

## Systems of Equations: Lesson 1

### Introduction and Solving by Graphing: Notes

Name: answer key!

MATH  ALL

Systems of Equations:

More than one equation governs more than one variable.

Which of these points are a solution to the system?

(0, 6), (4, 18), or (1, 3)?

$$\begin{cases} y=5x-2 \\ y=-3x+6 \end{cases}$$

(0, 6):  $\begin{array}{l} y=5x-2 \\ 6=? \\ 6=5(0)-2 \\ 6 \neq -2 \end{array}$

(4, 18):  $\begin{array}{l} 18=5x-2 \\ 18=? \\ 18=20-2 \\ 18=18 \end{array}$  ✓

$\begin{array}{l} 18=5x-2 \\ 18=? \\ 18=-3x+6 \\ 18=? \\ 18=-3 \cdot 4 + 6 \\ 18 \neq -6 \end{array}$

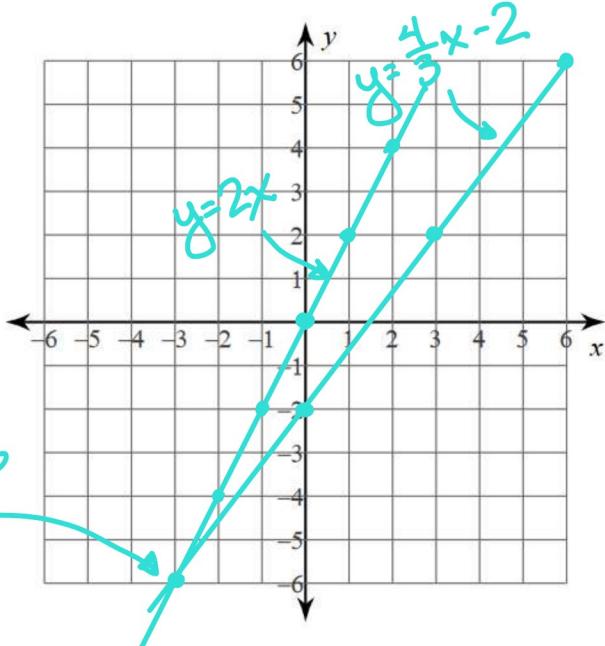
(1, 3)

(1, 3):  $\begin{array}{l} 3=5x-2 \\ 3=? \\ 3=5(1)-2 \\ 3=3 \end{array}$  ✓

$\begin{array}{l} 3=5x-2 \\ 3=? \\ 3=-3(1)+6 \\ 3=3 \end{array}$  ✓

What is the solution to the system:

$$\begin{cases} y=\frac{4}{3}x-2 \\ y=2x \end{cases}$$



intersection is  
the winner!  
(-3, -6)