

What is a Line? (First Worksheet)

How many lines are there? What is a quality about both of these lines? _____

What is the name of the blue line? Green line?

Blue Line _____

Pink Line _____

Move x along the slider, what does it do? _____

Move b along the slider, what does it do? What is the point on blue line that is effected by

b? _____

Move m along the slider, what does it do? _____

Move m so that it equals 0.4.

Move b so that it equals 4.

For the blue line $y =$ _____.

When $x = -5$ what does y equal? (put -5 in the equation and solve for y)

When $x = 5$ what does y equal? (put 5 in the equation and solve for y)

When $x = 3$ what does y equal? (put 3 in the equation and solve for y)

For the pink line $y =$ _____.

When $x = -4$ what does y equal? (put -5 in the equation and solve for y)

When $x = 2$ what does y equal? (put 5 in the equation and solve for y)

When $x = 5$ what does y equal? (put 3 in the equation and solve for y)

Move X along the slider until it equals each value listed in the following tables. Fill in the table for the blue line and for the pink line.

Blue

X	-5	-3	-1	0	1	3	5
Y							

Pink

X	-5	-3	-1	0	1	3	5
Y							

Takeaway: If you connect all of these points you get the line. A line is just a bunch of points that follow a pattern.

Components of a Line(Second Worksheet)

Move slider m so that $m = 2$

Move slider c so that $c = 3$

$y =$ _____

Green Point (_____ , _____)

Move the black point on the line so that it is on the next whole point (no integers).

Black Point (_____ , _____)

What is the rise from the green point to the black point? What is the run from the green point to the black point?

Rise = _____

Run = _____

Move slider m so that $m = -2$

Move slider c so that $c = 1$

$y =$ _____

Green Point (_____ , _____)

Move the black point on the line so that it is on the next whole point (no integers).

Black Point (_____ , _____)

What is the rise from the green point to the black point? What is the run from the green point to the black point?

Rise = _____

Run = _____

Move slider m so that $m = -1$

Move slider c so that $c = -2$

$y =$ _____

Green Point (_____ , _____)

Move the black point on the line so that it is on the next whole point (no integers).

Black Point (_____ , _____)

What is the rise from the green point to the black point? What is the run from the green point to the black point?

Rise = _____

Run = _____

Move slider m so that $m = 3$

Move slider c so that $c = -1$

$y =$ _____

Green Point (_____ , _____)

Move the black point on the line so that it is on the next whole point (no integers).

Black Point (_____ , _____)

What is the rise from the green point to the black point? What is the run from the green point to the black point?

Rise = _____

Run = _____

Where do you place m and c in the equation?

$$y = \underline{\quad} x + \underline{\quad}$$

What does m do to the line? _____

What does c do to the line? _____

Create a Line(Last Worksheet)

Using what you learned above create the line shown using A and B. Hit New Line. Repeat(6x).