Summary of Basic Statistics Features

General comments:
It’s obviously impossible to address every possible situation in one page, but this should help you get started with the basics of entering formulas for graphing and manipulating the viewing window. If the calculator is completely new to you, a good starting point is to reset it. On the TI-83 or 84, press the following keys in order: 2nd, +, 7, 2, 2. On the TI-86, the keys are: 2nd, 3, F3, F1, F4.

You also need to be aware that the TIs pay attention to whether you use a negative (-) sign or a minus –. If you get a “syntax” error message, especially relating to the viewing window, check this first. You are usually given a “Goto” option, and if you select it, it will take you to the location of the error.

TI – 83/84 calculators:
RETURNING TO THE MAIN SCREEN: Whenever things get confusing, press 2nd, Mode (Quit) to return to the starting screen (where you do calculations). To clear that screen, press Clear.

ENTERING DATA: Press Stat followed by 1 or Enter. You should see columns labeled “L1,” “L2,” etc. If there is data you don’t want, just press the Del key repeatedly to eliminate data in a column. You can use the Arrow keys to switch columns or move to a specific data value to delete. In the L1 column, type each data value (raw data, midpoint, or upper class boundary) followed by Enter. In the L2 column, you can enter frequency values, a second data set, or nothing at all.

COMPUTING MEAN, STANDARD DEVIATION, ETC.: If you’re working with raw data, enter all of those values into the L1 column. Bring up the stat menu again by pressing Stat. Press the Right Arrow to move to the CALC menu, and choose the first option, “1-Var Stats.” Press Enter to see the various statistics computations. Use the Up or Down Arrows to scroll through the list of information.

For grouped data, enter your class midpoints in L1, and the frequencies in L2. Follow the above steps to get “1-Var Stats” onscreen. Then press 2nd, 1, the comma key (one key above the 7), followed by 2nd, 2. You should see “1-Var Stats L1,L2” on your screen. Now press Enter to see the statistics information. Use the Up or Down Arrows to scroll through the list of information.

CREATING A HISTOGRAM: You should have your raw values (or upper class boundaries) in L1 and nothing (or your frequencies) in L2. Press 2nd, Y= (the blue button in the top left) to enter the stat plot menu. Choose Plot1 by pressing 1 or Enter. If the word “On” is in a dark square, do nothing. Otherwise, press Enter. Press the Down Arrow, then the Right Arrow twice and Enter to choose the histogram. Go down again and press 2nd, 1 to make L1 your category labels. If you have frequencies in L2, go down to the “Freq:” line and press 2nd, 2. (If you DON’T have frequency data, on the “Freq:” line press Alpha, 1.) Now press the blue Graph button.

If you don’t see your graph, or it looks funny, press Window to change the window. Set xMin to your lowest value or boundary, xMax to your highest, xScl to the category widths, yMin to 0, and yMax to your largest frequency (or higher). Then press Graph to graph. To move around the graph, press Trace and move the cursor with the Arrow keys.

CREATING A SCATTERPLOT: As far as the buttons go, this is basically like creating a histogram, so the instructions here will keep referring back to the histogram instructions. You should have your pairs of data listed in L1 and L2 so each pair sits side-by-side in a single row. Follow the steps in the histogram section to get into and turn on Plot1. Move to the “Type:” row and press Enter to choose a scatterplot. Move down and set Xlist to L1 and Ylist to L2 if necessary (see histogram instructions for help). Now press the blue Graph button. To adjust your graph, see the second paragraph under the histogram section.
RETURNING TO THE MAIN SCREEN: Whenever things get confusing, press **2nd**, Exit (Quit) to return to the starting screen (where you do calculations). To clear that screen, press **Clear**.

ACCESSING THE STATISTICS MENU: To do many of the statistics tasks, you will need to first get the statistics menu along the bottom of your screen. If there are already menus present, press the Exit key several times until all the menus disappear. Then press **2nd**, + (Stat) and you should see:

| CALC | EDIT | PLOT | DRAW | VARS > |

Notice that each menu item is located above one of the function keys F1 – F5.

ENTERING DATA: Get the stats menu along the bottom of the screen, then press the **F2** key (the one right under EDIT). You should see columns labeled “xStat,” “yStat,” etc. If there is data you don’t want, just press the Del key repeatedly to eliminate data in a column. You can use the **Arrow keys** to switch columns or move to a specific data value to delete. In the xStat column, type each data value (raw data, midpoint, or upper class boundary) followed by **Enter**. In the yStat column, you can enter frequency values, a second data set, or nothing at all.

COMPUTING MEAN, STANDARD DEVIATION, ETC.: If you’re working with raw data, enter all of those values into the xStat column. Then go to the main screen by pressing **2nd**, Exit. Bring up the stat menu and press F1, F1. Then press **2nd**, − (List) followed by F3, F2 and your screen should now show “OneVar xStat.” Press **Enter**, and you will see the various statistics computations. Use the Up or Down Arrows to scroll through the list of information. If you want to see more of the information at one time, press Exit twice to remove the menus.

For grouped data, enter your class midpoints in xStat, and the frequencies in yStat. Follow the above steps to get “OneVar xStat” onscreen. Then press the comma key (on the left side, two keys above On), followed by F3. Now press **Enter** to see the statistics information. See the instructions above for more information.

CREATING A HISTOGRAM: You should have your raw values (or upper class boundaries) in xStat and nothing (or your frequencies) in yStat. Bring up the stat menu as before, and press F3. Then press F1 to choose Plot1. If the word “On” is in a dark square, do nothing. Otherwise, press **Enter**. Press the Down Arrow, then F4 to choose a histogram. Go down again and choose F1 to make xStat your category labels. IF you have frequencies in yStat, go down to the “Freq=” line and press F2. (If you DON’T have frequency data, make sure you see Freq=1; otherwise, press Alpha, 1.) Now press **Graph** to bring up the graph menu, followed by F5.

If you don’t see your graph, or it looks funny, make sure the graph menu is present, and press F2 to change the window. Set xMin to your lowest value or boundary, xMax to your highest, xScl to the category widths, yMin to 0, and yMax to your largest frequency (or higher). Then press F5 to graph. To move around the graph, press F4 to activate the “Trace” feature and move the cursor with the Arrow keys.

CREATING A SCATTERPLOT: As far as the buttons go, this is basically like creating a histogram, so the instructions here will keep referring back to the histogram instructions. You should have your pairs of data listed in xStat and yStat so each pair sits side-by-side in a single row. Follow the steps in the histogram section to get into and turn on Plot1. Move to the “Type=” row and press F1 to choose a scatterplot. Move down and set Xlist to xStat and Ylist to yStat if necessary (see histogram instructions for help). Now press **Graph** to bring up the graph menu, followed by F5. To adjust your graph, see the second paragraph under the histogram section.