

Graphing Calculator Instructions

If at any time you wish to go back to the main screen press 2^{nd} , $\boxed{\text{MODE}}$

Clear the Calculator

Each time you turn on the calculator it is a good idea to clear out any existing data using the following.

Go to the main screen and press $\boxed{\text{CLEAR}}$ twice.

Go to the Y= Screen and clear out any existing equations.

Turn off the Stat Plot - 2^{nd} , $\boxed{\text{Y=}}$, $\boxed{4}$, $\boxed{\text{ENTER}}$

Clear All Lists - 2^{nd} , $\boxed{+}$, $\boxed{3}$, $\boxed{\text{ENTER}}$

Clear All Lists - 2^{nd} , $\boxed{+}$, $\boxed{4}$, $\boxed{\text{ENTER}}$

Graphing Lines and Curves

In order to graph lines and curves go into the $\boxed{\text{Y=}}$ screen.

The button $\boxed{\text{x,t},\theta,\text{n}}$ is used to input an x into the equation. Ex. To enter the equation $y = 3x - 5$, you would press $\boxed{\text{Y=}}$, $\boxed{3}$, $\boxed{\text{x,t},\theta,\text{n}}$, $\boxed{-}$, $\boxed{5}$.

One important note is that there are two buttons that look like subtraction. The purple button $\boxed{-}$, means subtraction, while the grey button $\boxed{(-)}$, means that the number is negative.

Entering in Data from a Table of Values and Creating a Scatter Plot

To create a scatter plot press $\boxed{\text{STAT}}$, $\boxed{\text{ENTER}}$

Then enter each data point into the lists, pressing $\boxed{\text{ENTER}}$ between each entry

To show the graph of the data press 2^{nd} , $\boxed{\text{Y=}}$, $\boxed{\text{ENTER}}$, $\boxed{\text{ENTER}}$, then $\boxed{\text{ZOOM}}$, $\boxed{9}$.

Performing Regression

To run regression press $\boxed{\text{STAT}}$, $\boxed{\triangleright}$, for linear regression press $\boxed{4}$ and for quadratic regression press $\boxed{5}$. For any other type of regression examine the list and choose the appropriate number.

From here you will enter in the lists that you have entered your data into. Usual this will be L_1 and L_2 . If your data are in any other columns, adjust the numbers in the instructions below to match your data.

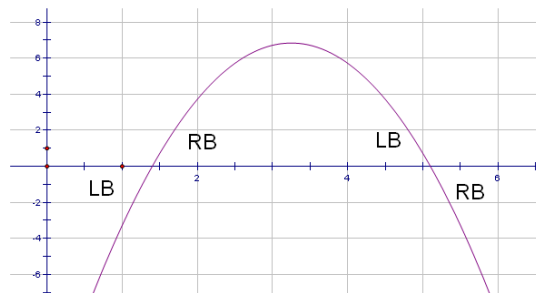
Press 2^{nd} , $\boxed{1}$, $\boxed{\text{comma}}$, 2^{nd} , $\boxed{2}$, $\boxed{\text{comma}}$, $\boxed{\text{VARS}}$, $\boxed{\triangleright}$, $\boxed{\text{ENTER}}$, $\boxed{\text{ENTER}}$, $\boxed{\text{ENTER}}$.

The Calculate Menu

To access the CALC menu press 2^{nd} , $\boxed{\text{TRACE}}$.

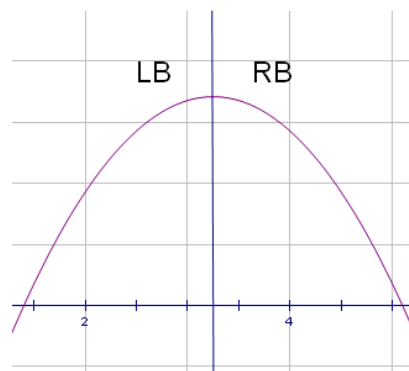
Determining the X-intercepts (Zeroes) of a Quadratic Function

To determine the zeroes of a function select #2 from the CALC menu. The calculator will ask you to identify the left bound (LB) of one of the x-intercepts. To do this move the cursor to the left side of one of the zeroes and press enter. Then move the cursor to the right side (RB) and press enter two more times. Repeat this process with the zero on the other side.



Determining the Maximum or Minimum (Vertex) of a Quadratic Function

To determine the minimum/ maximum of a function select 3/4 from the CALC menu. The calculator will ask you to identify the left bound (LB) of one of the vertex. To do this move the cursor to the left side of the vertex and press enter. Then move the cursor to the right side (RB) and press enter two more times.



Determining the Point of Intersection (POI) Between two Functions

To determine the point of intersection between two different functions select #5 from the CALC menu. The Calculator will ask you to specify which two functions you would like to find the point of intersection for. Usually you will simply be able to press $\boxed{\text{ENTER}}$ three times and it will select the appropriate curves. If there are multiple curves or multiple points of intersection you may have to move the cursor to the appropriate positions along the two curves of interest.