

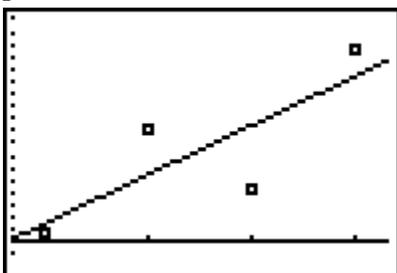
<pre> VARX Y-VARS 1: Window... 2: Zoom... 3: GDB... 4: Picture... 5: Statistics... 6: Table... 7: String... </pre>	<pre> VARX Y-VARS 1: Function... 2: Parametric... 3: Polar... 4: On/Off... </pre>	<pre> FUNCTION 1: Y1 2: Y2 3: Y3 4: Y4 5: Y5 6: Y6 7: Y7 </pre>
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4. Pressing ENTER will print the values for the parameters of the regression equation on the home screen and enter the function in the Y= screen.

<pre> LinReg y=ax+b a=3.98 b=-2.5 </pre>	<pre> ZOOM Plot2 Plot3 \Y1=3.98X+ -2.5 \Y2= \Y3= \Y4= \Y5= \Y6= \Y7= </pre>
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5. Plot your regression equation along with your data.

Be sure that the Stat Plot is setup and turned ON (see the "[Plotting Points](#)" help page) and press ZOOM and choose ZoomStat.



Graphing Max and Min on TI-83

1. Graph the function in a viewing window that contains the minimum and/or maximum values of the function.
2. Set the Format menu to ExprOn and CoordOn.
3. Press [2nd][TRACE] to access the Calculate menu.
4. Press [3] to find the minimum, or press [4] to find the maximum.
5. If necessary, repeatedly press

[▲]

until the appropriate function appears at the top of the screen.

6. Set the Left Bound of the minimum or maximum point.

To do so, use the [◀] and [▶]

keys to place the cursor on the graph a little to the left of the location of the minimum or maximum point, and then press [ENTER]. A *left bound indicator* appears at the top of the screen.

7. Set the Right Bound for the zero.

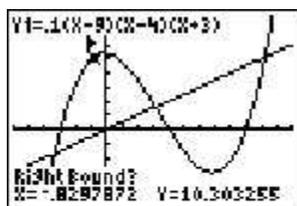
To do so, use the [◀] and [▶]

keys to place the cursor on the graph a little to the right of the location of the minimum or maximum point, and then press [ENTER]. A *right bound indicator* appears at the top of the screen.

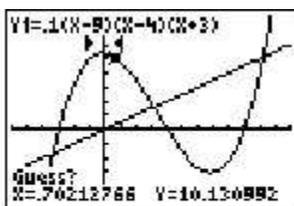
8. Tell the calculator where you guess the min or max is located.

To do so, use the [◀] and [▶]

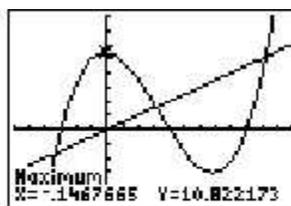
keys to place the cursor on the graph as close to the location of the minimum or maximum point as possible, and then press [ENTER]. The coordinates of the minimum or maximum point appears at the bottom of the screen.



Left bound



Right bound



Guess

Find the Zeroes of a Function on TI-83 Plus

1. Graph the function in a viewing window that contains the zeros of the function.

To get a viewing window containing a zero of the function, that zero must be between **Xmin** and **Xmax** and the x -intercept at that zero must be visible on the graph.

2. Set the Format menu to **ExprOn** and **CoordOn**.

3. Press **[2nd][TRACE]** to access the Calculate menu.

4. Press **[2]** to select the zero option.

5. If necessary, repeatedly press **[▲]** until the appropriate function appears at the top of the screen.

6. Set the Left Bound for the zero you desire to find.

To do so, use the

[◀] and **[▶]** keys to place the cursor on the graph a little to the left of the zero, and then press **[ENTER]**. A Left Bound indicator appears at the top of the screen.

7. Set the Right Bound for the zero.

To do so, use the

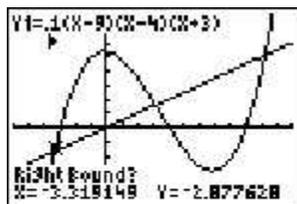
[◀] and **[▶]** keys to place the cursor on the graph a little to the right of the zero, and then press **[ENTER]**. A Right Bound indicator appears at the top of the screen.

8. Tell the calculator where you guess the zero is located.

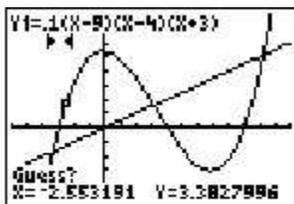
This guess is necessary because the calculator uses a numerical routine for finding a zero. The routine is an iterative process that requires a seed (guess) to get it started. The closer the seed is to the zero, the faster the routine finds the zero.

To do this, use the

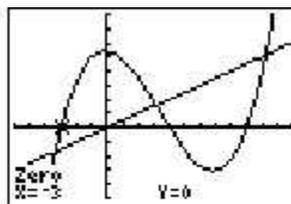
[◀] and **[▶]** keys to place the cursor on the graph as close to the zero as possible, and then press **[ENTER]**. The value of the zero appears at the bottom of the screen.



Left bound



Right bound



Guess

TI89

For the TI-89 and TI-92, you may enter lower bounds or upper bounds from the keyboard instead of arrowing and hitting enter. When it asks for a value, just enter your number and press enter.

1. If your equation has something on the right side, subtract it from both sides so that the right hand side is 0.
2. Go to Y=
3. Enter the expression
4. Hit Graph
5. Change the viewing window if necessary so that you can see where the graph crosses the x-axis. You need to make sure that there is enough to the left and right of the x-intercept to select a point.
6. Press Math (F5)
7. Choose Zero (#2)
8. For the Lower Bound, arrow to the left of the x-intercept and press enter.
9. For the Upper Bound, arrow to the right of the x-intercept and press enter.
10. The TI-89 will return a value for x and 0 for y.

You do not need to supply a guess for the TI-89. You should make sure there is only one x-intercept in the interval specified or you won't know which one it is going to give you.