



Plotting Individual Points

- Go to Data Set 1 Expression Box
 - It is not available in Data Set 2
- Clear the Data Table → Delete, then Enter
- Type POINTS=N where N equals the number of points you wish to enter.
- Press Enter. The word USER displays in the expression box.
- Tab and select rectangular or polar coordinates.
- Tab to enter the table.
- Type the x and y values, pressing TAB after each coordinate.
- Enter SHIFT+TAB to return to the Expression Box. Press Enter to set the database.
- Press F4 (This time F4 is a lot faster. You will not hear a short tone since you created the data table yourself.)

Example 6 – Plotting a Linear Function (Part 1)

X	Y
1	3
2	5
3	7
4	9

- Enter the following data table
- Display the graph→F3
- Tab to Statistical Description of Data Set button and press Enter
- Tab to the Mode box.
- Select Basic Statistical Information using the arrow keys, if it is not already displayed.
- Tab to Evaluate Statistics and press Enter



Example 6 – Plotting a Linear Function (Part 2)

- In the text box, arrow up and down for the number of data points, sum, mean, and standard deviations for both X and Y data values
- Tab to the Mode box and arrow up or down to find Linear: $y=ax+b$
- Tab to Evaluate Statistics and press Enter
- Tab once again to return to the text box. By using the up and down arrow keys to find the equation fitting the data points: $y=2x+1$, where a is the slope and b is the y-intercept
- Tab to the Plot Data Set 2 button and press Enter. You have just placed the regression equation into the Data Set 2 expression box and filled in the data table

Example 7 – Plotting a Quadratic Function (Part 1)

X	Y
1	10
2	19
3	32
4	49

- Enter the following data table
- Display the graph→F3
- Tab to Statistical Description of Data Set and press Enter
- You are now in the Mode box. Select Basic Statistical Information
- Tab to Evaluate Statistics and press Enter
- In the text box, arrow up and down for the number of data points, sum, mean, and standard deviations for both X and Y data values



Example 7 – Plotting a Quadratic Function (Part 2)

- Tab to the Mode box and arrow up or down to find Quadratic: $y=ax^2+bx+c$
- Tab to Evaluate Statistics and press Enter
- Tab once again to return to the text box. By using the up and down arrow keys to find the equation fitting the data points: $y=2x^2+3x+5$, where a is the coefficient of x^2 , b is the coefficient of x , and c is the constant.
- Tab to the Plot Data Set 2 button and press Enter. You have just placed the regression equation into the Data Set 2 expression box and filled in the data table



Other Types of Regression Equations

- In the mode box, you can select
 - Linear
 - Quadratic
 - Cubic
 - Quartic
 - Exponential
 - Logarithmic
 - Power
 - Hyperbolic
 - Rational
 - Logistic
 - Sinusoidal