

Solve each system using substitution. Check your answer.

$$\begin{aligned} 12. \quad 2x + 2y &= 38 \\ y &= x + 3 \end{aligned}$$

$$\begin{aligned} 14. \quad y &= 8 - x \\ 7 &= 2 - y \end{aligned}$$

$$\begin{aligned} 16. \quad 3x + 2y &= 23 \\ \frac{1}{2}x - 4 &= y \end{aligned}$$

$$\begin{aligned} 18. \quad 4x &= 3y - 2 \\ 18 &= 3x + y \end{aligned}$$

$$\begin{aligned} 20. \quad 4y + 3 &= 3y + x \\ 2x + 4y &= 18 \end{aligned}$$

$$\begin{aligned} 22. \quad 4y - x &= 5 + 2y \\ 3x + 7y &= 24 \end{aligned}$$

Solve each system by graphing. Tell whether the system has *one solution*, *infinitely many solutions*, or *no solution*.

$$\begin{aligned} 50. \quad y &= x + 1 \\ 2x + y &= 10 \end{aligned}$$

$$\begin{aligned} 51. \quad y &= -x + 2 \\ x + y &= 3 \end{aligned}$$

