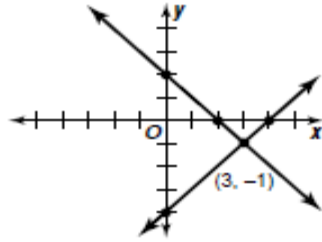


Solve a System by Graphing WS

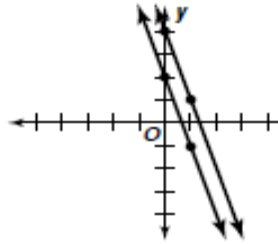
Examples: Solve each system of equations by graphing.

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

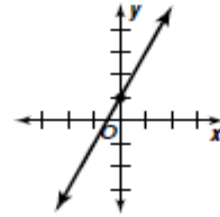


The point $(3, -1)$ lies on both lines, thus $(3, -1)$ is the solution set for the system of equations.

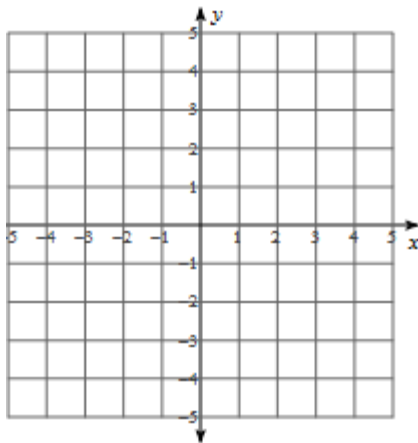
$$\begin{aligned}3x + y &= 2 \\3x + y &= 4 \\ \text{no solution}\end{aligned}$$



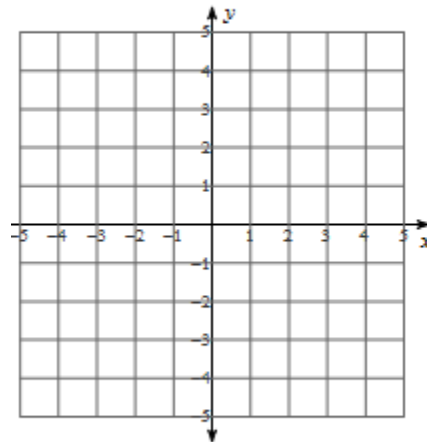
$$\begin{aligned}y &= 2x + 1 \\2y &= 4x + 2 \\ \text{infinitely many solutions}\end{aligned}$$



1.
$$y = -\frac{2}{3}x + 1$$
$$y = -\frac{7}{3}x - 4$$



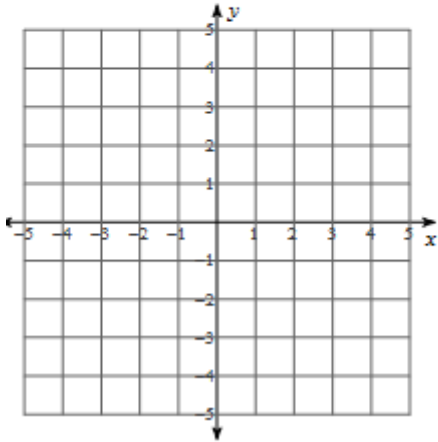
2.
$$y = -x + 4$$
$$y = 6x - 3$$



3.

$$y = \frac{3}{4}x - 4$$

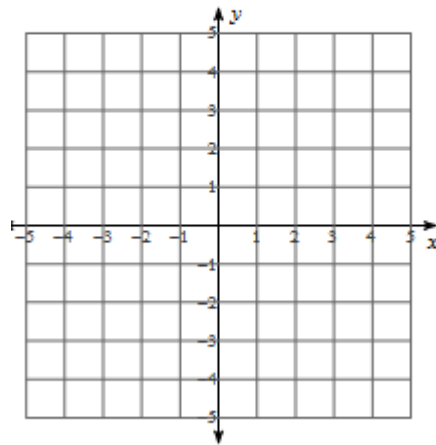
$$y = \frac{3}{4}x + 2$$



4.

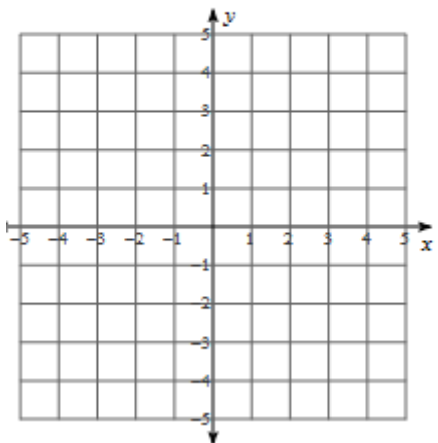
$$y = -1$$

$$y = \frac{3}{4}x + 2$$



5. $7x + 4y = -12$

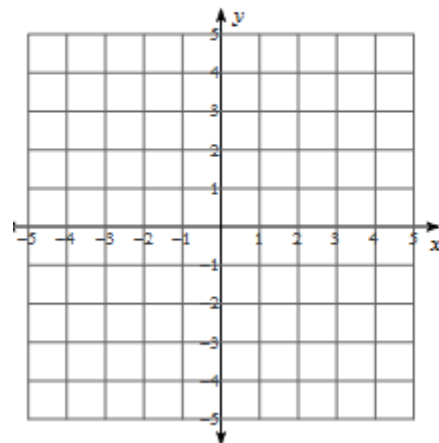
$$x + 2y = 4$$



6.

$$x - y = 2$$

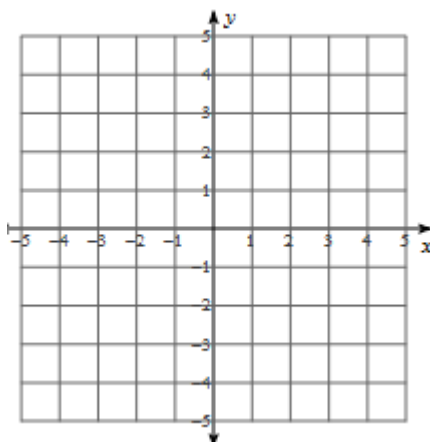
$$x + y = 4$$



7.

$$x + y = 1$$

$$3x + 3y = 3$$



8.

$$4x - 2y = 4$$

$$4x - 2y = 0$$

