

Solving Systems of Equations by Elimination

Solve each system by elimination.

$$\begin{array}{l} 1) \quad -4x - 2y = -12 \\ \quad \quad 4x + 8y = -24 \end{array}$$

$$\begin{array}{l} 2) \quad 4x + 8y = 20 \\ \quad \quad -4x + 2y = -30 \end{array}$$

$$\begin{array}{l} 3) \quad x - y = 11 \\ \quad \quad 2x + y = 19 \end{array}$$

$$\begin{array}{l} 4) \quad -6x + 5y = 1 \\ \quad \quad 6x + 4y = -10 \end{array}$$

$$\begin{array}{r} 5) \quad -2x - 9y = -25 \\ \quad \quad +4x + 9y = +23 \\ \hline \quad \quad 2x \quad = -2 \\ \quad \quad \quad \boxed{x = -1} \\ \quad \quad \quad \quad \quad (-1, 3) \end{array}$$

$$\begin{array}{r} \quad \quad -2(-1) - 9y = -25 \\ \quad \quad \quad 2 - 9y = -25 \\ \quad \quad \quad \quad \quad -2 \\ \hline \quad \quad \quad \quad \quad -9y = -27 \\ \quad \quad \quad \quad \quad \quad \quad \quad -9 \\ \quad \quad \quad \quad \quad \quad \quad \quad \quad \quad y = 3 \end{array}$$

$$\begin{array}{l} 6) \quad 8x + y = -16 \\ \quad \quad -3x + y = -5 \end{array}$$