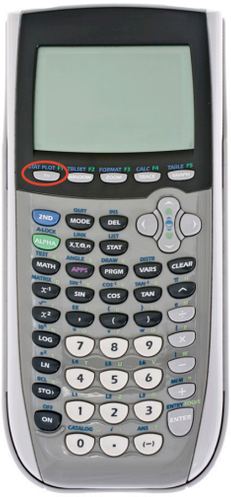
TI-83/TI-84™ Calculator Guide

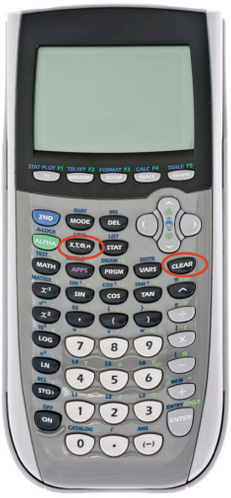
Although Texas Instruments TI-83™ or TI-84™ calculators are not the only graphing calculators that can be used with this course, they are common, so specific instructions for their use are included here. The instructions for the two calculators are the same.

Graphing Linear Equations using a TI-83/TI-84™ Calculator

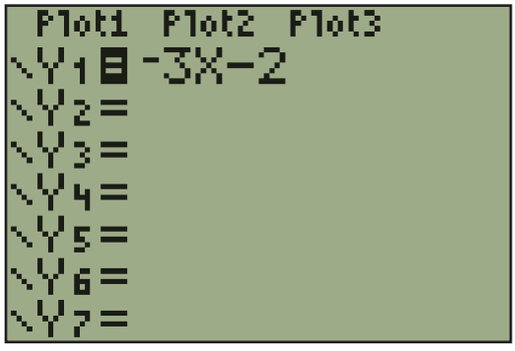


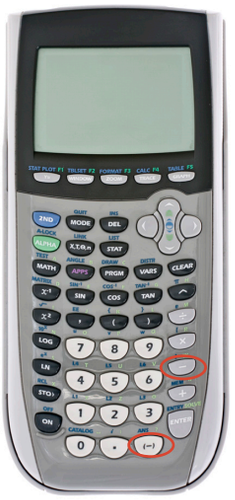
- To graph a linear equation, first make sure the y is on one side of the equation and everything else is on the other side of the equation. For example, $y = 3x + 2$ and $y = 5(3 - x)$ both can be entered, but $2x - 3y + 4 = 0$ cannot be entered until y has been isolated.
- Turn the calculator on and press the Y= button.

- If necessary, delete any existing equations using the CLEAR button.

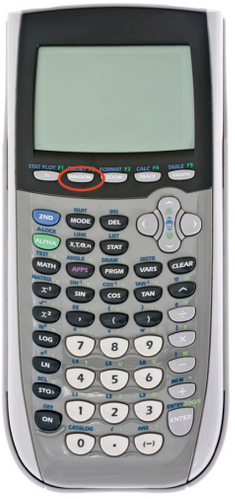


- Enter the equation you would like to graph in Y1. Here, $y = -3x - 2$ is shown.

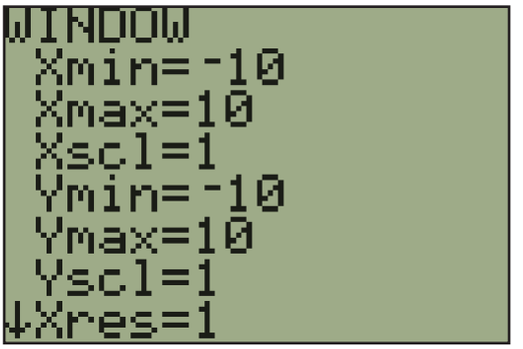




- Notice that the negative symbol from the bottom of the keypad is used for a negative term and the minus sign from the right side of the keypad is used between terms to denote subtraction.

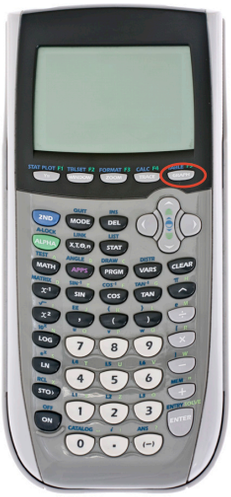


- Once you have entered your equation, press the WINDOW button to control the horizontal and vertical scales and how far each axis extends in each direction.

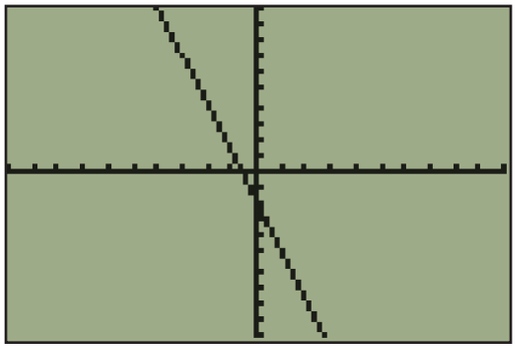


- The settings shown will give a graph with a horizontal and vertical scale of 1 that extends from –10 to 10 in both directions.

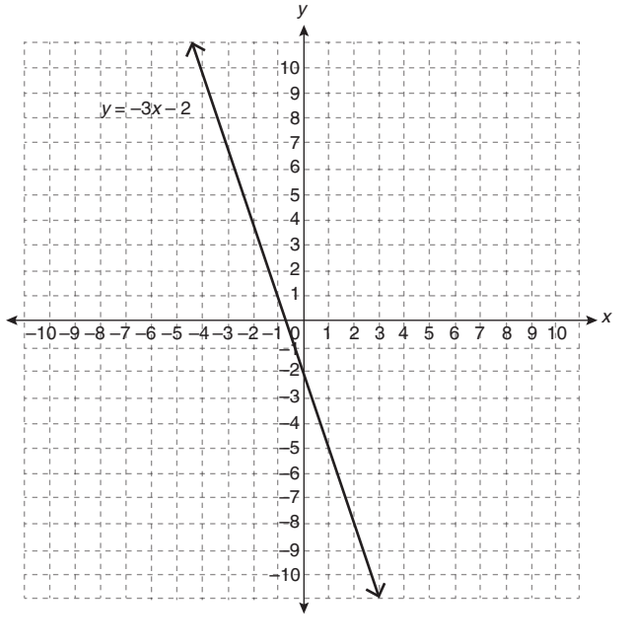
Xmin	The minimum *x*-value shown.
Xmax	The maximum *x*-value shown.
Xscl	The distance between tick marks on the *x*-scale.
Ymin	The minimum *y*-value shown.
Ymax	The maximum *y*-value shown.
Yscl	The distance between tick marks on the *y*-scale.
Xres	How often the calculator selects a point when graphing the equation. Leave this at 1 to give the most detailed graph.

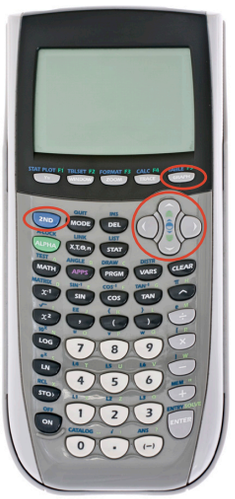


- Once you have set the WINDOW, press GRAPH.

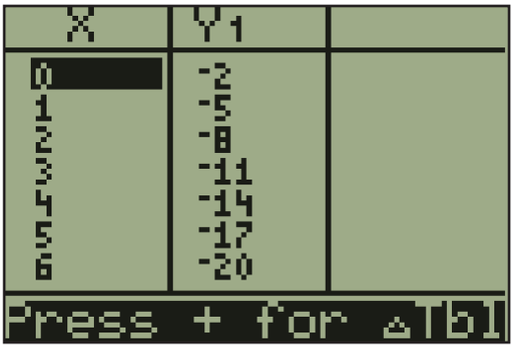


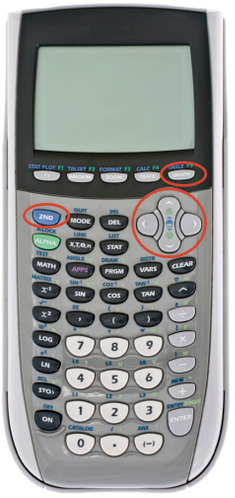
- Notice that no values on the x- or y-axis are shown. You need to remember your window settings to interpret the graph. Both scales were set to 1, the x-values are from –10 to 10, and the y-values are from –10 to 10, so you can imagine this graph as the one shown below.





- To see some of the points on the line, press 2nd TABLE. The arrow keys can be used to scroll through the table.





- If you wish to change the x-increments or the starting x-value in the table, the table settings can be adjusted by pressing 2nd TBLSET. TBLStart is where you define the first visible x-value in the table and ΔTbl is where you define the size of the x-increments.