

Solve by Elimination

Level 1: These you will be able to eliminate a variable by adding or subtracting right from the start.

$$\begin{aligned} 1. \quad y &= x^2 + 5x - 23 \\ y &= 2x + 5 \end{aligned}$$

$$\begin{aligned} 2. \quad y &= x^2 + 2x - 15 \quad (-2, 15) \text{ and } (7, 48) \\ y &= 7x - 1 \end{aligned}$$

$$\begin{aligned} 3. \quad y &= x^2 + 5x + 9 \\ y &= -4x - 9 \end{aligned}$$

$$\begin{aligned} 4. \quad y &= x^2 - 13x + 19 \quad (2, -3) \text{ and } (10, -11) \\ y &= -x - 1 \end{aligned}$$

$$\begin{aligned} 5. \quad x^2 + 3x - y &= 60 \\ -5x + y &= 3 \end{aligned}$$

Level 2: These you will have to first move some terms around before you can add or subtract to eliminate a variable.

$$\begin{aligned} 6. \quad y &= x^2 + 3x - 28 \quad (-5, -18) \text{ and } (5, 12) \\ 3x - y &= 3 \end{aligned}$$

$$\begin{aligned} 7. \quad x - y &= 1 \\ y &= -x^2 + 8x - 7 \end{aligned}$$

$$\begin{aligned} 8. \quad y &= x^2 - x - 1 \quad (-3, 11) \text{ and } (-4, 19) \\ -8x - y &= 13 \end{aligned}$$