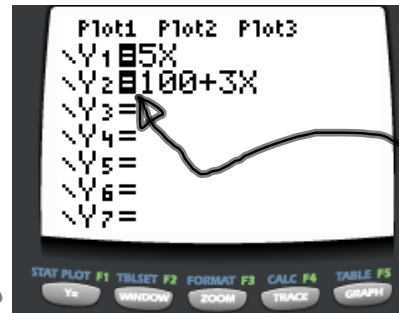


# Basic Graphing on the TI-83 Graphing Calculator

Find the "Y =" button.

Clear any equations that may be there.



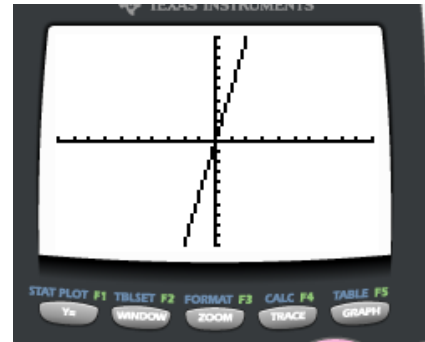
An equation will show up on your graph when the = sign looks like this:

Type in the equation:

$$Y_1 = 1X$$

and push ENTER.

Be sure to use the "X"  
button and not the  
multiplication sign button.



Now graph the equation by pushing the GRAPH button.

After graphing, look at the line.

- \* How steep is it (what is the slope)?  
Remember that slope is the rate of change or the speed.
- \* Where does it cross the vertical axis (what is the y-intercept)?

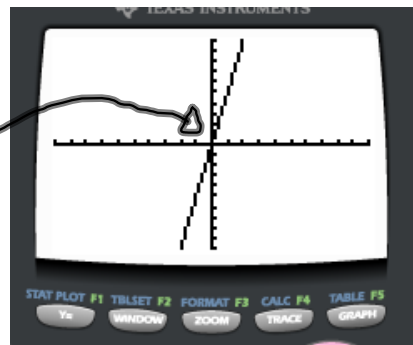
For more information about y-intercept,  
turn this page over.

Y-intercepts can be found in the equation by looking for the number that is ADDED to the x-term.

$Y_1 = 1X$  doesn't have a number added to the x term, so change the equation to  
 $Y_1 = 1X + 0$

Now 0 can be recognized as the y-intercept.

The y-intercept appears on the graph at the point where the line crosses the y-axis.



Now push "2nd" and then "GRAPH" which gives you the TABLE for the equation.

X	Y1	Y2
0	0	100
5	5	103
10	10	106
15	15	109
20	20	112
25	25	115
30	30	118

Since the y-intercepts lie on the y-axis, and  $x=0$  along the y-axis, the y-intercepts can also be found on the table at the point where  $x=0$ .