

Solve the system of equations by using any method you want.

$$1) \begin{cases} 4x + 3y = 1 \\ x = 1 - y \end{cases}$$

$$2) \begin{cases} 2x - y = 6 \\ -x + y = -1 \end{cases}$$

$$3) \begin{cases} y = 2x - 4 \\ y = \frac{1}{4}x + 3 \end{cases}$$

$$4) \begin{cases} 6x - y = 3 \\ 4x - 2y = -2 \end{cases}$$

$$5) \begin{cases} y = -x + 2 \\ y = \frac{1}{3}x - 2 \end{cases}$$

$$6) \begin{cases} 2x + 3y = 7 \\ x = 1 - 4y \end{cases}$$

$$7) \begin{cases} y = x + 2 \\ y = -\frac{2}{3}x - 3 \end{cases}$$

$$8) \begin{cases} 2x + 3y = 6 \\ x - 3y = -15 \end{cases}$$

$$9) \begin{cases} 7x - 5y = 4 \\ y = 3x - 4 \end{cases}$$

- 10) Stefan's school is selling tickets to a choral performance. On the first day of ticket sales the school sold 14 senior citizen tickets and 12 child tickets for a total of \$220. The school took in \$65 on the second day by selling 7 senior citizen tickets and 1 child ticket. Find the price of a senior citizen ticket and the price of a child ticket.

- 11) The length of a rectangle is 8 inches more than the width. The perimeter of a rectangle is 56 inches. Write and solve a system of linear equations to find the length and width of a rectangle.

- 12) The school that Mary goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 1 senior citizen ticket and 6 student tickets for a total of \$58. The school took in \$140 on the second day by selling 8 senior citizen tickets and 12 student tickets. What is the price each of one senior citizen ticket and one student ticket?