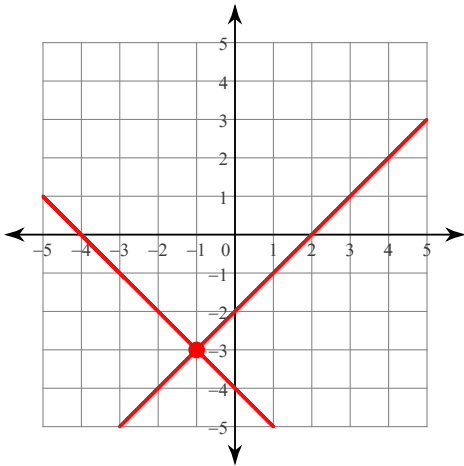


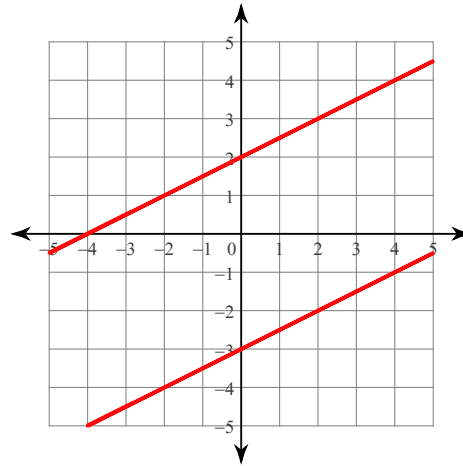
## Practice 8.4 Special Systems

Solve each system by graphing.

$$1) \begin{aligned} y &= -x - 4 \\ y &= x - 2 \end{aligned}$$

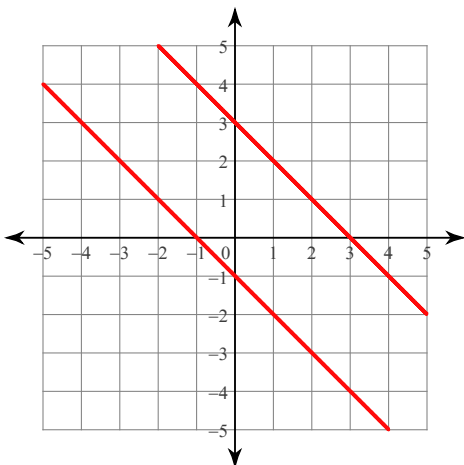
 $(-1, -3)$ 

$$2) \begin{aligned} y &= \frac{1}{2}x + 2 \\ y &= \frac{1}{2}x - 3 \end{aligned}$$



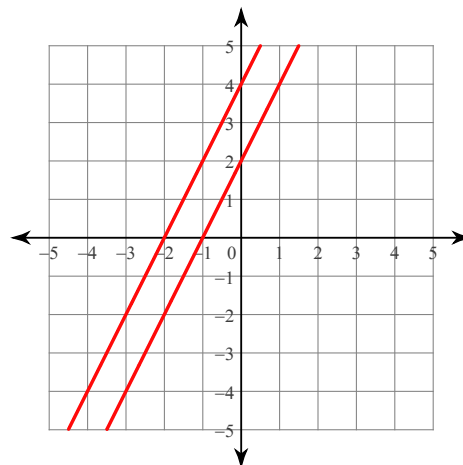
No solution

$$3) \begin{aligned} x + y &= 3 \\ x + y &= -1 \end{aligned}$$



No solution

$$4) \begin{aligned} 2x - y &= -4 \\ 2x - y &= -2 \end{aligned}$$



No solution

**Solve each system by elimination.**

$$\begin{aligned} 5) \quad & -3x + 7y = -2 \\ & 6x - 14y = 4 \end{aligned}$$

Infinite number of solutions

$$\begin{aligned} 6) \quad & 16x - 4y = -4 \\ & -8x + y = -3 \end{aligned}$$

(1, 5)

$$\begin{aligned} 7) \quad & 9x + 15y = -12 \\ & -3x - 5y = 7 \end{aligned}$$

No solution

$$\begin{aligned} 8) \quad & -5x - 4y = -1 \\ & 10x + 8y = 2 \end{aligned}$$

Infinite number of solutions

**Solve each system by substitution.**

$$\begin{aligned} 9) \quad & 12x - 2y = 3 \\ & y = 6x - 2 \end{aligned}$$

No solution

$$\begin{aligned} 10) \quad & y = 3x + 21 \\ & -9x + 3y = 63 \end{aligned}$$

Infinite number of solutions

$$\begin{aligned} 11) \quad & 3x - 6y = -6 \\ & y = x - 2 \end{aligned}$$

(6, 4)

$$\begin{aligned} 12) \quad & y = -8x - 1 \\ & 24x + 3y = -3 \end{aligned}$$

Infinite number of solutions