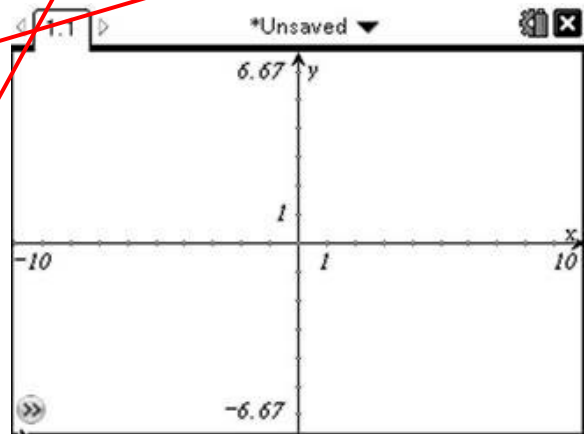




1. The calculator should be at the home screen first. If not press the "Home/On" button.

2. Use the directional pad and select "Add **Graphs to**" Your screen should look like this then:

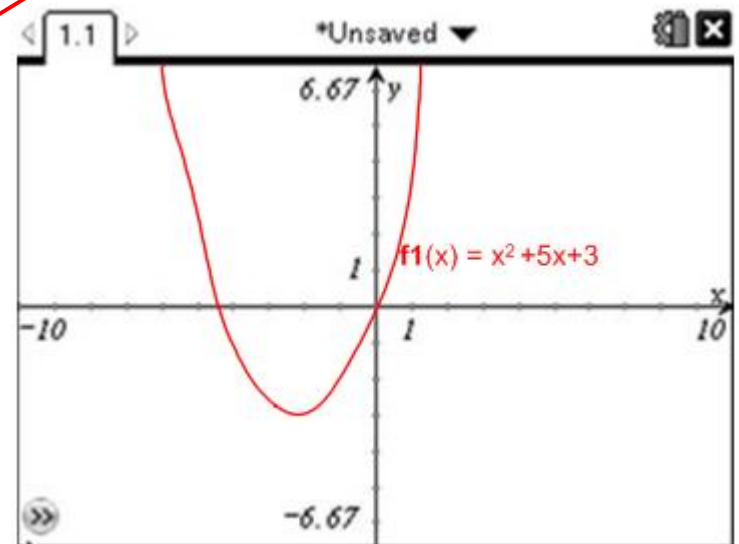


3. If the bottom of the screen does not have  $f_1(x) =$  and a blinking cursor press "tab" to bring up that entry field.

4. After the  $f_1(x) =$  enter the function you would like to graph. For example, lets graph the function;

$$f(x) = x^2 + 5x + 3$$

5. So, you would press "x" on the keyboard. Then "x<sup>2</sup>", next "+", "5", "x", then "+", "3". After the function is typed press the "enter" key to graph it. It will look *somewhat* like this below.

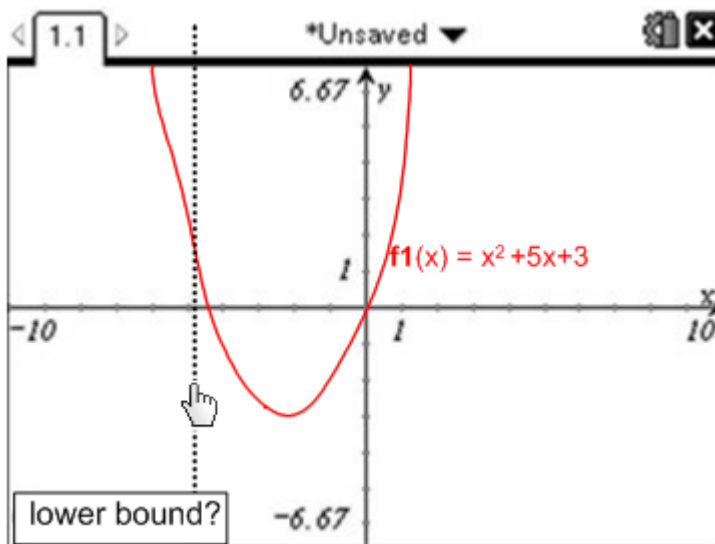




6. You will see the parabola graphed on the screen, if you do not, your zoom may be off. To check that Press "menu" then choose "4: Window/Zoom", after that choose "5: Zoom – Standard". You will clearly see the graph now.

7. Next, let's find the zeros of the function. To do this press "menu" then choose "6: Analyze Graph" then "1: Zero"

8. On the screen you will see a dashed vertical line with a little pointer hand attached to it. Using the touchpad slide your finger to the left on it to move the dashed line to the left. In the lower left corner the text reads "lower bound?" Move the dashed line so it is to the left of where the parabola intercepts the x-axis (See screen shot below). This is the lower bound, so "click" the touchpad once. Then move the dashed line to the right and click when you are to the right of that point. This is the upper bound. "Click" the touchpad. On the screen the zero will be defined as (-4.3, 0). To do the same for the other zero on the right of the parabola, repeat steps 7 – 8. The zero should be (-0.697, 0).



9. The vertex, or in this case the coordinates of the minimum point, can also be found. Press "menu" then choose "6: Analyze Graph" then "2: Minimum." The same vertical dashed line and pointer hand will appear as before. Click a point on the graph to the left (lower bound) then right (upper bound) of the vertex. The minimum (vertex) coordinate will then be displayed. (-2.5, -3.25).

10. Click the "Home/On" button to return to the main screen.