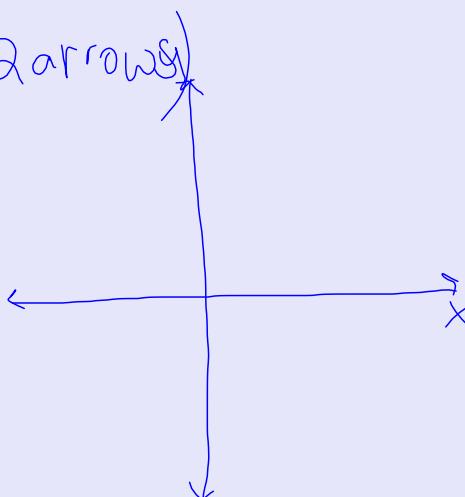


Grab a White Board, Marker,  
and Eraser for today's lesson

Write down everything you  
know about...

## LINES

- lines are everywhere
- horizontal & vertical
- short or long
- • straight
- parallel
- on graphs
- 2 points
- Keep going (2 arrows)



## 4.3 Intro to Graphing Lines

What are the most common variables we use in math?

x

y

We are going to use those variables when we graph lines!

First we will start with y...

Lines in the form:

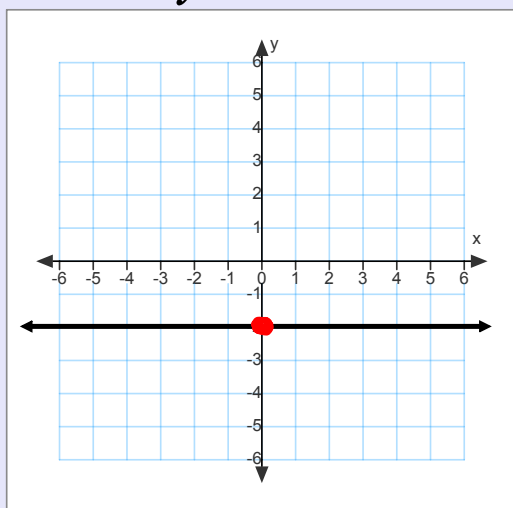
$$y = a$$

where  $a$  is any real number

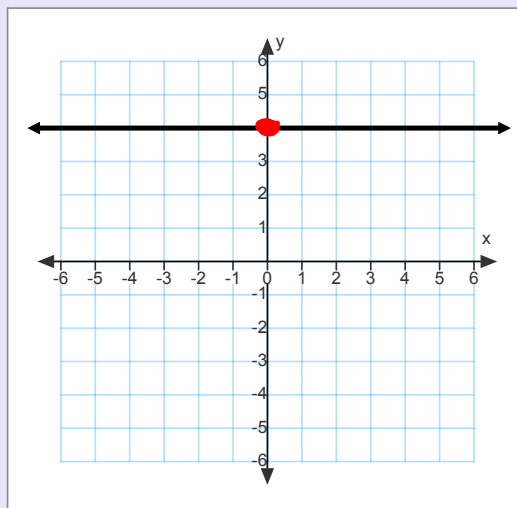
Will always be horizontal

## Example Graphs

$$y = -2$$



$$y = 4$$



The letter in the function tells you what axis the graph will hit

Now onto x...

Lines in the form:

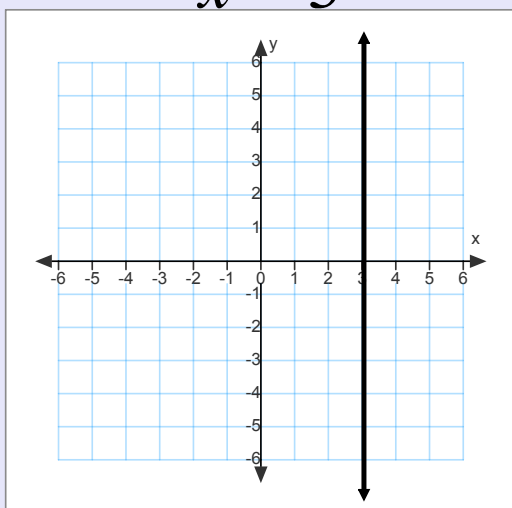
$$x = a$$

where  $a$  is any real number

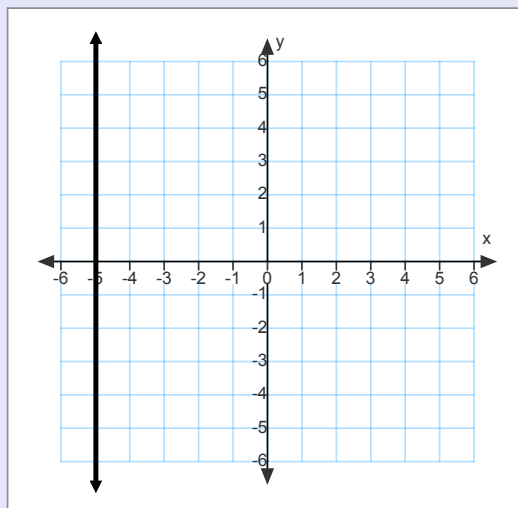
Will always be vertical

## Example Graphs

$$x = 3$$



$$x = -5$$



The letter in the function tells you what axis the graph will hit

## Practice

$$y = 5$$

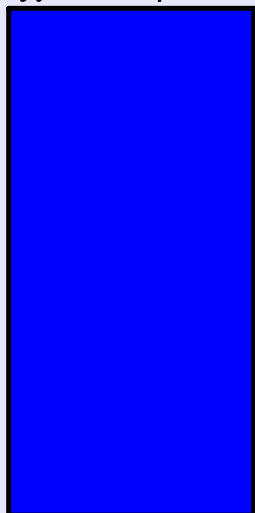
$$x = 1$$

$$y = 8$$

$$x = 0$$

$$y = -6$$

$$x = -7$$



$$y = 1$$

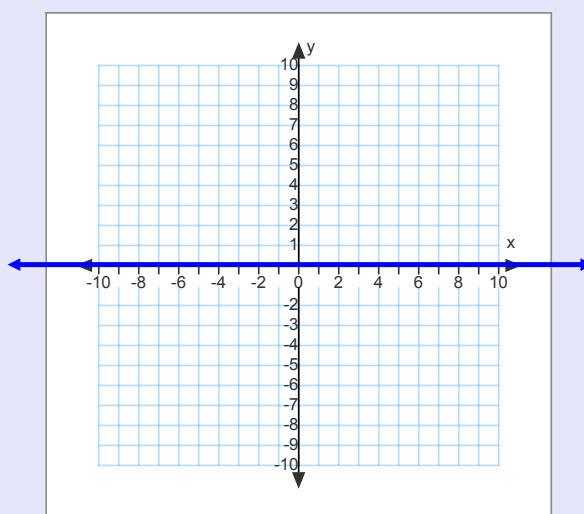
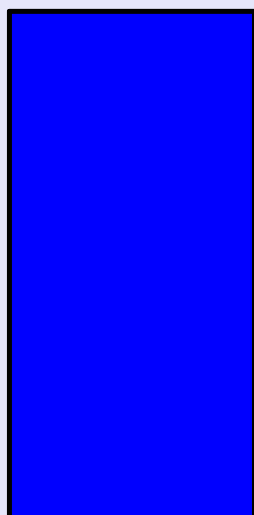
$$x = 9$$

$$y = -1$$

$$y = 0$$

$$x = 4$$

$$x = -1$$





## Before you Leave...

1. $y = 2$	4. $y = 0$	7. $x = -2$
2. $x = 9$	5. $x = 0$	8. $y = 5$
3. $y = -2$	6. $x = 4$	9. $x = 2$

