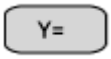
Lesson #15

Graphing Functions

The TI-84 is a powerful graphing tool. The five buttons found just below the calculator's screen are used to enter in equations, graph equations, control graphing settings, and perform certain tasks on a graph.

The y-editor Screen

To graph an equation on the calculator, it must be entered into the y-editor screen first. Press 

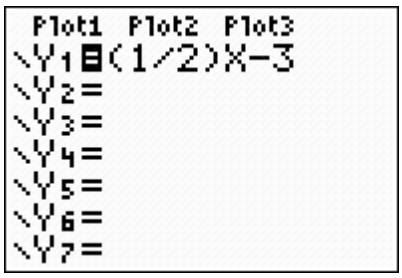
. Notice that the screen contains 7 places to enter in equations. Pressing the  key several times will reveal 3 more places to enter equations at the bottom of the screen. Enter the expression $y = \frac{1}{2}x - 3$ into the Y_1 line. Use the 

key to enter the variable *x*. This equation is ready to be graphed.

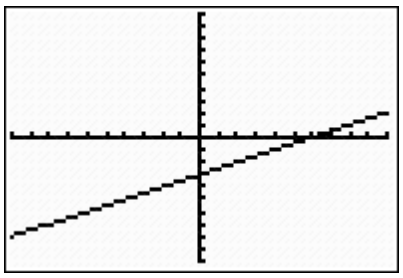
The Graphing Screen

To see the graph of the equation $y = \frac{1}{2}x - 3$, press 

. The graphing screen consists of two axis: the *x*-axis and the *y*-axis. The *x*-axis is the horizontal axis and the *y*-axis is the vertical axis.



Entering an equation into the Y_1 on the y-editor screen.

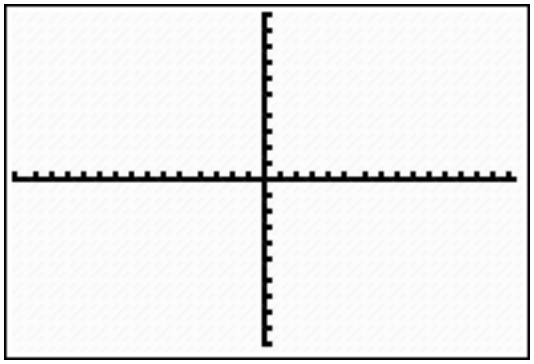


The graph of Y_1 on the graphing screen

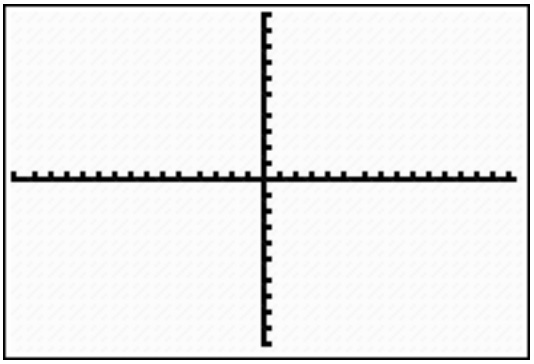
Set 1 – Graph the following equations on the TI-84 graphing screen. Draw a sketch of the screen.

LP#1

$y = 2x - 3$

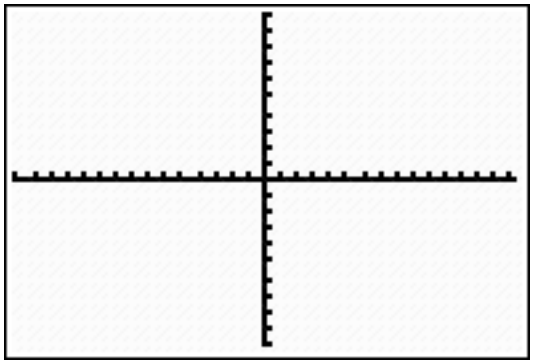


$y = x^2$

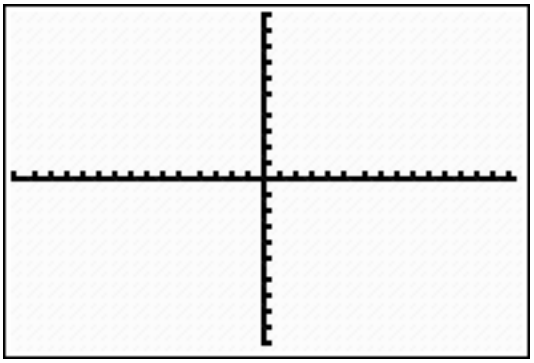


LP#2

$y = x^3$

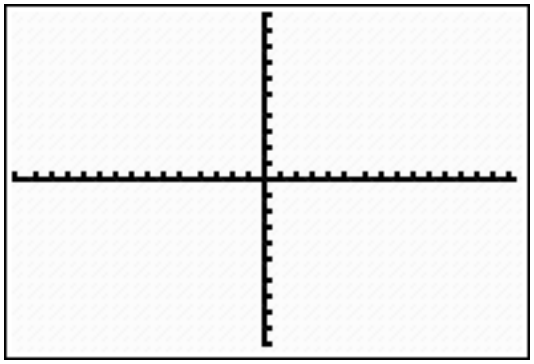


$y = |x|$

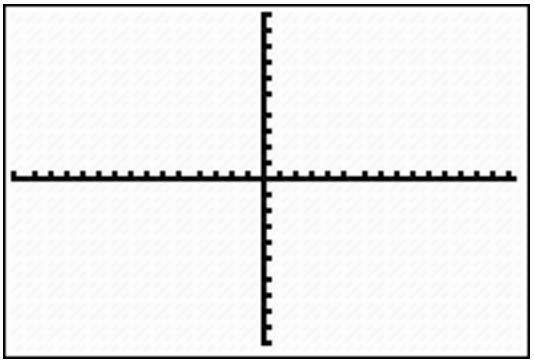


R#1

$y = \frac{3}{2}x + 1$

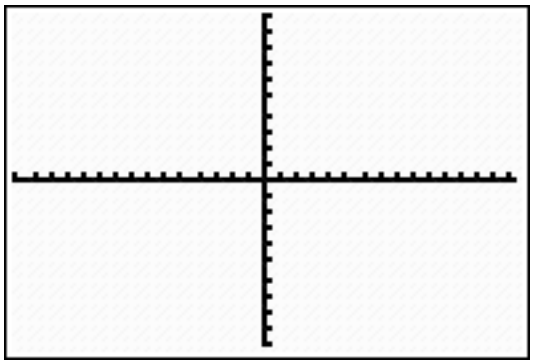


$y = 2^x$

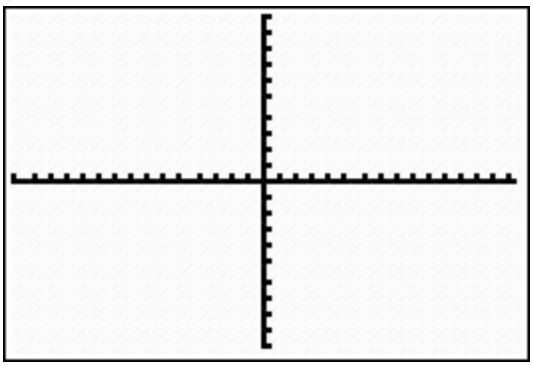


R#2

$y = x^2 + 3$

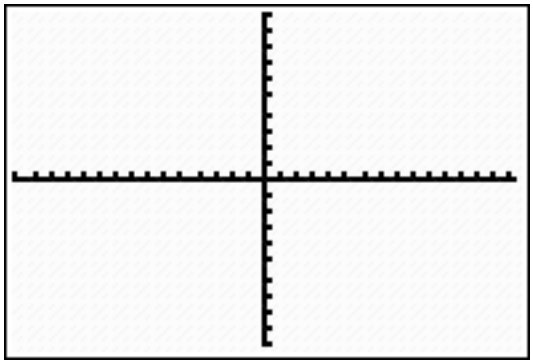


$y = \sqrt{x}$



R#3

$y = (x+3)^2$



$y = \sqrt[3]{x}$