

MAC1105

How to Use the Graphing Calculator to Find Zero's

Using the graphing calculator to find zero's: (Below is the description for finding one zero, if there are more than one just repeat this process for each one you see)

In the **Y=** function at the top, type in your given equation.

Go to **WINDOW** (if the problem specifies the window values to look at). Where the problem might say things like "x is between -2 and 2", you would then change the window to be "**XMin** -2" and "**XMax** 2". (Do the same with the y-values if provided, if not provided try some values such "**YMin** -10" and "**YMax** 10").

Go to **GRAPH** (Do not use Zoom since we just hand set the window. If you were not given values for Window, go to ZOOM - FIT).

2nd - CALC/TRACE, Select 5: Intersect

It will prompt you "Left Bound?" - It is asking for you to scroll the blinking dot to the *left* of the zero (x-intercept). Hit **ENTER** once you are at a good location to the left.

It will prompt you "Right Bound?" - It is asking for you to scroll the blinking dot to the *right* of the zero (x-intercept). Hit **ENTER** once you are at a good location to the right.

It will prompt you "Guess?" - It is asking for you to scroll the blinking dot to the *x-intercept* (as best as you can). Hit **ENTER** once you are very close to the x-intercept location.

It will now give you the X= and Y= values at the bottom of the screen for your Zero's location. (The y-value should come up as 0).