

NAME _____

Module 10 Solving Systems of Linear Equations and Inequalities

Lesson 1 Solving Systems of Linear Equations by Graphing



guided
practice

Set 1

1. Is $(4, 3)$ a solution to the system of linear equations?

$$\begin{cases} 5x - 2y = 14 \\ x + y = 8 \end{cases}$$

$(4, 3)$ is NOT a solution.

2. Is $(-1, -2)$ a solution to the system of linear equations?

$$\begin{cases} 3x - 4y = 5 \\ y = x - 1 \end{cases}$$

$(-1, -2)$ is a solution.

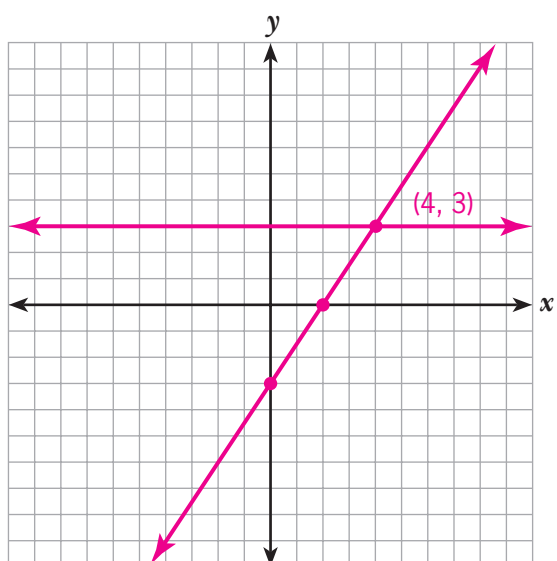
Set 2

1. Solve by graphing:

$$\begin{cases} 3x - 2y = 6 \\ y = 3 \end{cases}$$

$(4, 3)$

Solution:



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Check:

$$3x - 2y = 6$$

$$y = 3$$

$$3(4) - 2(3) \stackrel{?}{=} 6$$

$$3 = 3\checkmark$$

$$12 - 6 \stackrel{?}{=} 6$$

$$6 = 6\checkmark$$

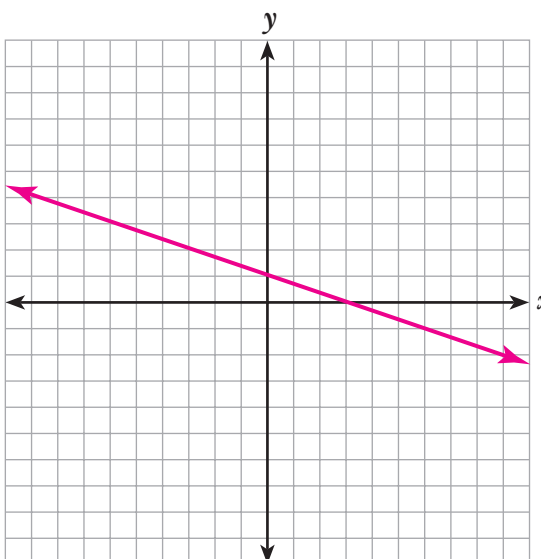
$(4, 3)$ is the solution.

2. Solve by graphing:

$$\begin{cases} 2x + 6y = 6 \\ y = -\frac{1}{3}x + 1 \end{cases}$$

This system of linear equations has an infinite number of solutions.

Solution:



3. Solve by graphing:

$$\begin{cases} x - 3y = -3 \\ 2x - 6y = 12 \end{cases}$$

This system of linear equations has no solution.

Solution:

