

# TI-89 CHEAT SHEET

## Entering Data in Lists

1. Getting to place to enter data: Press the APPS key and then select 6:Data/Matrix Editor. Select 3:New (Note: After the first time you enter data, instead of selecting 3:New, you can select 1:Current. Then you will be able to skip the next two steps.
2. The information for Type (Data) and Folder (main) should be correct, so press the ``down-arrow" twice to take you to the Variable input box. You should be in alpha mode, so type in a variable name, such as: math.
3. Press ENTER twice, the first time to accept it, the second time to save it.
4. You are now in the Data/Matrix editor.
5. Clearing old data: You can delete all the old data by pressing F1 (Tools) and select 8 (Clear Editor), then press enter. You can clear one column by highlighting the column header, selecting F6 (Util) and then selecting 5: Clear Column, then press Enter to clear the data in that column.
6. Enter your data in C1 and C2. Be sure there are the same number of data items in C1 and C2!

## Making a Scatter Plot of Data

1. From the Data/Matrix Editor, select F2 (Plot Setup), and then F1 (Define).
2. Set the Plot Type to Scatter, press the ``down-arrow" and set the Mark to Box (or whatever type you want).
3. The next part is tricky! We want to enter c1 for the  $x$ -variable, and c2 for the  $y$ -variable. However, it is difficult to tell if we are in alpha mode or not. At the  $x$  input box, press the alpha key until you see the alpha symbol at the very bottom row of the screen. When you do, press the letter C, then (if the alpha symbol disappears) press 1. Press the ``down-arrow" and repeat this step to enter c2 for the  $y$ -variable.
4. Everything else on this screen is OK, so press Enter twice. This should bring you back to the Data/Matrix Editor.
5. Press the ``Green diamond" followed by F1 to take you to the Y=Editor. Clear out any functions you may have in Y1, Y2, etc. Set up the WINDOW for your scatterplot by hand, or, from the Y=Editor, select F2 (ZOOM) and 9:ZoomData for the calculator to set the window for you.

## Obtaining a Regression Equation for the Data and the Plotting

1. Press the APPS key, then select 6:Data/Matrix Editor, then 1:Current to take you back into the data editor.
2. Select F5 (Calc) and select the type of regression equation you want (Linear Regression, Exponential Regression, etc.)

3. Press the "down-arrow" and again we need to enter  $c_1$  for the  $x$ -variable and  $c_2$  for the  $y$ -variable. You probably will need to press the alpha key in order to get the  $c_1$  and  $c_2$  in their correct place.
4. If you would like the resulting regression equation to be automatically transferred to the Y=Editor, you can do this by selecting  $y_1(x)$  (or  $y_2(x)$ , or  $y_3(x)$ ...) under the "Store RegEq to" line. (This is a nice feature, but if you don't care about this leave the selection as "none".)
5. Press Enter to obtain the equation, then Enter again to make it disappear.
6. Press Graph to see the scatterplot and the graph of the regression equation (if you transferred it to the Y=Editor).