**DIRECTIONS:** Generating a scatterplot

**Step 1:** Enter your data into an Excel worksheet.

**Step 2:** Highlight the columns that contain the data you want to represent in the scatter plot.

**Step 3:** Open the **Insert** tab on the Excel ribbon. Click on **Scatter** in the **Charts** section to expand the chart options box. Select the first item, **Scatter with only Markers**, from this box.

After making this selection, the initial scatter plot will be created in the same worksheet. You can resize this chart window and drag it to any other part of the worksheet.

**Step 4:** Make any formatting or [design](http://www.brighthub.com/computing/windows-platform/articles/17778.aspx) changes you wish in the **Design**, **Layout**, and **Format** tabs located under **Chart Tools** on the Excel ribbon. Most of these changes will be based on your own personal preferences, but there are a couple that we’ll discuss here.

**Label the Axes**: First, label the horizontal axis. To do this, select the **Layout** tab under **Chart Tools**. Next, click on **Axis Titles** in the **Labels** section. Choose **Primary Horizontal Axis** and then pick **Title Below Axis**. A text box with the default wording **Axis Title** will appear on the chart. Click anywhere in that text box and edit the information to reflect the true title of the horizontal axis. Similarly, you can create a label for the vertical axis, but you will have more choices for title placement here. We’ll use the **Rotated Title** option. The default legend that was created with the scatter plot serves no real purpose here, so let’s get rid of it. If you’ve been “tabbing” around, go back to the **Layout** tab and click on **Legend**. From the list of expanded options, pick **None** to turn off the legend. **Change Chart Title**: Another thing that most everyone will want to change is the chart title for the scatter plot. To do this, just click on the title to open the text box that contains it and edit it with your new description.

**DIRECTIONS:** Computing correlation coefficient in Excel

1. Enter your data into columns A and B; i.e., x values in A, y values in B. Let’s ***assume you have 20 paired values, meaning 2 columns, 20 rows***.
2. Go to any free cell on the worksheet and type:

 =pearson(a1:a20,b1:b20)

The correlation coefficient will appear in that cell.

Note: This assumes you have 20 rows. If you have 30 rows, the command will look like this:

 =pearson(a1:a30,b1:b30)

Excel will also draw the scatter plot:

1. Go to Insert/Chart and pick XY Scatter, then Next.
2. Under data range, type “=a1:a20,b1:b20” ***(for this example***).
3. Under “Series in” pick columns.
4. Hit Next to label the axes and whatnot
5. Hit Finish