bunches of ornamental grass. What is the cost of one hosta and the cost of one bunch of ornamental grass?

$$H = \$ \underline{\hspace{2cm}}$$

$$G = \$ \underline{\hspace{2cm}}$$

- 2) Wilbur's school is selling tickets to a fall musical. On the first day of ticket sales the school sold 6 senior citizen tickets and 10 student tickets for a total of \$194.60. The school took in \$183.90 on the second day by selling 6 senior citizen tickets and 9 student tickets. Find the price of a senior citizen ticket and the price of a student ticket.

$$C = \$ \underline{\hspace{2cm}}$$

$$S = \$ \underline{\hspace{2cm}}$$

- 3) Jose's school is selling tickets to the annual talent show. On the first day of ticket sales the school sold 12 adult tickets and 12 child tickets for a total of \$340.32. The school took in \$243.93 on the second day by selling 5 adult tickets and 12 child tickets. Find the price of an adult ticket and the price of a child ticket.

$$A = \$ \underline{\hspace{2cm}}$$

$$C = \$ \underline{\hspace{2cm}}$$

- 4) Jasmine and Alberto each improved their yards by planting rose bushes and ivy. They bought their supplies from the same store. Jasmine spent \$258 on 18 rose bushes and 14 pots of ivy. Alberto spent \$270 on 6 rose bushes and 20 pots of ivy. Find the cost of one rose bush and the cost of one pot of ivy.

$$R = \$ \underline{\hspace{2cm}}$$

$$P = \$ \underline{\hspace{2cm}}$$

- 5) The school that Mike goes to is selling tickets to the annual talent show. On the first day of ticket sales the school sold 4 senior citizen tickets and 7 child tickets for a total of \$56. The school took in \$148 on the second day by selling 12 senior citizen tickets and 16 child tickets. What is the price each of one senior citizen ticket and one child ticket?

$$S = \$ \underline{\hspace{2cm}}$$

$$C = \$ \underline{\hspace{2cm}}$$

- 6) Arjun and Kayla are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of shiny wrapping paper. Arjun sold 10 rolls of plain wrapping paper and 14 rolls of shiny wrapping paper for a total of \$294. Kayla sold 20 rolls of plain wrapping paper and 6 rolls of shiny wrapping paper for a total of \$236. What is the cost each of one roll of plain wrapping paper and one roll of shiny wrapping paper?

$$P = \$ \underline{\hspace{2cm}}$$

$$S = \$ \underline{\hspace{2cm}}$$

- 7) Eduardo and Mofor are selling cheesecakes for a school fundraiser. Customers can buy pecan cheesecakes and chocolate marble cheesecakes. Eduardo sold 3 pecan cheesecakes and 14 chocolate marble cheesecakes for a total of \$290.30. Mofor sold 4 pecan cheesecakes and 14 chocolate marble cheesecakes for a total of \$299.80. What is the cost each of one pecan cheesecake and one chocolate marble cheesecake?

$$P = \$ \underline{\hspace{2cm}}$$

$$C = \$ \underline{\hspace{2cm}}$$

- 8) Heather and Brenda are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Heather sold 4 small boxes of oranges and 4 large boxes of oranges for a total of \$98.32. Brenda sold 11 small boxes of oranges and 4 large boxes of oranges for a total of \$142.07. What is the cost each of one small box of oranges and one large box of oranges?

$$S = \$ \underline{\hspace{2cm}}$$

$$L = \$ \underline{\hspace{2cm}}$$

- 9) Huong's school is selling tickets to a spring musical. On the first day of ticket sales the school sold 7 senior citizen tickets and 8 child tickets for a total of \$152.90. The school took in \$185.90 on the second day by selling 13 senior citizen tickets and 8 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.

$$S = \$ \underline{\hspace{2cm}}$$

$$C = \$ \underline{\hspace{2cm}}$$

- 10) Kathryn's school is selling tickets to the annual talent show. On the first day of ticket sales the school sold 17 senior citizen tickets and 12 student tickets for a total of \$411. The school took in \$187 on the second day by selling 9 senior citizen tickets and 4 student tickets. Find the price of a senior citizen ticket and the price of a student ticket.

$$C = \$ \underline{\hspace{2cm}}$$

$$S = \$ \underline{\hspace{2cm}}$$

- 11) Trevon and Perry each improved their yards by planting daylilies and geraniums. They bought their supplies from the same store. Trevon spent \$15 on 1 daylily and 5 geraniums. Perry spent \$51 on 3 daylilies and 18 geraniums. What is the cost of one daylily and the cost of one geranium?

$$D = \$ \underline{\hspace{2cm}}$$

$$G = \$ \underline{\hspace{2cm}}$$

- 12) The school that Cody goes to is selling tickets to a fall musical. On the first day of ticket sales the school sold 9 adult tickets and 12 student tickets for a total of \$189. The school took in \$300 on the second day by selling 18 adult tickets and 11 student tickets. What is the price each of one adult ticket and one student ticket?

$$A = \$ \underline{\hspace{2cm}}$$

$$S = \$ \underline{\hspace{2cm}}$$