

**Geometry 9/26**

**Warm Up  
Practice  
AIMS Web**

## 0-8 Solving Systems of Linear Equations by Graphing

I can solve a system of linear equations by graphing

### System of Equations

Two or more equations that have common variables.

$$y = 2x + 2$$

$$y = 3x - 1$$

### Solution of a System of Equations

Is an ordered pair  $(x, y)$  that satisfies both equations.

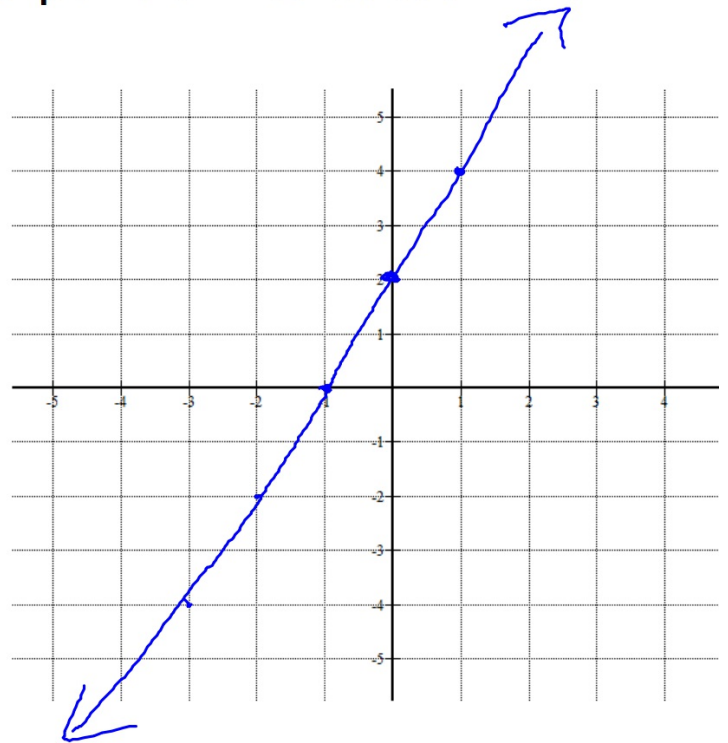
## I can solve a system of linear equations by graphing

When solving a system by graphing we graph the equations and look for the point where they intersect. Not very accurate when the point of intersection is a decimal/fractional value.

Ex. 1 Graph the equation

$$y = 2x + 2$$

$y = mx + b$   
rise  
run  
up and  
over  
Start  
on y-axis

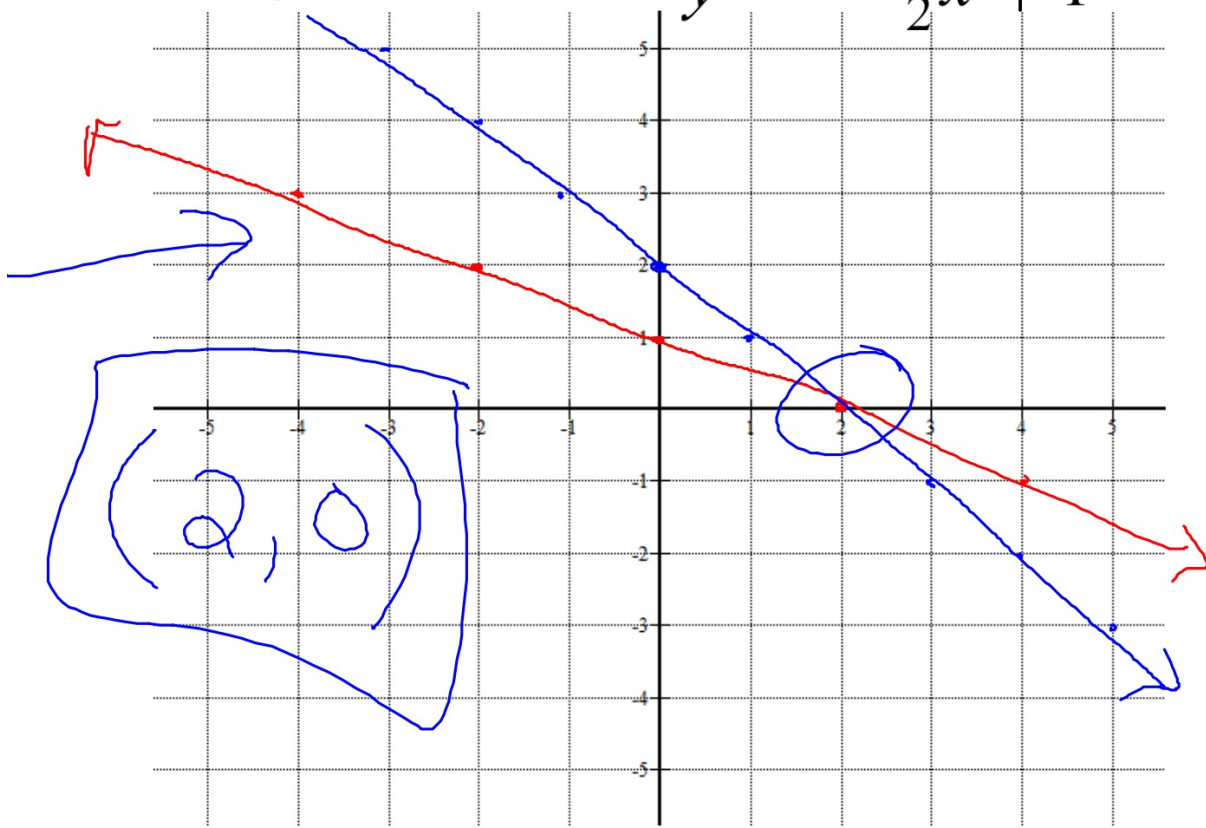


I can solve a system of linear equations by graphing

Ex. 2 Solve by graphing

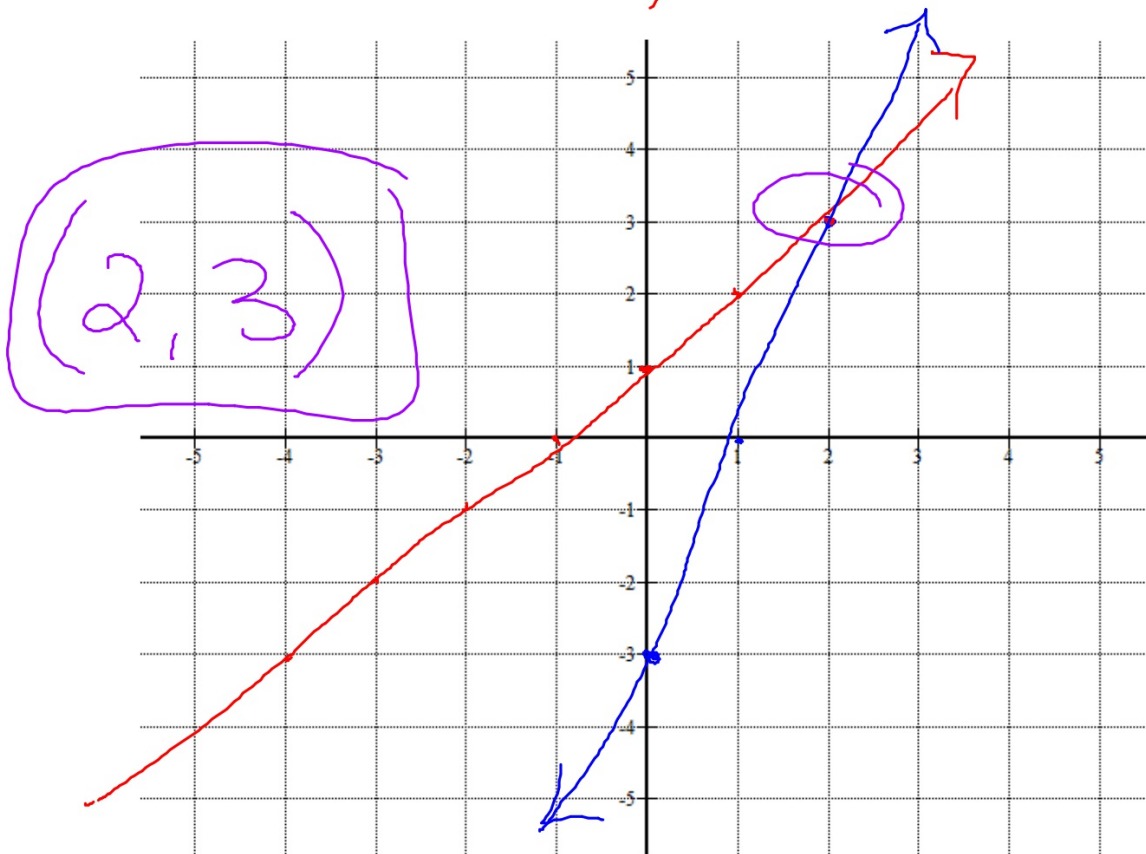
1)  $y = -x + 2$

2)  $y = -\frac{1}{2}x + 1$



I can solve a system of linear equations by graphing

Ex. 3 Solve by graphing  $\left. \begin{array}{l} 1) y = 3x - 3 \\ 2) y = x + 1 \end{array} \right\}$



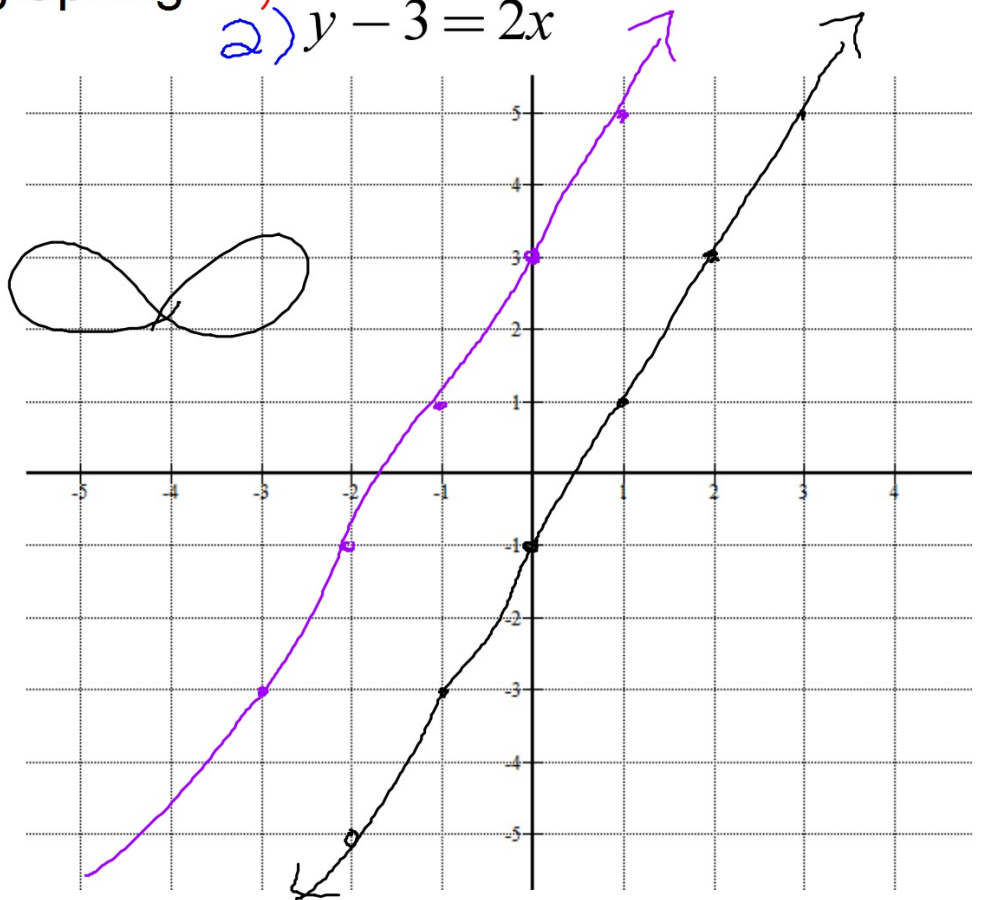
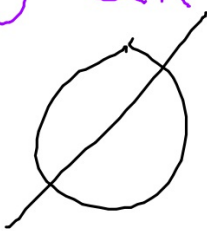
I can solve a system of linear equations by graphing

Ex. 3 Solve by graphing

1)  $y - 2x = -1$   
2)  $y - 3 = 2x$

$$\begin{array}{r} 1) \ y - 2x = -1 \\ \quad + 2x \quad + 2x \\ \hline y = 2x - 1 \end{array}$$

$$\begin{array}{r} 2) \ y - 3 = 2x \\ \quad \quad + 3 \quad + 3 \\ \hline y = 2x + 3 \end{array}$$



I can solve a system of linear equations by graphing

# ICA Wkst

## + IXL Algebra 1

## U.2