EXCEL Step by Step

Example XL10–1

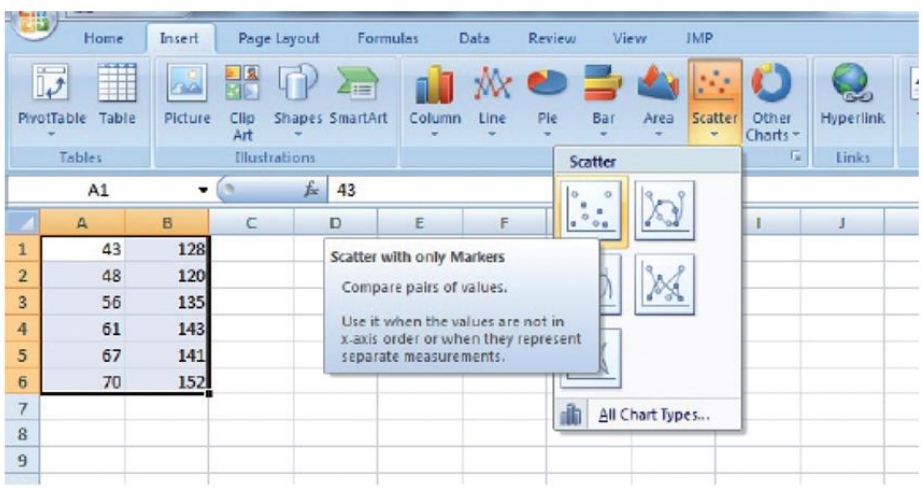
Use the following data to create a **Scatter Plot**, calculate a **Correlation Coefficient**, and perform a simple linear **Regression Analysis**.

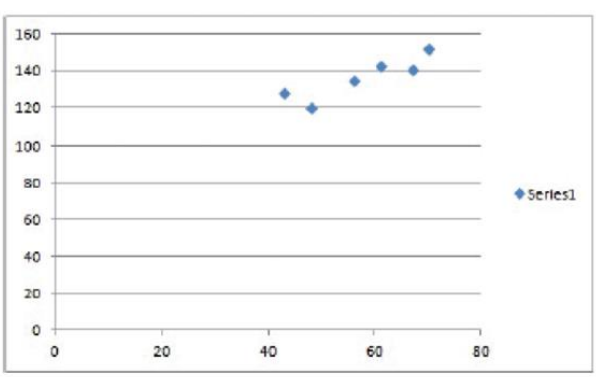
x	43	48	56	61	67	70
y	128	120	135	143	141	152

Enter the data from the example above in a new worksheet. Enter the six values for the *x* variable in column A and the corresponding *y* variable in column B.

Scatter Plot

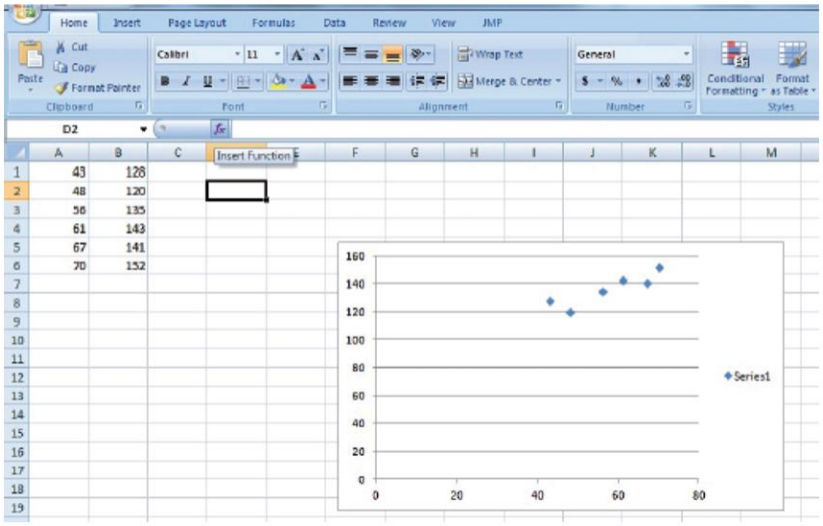
1. Select the Insert tab from the toolbar.
2. Highlight the cells containing the data by holding the left mouse key over the first cell and dragging over the other cells.
3. Select the Scatter Chart type and choose the Scatter plot type in the upper left-hand corner.



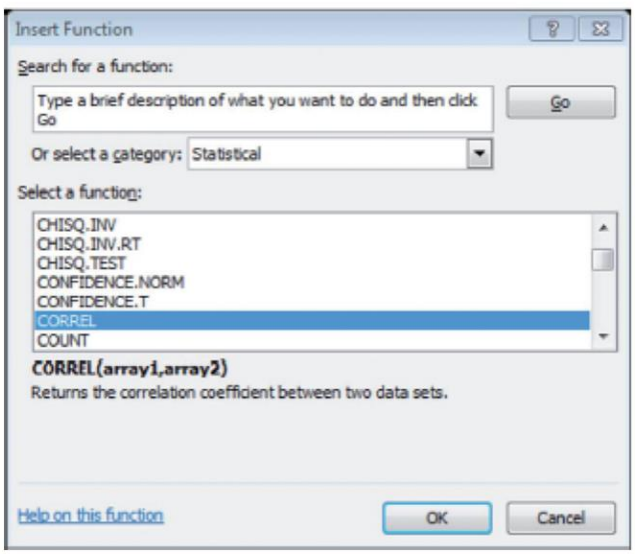


Correlation Coefficient

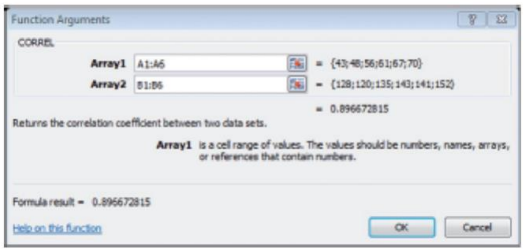
1. Select any blank cell in the worksheet and then select the insert Function tab from the toolbar.



2. From the Insert Function dialog box, select the Statistical category and scroll to the CORREL function (this function will produce the Pearson-Product Moment Correlation Coefficient for the data).



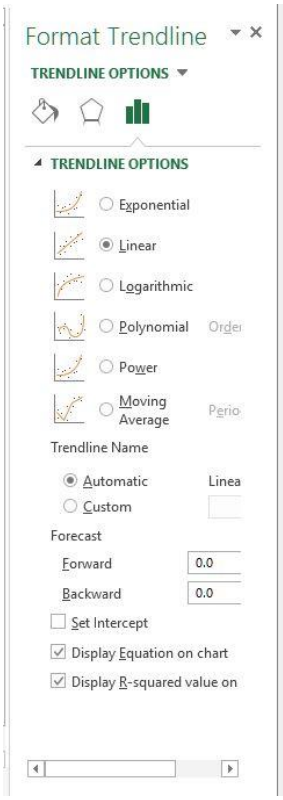
3. Enter the data range A1:A6 for the *x* variable in Array 1 and B1:B6 for the *y* variable in Array 2.

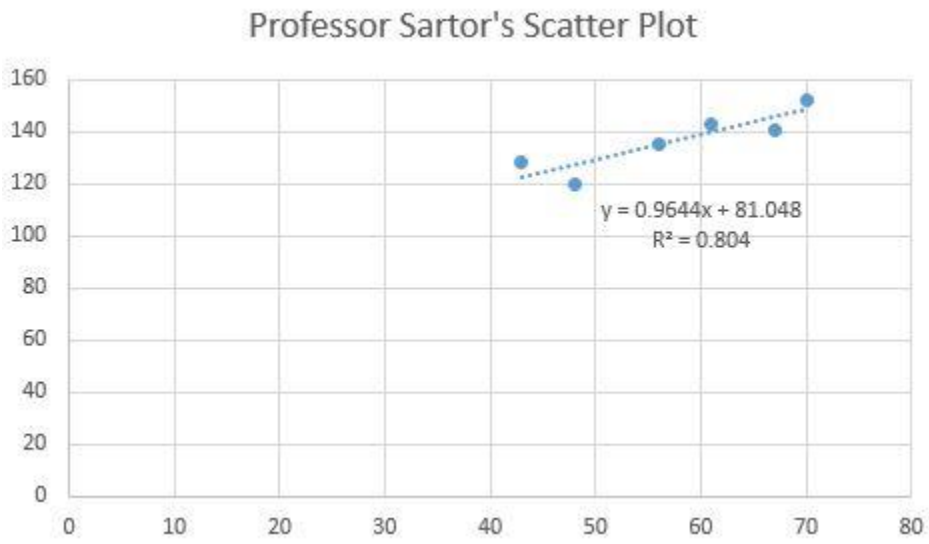


4. Click OK.

Regression Analysis

1. Click on the Scatter Plot to select it (click somewhere in the white area).
2. Click CHARTS>CHART LAYOUT>ADD CHART ELEMENT>TRENDLINE>MORE TRENDLINE OPTIONS
   - Select TYPE and then LINEAR:
   - Select OPTIONS and then check DISPLAY EQUATION ON CHART and DISPLAY R-squared value on chart:





When your spreadsheet is complete, save the file with the filename *yourlastname_Regression.xlsx.*

Email your final workbook to *asartor@fscj.edu*.