

Solving Systems of Equations by Elimination

Solve each system by elimination.

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

$$(6, -6)$$

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

$$(7, -1)$$

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

$$(10, -1)$$

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

$$(-1, -1)$$

$$\begin{aligned} 5) \quad & -2x - 9y = -25 \\ & -4x - 9y = -23 \end{aligned}$$

$$(-1, 3)$$

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

$$(-1, -8)$$

$$\begin{aligned} 7) \quad & -6x + 6y = 6 \\ & -6x + 3y = -12 \end{aligned}$$

$$(5, 6)$$

$$\begin{aligned} 8) \quad & 7x + 2y = 24 \\ & 8x + 2y = 30 \end{aligned}$$

$$(6, -9)$$

$$\begin{aligned} 9) \quad & 5x + y = 9 \\ & 10x - 7y = -18 \end{aligned}$$

$$(1, 4)$$

$$\begin{aligned} 10) \quad & -4x + 9y = 9 \\ & x - 3y = -6 \end{aligned}$$

$$(9, 5)$$

$$\begin{aligned} 11) \quad & -3x + 7y = -16 \\ & -9x + 5y = 16 \end{aligned}$$

$$(-4, -4)$$

$$\begin{aligned} 12) \quad & -7x + y = -19 \\ & -2x + 3y = -19 \end{aligned}$$

$$(2, -5)$$

$$\begin{aligned} 13) \quad & 16x - 10y = 10 \\ & -8x - 6y = 6 \\ & (0, -1) \end{aligned}$$

$$\begin{aligned} 14) \quad & 8x + 14y = 4 \\ & -6x - 7y = -10 \\ & (4, -2) \end{aligned}$$

$$\begin{aligned} 15) \quad & -4x - 15y = -17 \\ & -x + 5y = -13 \\ & (8, -1) \end{aligned}$$

$$\begin{aligned} 16) \quad & -x - 7y = 14 \\ & -4x - 14y = 28 \\ & (0, -2) \end{aligned}$$

$$\begin{aligned} 17) \quad & -7x - 8y = 9 \\ & -4x + 9y = -22 \\ & (1, -2) \end{aligned}$$

$$\begin{aligned} 18) \quad & 5x + 4y = -30 \\ & 3x - 9y = -18 \\ & (-6, 0) \end{aligned}$$

$$\begin{aligned} 19) \quad & -4x - 2y = 14 \\ & -10x + 7y = -25 \\ & (-1, -5) \end{aligned}$$

$$\begin{aligned} 20) \quad & 3x - 2y = 2 \\ & 5x - 5y = 10 \\ & (-2, -4) \end{aligned}$$

$$\begin{aligned} 21) \quad & 5x + 4y = -14 \\ & 3x + 6y = 6 \\ & (-6, 4) \end{aligned}$$

$$\begin{aligned} 22) \quad & 2x + 8y = 6 \\ & -5x - 20y = -15 \\ & \text{Infinite number of solutions} \end{aligned}$$

$$\begin{aligned} 23) \quad & -14 = -20y - 7x \\ & 10y + 4 = 2x \\ & (2, 0) \end{aligned}$$

$$\begin{aligned} 24) \quad & 3 + 2x - y = 0 \\ & -3 - 7y = 10x \\ & (-1, 1) \end{aligned}$$