

Your overall statement at the end of the last assignment should look like : (please copy and understand)

When we make a graph for $y = Mx$ if

$M =$ positive the graph goes up when moving left to right

$M =$ negative the graph is going down

$M =$ a bigger number the graph is steeper going up or down

$M = 2$ is over 1 up 2 $M = 10$ is over 1 up 10 far steeper

$M =$ a fraction for example $1/3$ then we go over 3 up 1 (less than $y = 1x$ over 1 up 1)

$M = 3/4$ we go over 4 up 3 (tricky $4/3$ go over 3 up 4 steeper than $y = x$)

Always make a t-chart to organize your information

For the independent variable we pick the values

(try to pick numbers that work out nice, for $y = x/3$ go with multiples of 3)

For the dependent var. we calculate the values of y using the formula

More graphing practice with a slightly different concept.

I need you to make a graph for each equation. I'll do one example.

For each graph you need to make :

a t – chart (you pick indep, then solve for dep)

create a graph with all necessary pieces of info. Labels, even spacing,

I see linear relations as a series of steps, please draw and label one step on each graph.

For graphs where it is $y = 1x$ that is the easy one because the x values = the y values

Today there is a slight change

Some rules you need to remember for graphs –

they need the axis labelled and numbered evenly (in this question just x and y)

you pick the independent numbers for the x – axis

I generally pick easiest numbers I use $-1, 0, 1, 2, 5$ you need to have at least 4 points

for some questions like $y = x/2$ it would be easier to pick all even numbers

even though we could use difficult numbers like a price of \$ 22.98 to figure out the cost

you then need to calculate the y – axis or dependent variable

Label each line as done in the example

Show 1 step and put the 2 numbers on the step for up and over (same as last assignment)

Today there is something that always changes this is the y intercept

Intercept- in football it means to cut off a pass, he throwing to a spot and you get there to intercept

So the y intercept is where the graph and the y-axis intercept each other.

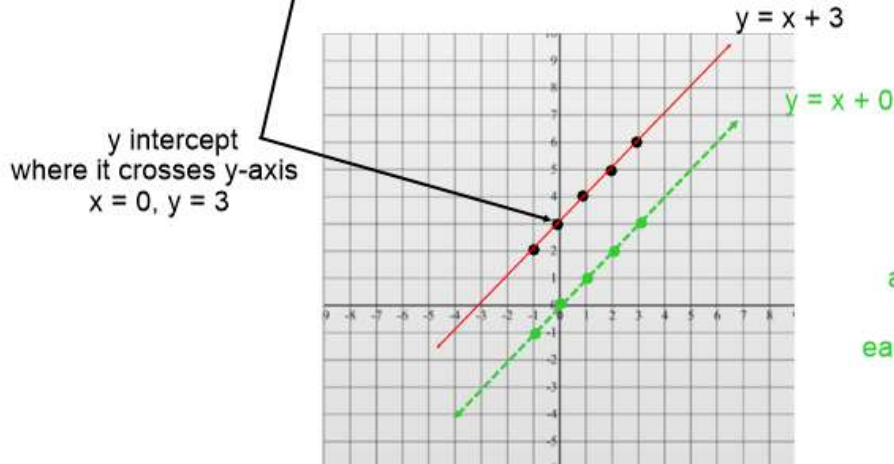
Now for your work, ($y = x + 0$ is just $y = x$ the zero can be dropped)

I will make a graph for $y = x + 3$

for this create a t-chart using 4 easy values minimum

x	-1	0	1	2	3	10	(indep you set these)
y	2	3	4	5	8	13	(dep. you calculate)

If you notice the y is always 3 more than the x due to the formula



Now you graph

(you can do 2 on one grid but label it and make it neat)

- 1) $y = x + 1$
- 2) $y = x + 5$
- 3) $y = x - 2$
- 4) $y = x - 4\frac{1}{2}$

When your done I need you to complete the summary

Summary

After completing several graphs I know that for $y = x + b$ when :

$b =$ is a positive number example 5 all the points from the $y = x$ graph as slid up ___ spaces

$b =$ is a negative _____

the y intercept is where the _____ and the _____ meet.

The y intercept can be found on the graph at _____

And on the t-chart at _____

Next I need you to tell me what you can about graphing the next example

$y = 2x - 1$ Where does it start? How steep is it? Can you make a graph without making a t-chart?

Now please graph and check if your ideas were correct

How is this different from $y = -2x + 1$ explain then check with a graph

Have a great weekend see some of you next week, If you are keeping up at home I do not need you to come in but would love to have you in if you need any help.

This can be a free tutoring session if you need extra help

But don't come in a say I don't get everything be specific and I'd love to help fix it.