Scatter Plots video transcript

An Excel spreadsheet can be used to draw a scatter plot. I have already entered my data into the cells of the spreadsheet.

(Data entered into spreadsheet cells)

I just need to select the data, go to Insert.

(Data selected and Insert command chosen)

I am going to draw a scatter plot, and I am not going to connect the data points with straight-line segments. Once I have selected that, the graph appears immediately.

(Graph appears to draw scatter plot)

If I am interested in drawing a trendline or a line of best fit, I right click on one of the data points and I choose Add Trendline.

(Add Trendline commands selected)

It's already selected linear, but I would like them to display the equation on the chart. Also because I am interested in the correlation, I wanted it to display the R-squared value.

(R-squared value displayed on the chart)

When I have done that, I can see that this is the relationship, which describes the association between the two variables. The R-squared value 0.552 is quite low, so it's telling me it's not a strong correlation.

(R-squared value showing association between variables)

I can now copy this graph and insert it in a Word document. So I go to Home, Copy, I open a Word document, and I merely Paste the graph into my Word document.

(Graph copied and inserted into Word document)

If I return to the spreadsheet now, there is one point, which I think might be an outlier. I can delete that point from my dataset and as I do so, the graph automatically adjusts to the new dataset.

(Point deleted from dataset and adjusting to new dataset)

It gives me a new line of best fit and also it gives me an R-squared value of 0.9497, much closer to one, telling me that the points now have quite a strong correlation.

(R-squared value showing correlation between points)

This suggests to me that the point that I omitted was indeed an outlier. I can now copy this graph and place it into the Word document if I wish to discuss this graph in my investigation.

(Graph copied and placed into Word document for further use)