

1. **Reasoning** Which of the following systems would be most efficiently solved using the elimination method?

$$\begin{array}{l} \text{System A} \quad 2x + 2y = 6 \\ \quad \quad \quad -6x - 2y = 6 \end{array}$$

$$\begin{array}{l} \text{System B} \quad y = 2 - 3x \\ \quad \quad \quad 4x - 2y = -2 \end{array}$$

2. Explain how you would solve the following system using the elimination method.

$$2x - 5y = -6$$

$$2x - 7y = 14$$

**Solve each system of equations by elimination. Check your solution.**

$$\begin{array}{l} 3. \quad x + y = 12 \\ \quad \quad x - y = 2 \end{array}$$

$$\begin{array}{l} 4. \quad 3x + 4y = 9 \\ \quad \quad -3x - 2y = -3 \end{array}$$

$$\begin{array}{l} 5. \quad -x + y = 4 \\ \quad \quad -2x + y = 2 \end{array}$$

$$\begin{array}{l} 6. \quad 6x + 2y = 10 \\ \quad \quad -2x + 2y = 2 \end{array}$$

$$\begin{array}{l} 7. \quad 4x - 2y = 7 \\ \quad \quad 3x + 6y = 9 \end{array}$$

$$\begin{array}{l} 8. \quad 5x - 6y = 1 \\ \quad \quad 2x + 2y = 18 \end{array}$$