## Calculator 7-5

Sec 1 H
Linear Regressions
Unit 7
Step 1: Enter the data into the calculator (Lists)

- HitSTAT button
- Hit Enter on 1: Edit OR Type 1 on the keypad
- To clear data out of an entire list use the arrows to move the cursor to the L1, L2, ...., hit the CLEAR button and then ENTER
- Enter the data into the list using the ENTER button in between each entry.

Step 2: Graph the scatter plot (optional, depends on the instructions)

- Hit the $\mathrm{Y}=$ button
- Clear all of the Y1, Y2, .... Equations
- Quit this menu (Hit $2^{\text {nd }}$ and MODE )
- Go to the Stat Plot Menu ( $2^{\text {nd }}$ and $\mathrm{Y}=$ )
- Hit Enter on 1: Plot 1
- Turn Plot 1 ON
- Select the Scatter Plot graph
- Xlist should be whichever list holds your $x$ values (usually L1)
- Ylist should be whichever list holds your $y$ values (usually L2)
- Mark should be the square
- To Zoom
- Hit the ZOOM button
- Hit Enter on 9: Zoom Stat
- Adjust the window as needed - Use the WINDOW button
- Hit the GRAPH button


## Calculator 7-5

## Sec 1 H

Linear Regressions
Unit 7
Step 3: Find the equation for the best-fitting line

- Hit the STAT button
- Arrow to the CALC menu
- Hit Enter on 4: LinReg (ax+b)
- You need to give the calculator three pieces of information... separated by commas
- Where the $x$ values are located
- Where the $y$ values are located
- Where you want the calculator to put the equation after it finds it
- Type L1 ( $\mathrm{Hit} 2^{\text {nd }}$ and $\triangle 1$ ), then a $\square$, (the button above the 7)
- Type L2 ( Hit $2^{\text {nd }}$ and 2 ), then a , (the button above the 7)
- Hit the VARS button
- Arrow to the Y-VARS menu
- Hit Enter on 1: Function
- Hit Enter on 1: Y1
- Hit ENTER
- Now you can hit GRAPH, and it will also show the line on your scatter plot.
How to graph a function that is only from an equation (not a set of data):
- Hit the $\mathrm{Y}=$ button
- Clear all of the Y1, Y2, .... Equations
- Make sure that the Plot 1, Plot 2, and Plot 3 menus are not highlighted (unless you have a set of data in the Lists)
- Type your equation into one of the $\mathrm{Y}=$ lines
- Hit the WINDOW button
- Adjust the window settings so that you will be able to see your graph.
- You can use the ZOOM menu but you will probably want to use option 5 or 6 to help you start the window and then you will have to adjust from there.

