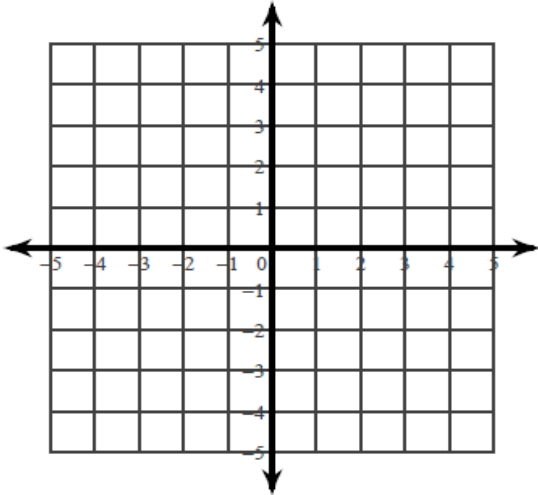


Systems of Equations ... Elimination

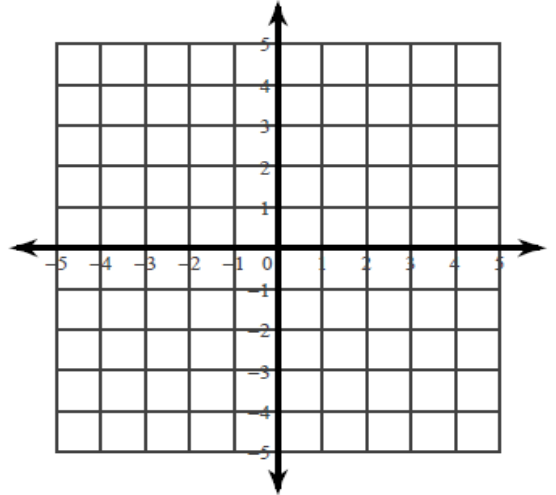
Solve each system by graphing.

1) $y = -\frac{1}{4}x - 4$

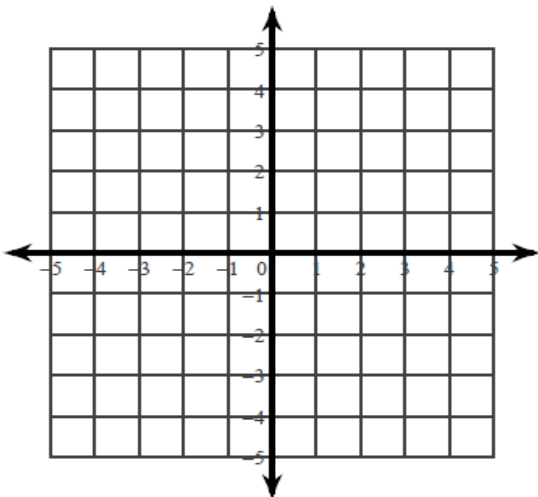
$$y = \frac{5}{4}x + 2$$



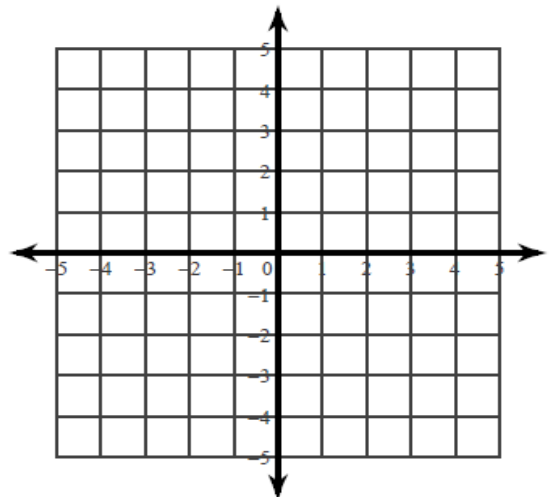
2) $y = 2x + 3$
 $y = -4x - 3$



3) $7x - y = 3$
 $x - y = -3$



4) $3x + 4y = 4$
 $3x + 4y = -16$



Systems of Equations ... Elimination

Solve each system by substitution.

$$\begin{aligned} 5) \quad x + 8y &= -15 \\ 7x + 8y &= -9 \end{aligned}$$

$$\begin{aligned} 6) \quad -5x - 7y &= 11 \\ x - 2y &= -9 \end{aligned}$$

$$\begin{aligned} 7) \quad y &= -7x + 1 \\ 5x + 4y &= -19 \end{aligned}$$

$$\begin{aligned} 8) \quad -9x - 3y &= -2 \\ y &= -3x - 4 \end{aligned}$$

Solve each system by elimination.

$$\begin{aligned} 9) \quad 6x + 2y &= -6 \\ 7x + 4y &= 8 \end{aligned}$$

$$\begin{aligned} 10) \quad 5x + 3y &= 15 \\ 10x + 6y &= 20 \end{aligned}$$

$$\begin{aligned} 11) \quad -6x - 9y &= 0 \\ -24x &= 36y \end{aligned}$$

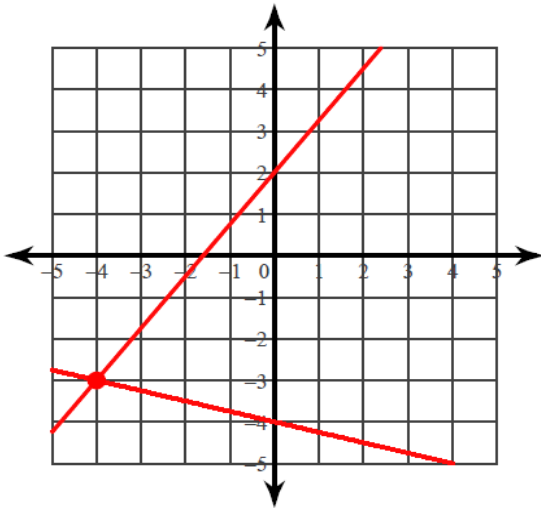
$$\begin{aligned} 12) \quad -3 - 3y &= 12x \\ -5 - y &= 2x \end{aligned}$$

Systems of Equations ... Elimination

Answers

1) $y = -\frac{1}{4}x - 4$

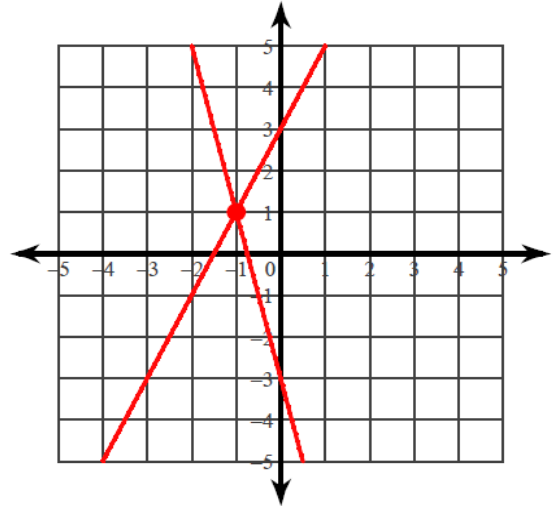
$y = \frac{5}{4}x + 2$



$(-4, -3)$

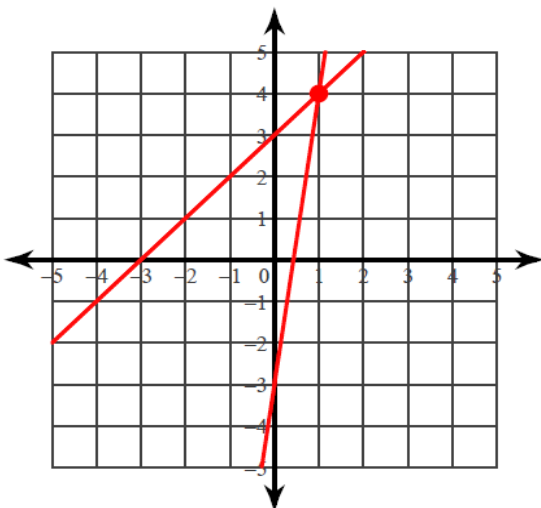
Solve each system by graphing.

2) $y = 2x + 3$
 $y = -4x - 3$



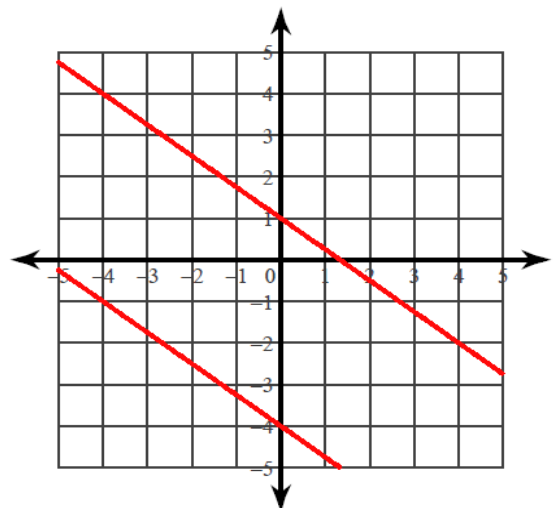
$(-1, 1)$

3) $7x - y = 3$
 $x - y = -3$



$(1, 4)$

4) $3x + 4y = 4$
 $3x + 4y = -16$



No solution

Systems of Equations ... Elimination

Solve each system by substitution.

$$\begin{aligned} 5) \quad x + 8y &= -15 \\ 7x + 8y &= -9 \end{aligned}$$

$(1, -2)$

$$\begin{aligned} 6) \quad -5x - 7y &= 11 \\ x - 2y &= -9 \end{aligned}$$

$(-5, 2)$

$$\begin{aligned} 7) \quad y &= -7x + 1 \\ 5x + 4y &= -19 \end{aligned}$$

$(1, -6)$

$$\begin{aligned} 8) \quad -9x - 3y &= -2 \\ y &= -3x - 4 \end{aligned}$$

No solution

Solve each system by elimination.

$$\begin{aligned} 9) \quad 6x + 2y &= -6 \\ 7x + 4y &= 8 \end{aligned}$$

$(-4, 9)$

$$\begin{aligned} 10) \quad 5x + 3y &= 15 \\ 10x + 6y &= 20 \end{aligned}$$

No solution

$$\begin{aligned} 11) \quad -6x - 9y &= 0 \\ -24x &= 36y \end{aligned}$$

Infinite number of solutions

$$\begin{aligned} 12) \quad -3 - 3y &= 12x \\ -5 - y &= 2x \end{aligned}$$

$(2, -9)$