

## Assignment Three – data manipulation

### NEED TO KNOW for assignment 3:

Start new excel spreadsheet  
Data entry  
Calculations with data  
Create a cluster column graph

*Instruction* - from Worksheet Figs1&2, copy the data in cells Column B, rows 2 through 12 and paste in Worksheet 3 at Column B, row 2. - then copy the data in Columns A and B, rows 14 and 15, and paste in Worksheet 3 in the identical cells.

(9) In Column C, row 2, place the capital letter Y and center it within the cell

(10) in Column C, row 3, build a formula that adds 4 to the number in Column B, row 3

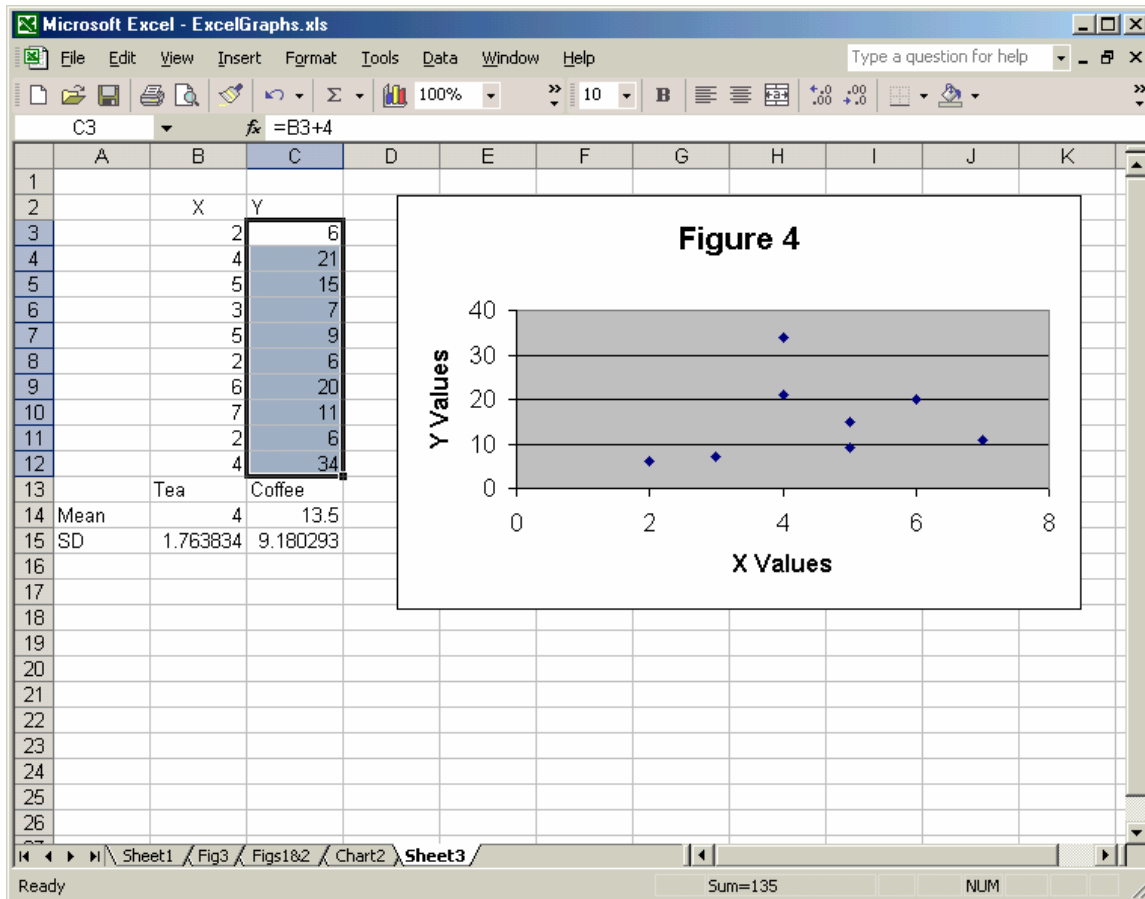
(11) use the Fill Down function to place the formula in Column C, row 3 into the cells from Column C, row 3 to Column C, row 12

(12) use the Fill Right function to place the formulas in Column B, rows 15 and 16 into Column C, rows 14 and 15 - *hint* - the mean should doubled but the standard deviation remains the same

(13) develop a Scatterplot using the data in Columns B and C, rows 3 through 12, , place the graph within Worksheet 3, be sure to include the appropriate labels and eliminate the legend - *hint* - your graph should be a straight line

(14) in Column C, row 4, place the number 21, in Column C, row 5, place the number 15, in Column C, row 9, place the number 20, in Column C, row 12, place the number 34. Notice how the graph changes right before your eyes 😊 as do the mean and standard deviation in Column C, rows 14 and 15

(15) in Column B, row 13, type the word "Tea", in Column C, row 13, type the word "Coffee"



(16) develop a Stacked Column graph by dragging over Columns A through C, rows 13 and 14, place as As New Sheet, remove gray background from graph, add plus and minus standard deviation bars to the graph - obtain data from Columns B and C, row 15, this is accomplished by right clicking on one of the bars in the graph and selecting Format Data Series, select Y Error Bars and then select Both, then select Custom, to the right of the Custom selection will be a little rectangular box with a + sign next to it, at the right edge of the box will be a little colored icon, select the icon and box will appear on your screen, this box is asking you to provide information about where the standard deviation data is, return to Sheet 3 and drag over the standard deviation data and hit enter, you need to repeat this same process to obtain the data for the negative direction. When completed you should have little Y error bars extending above the columns and down into the Columns in your graph

(17) return to Chart 2 and select only the right Column - *hint* - this is done by left clicking the Column once and then left clicking the Column again, only the right Column should be outlined, now double click the right Column, the Format Data Point box of options should appear, select Patterns (if it doesn't come up on your screen) and go to Fill Effects and select Patterns and then select the Wide upward diagonal pattern, make the Background white and the Foreground dark blue, for the left Column of the graph repeat the above steps by going to Fill Effects and selecting Texture, and then select the Paper bag texture.

(18) Almost done! In Chart 2, left click on the Paper bag (left) data Column, double click and the Format Data Point box will appear, go to Options and then set the Gap Width to 10

