## Using Microsoft Excel for drawing graphs

Open a new Excel file. Type your values and **select the data to be plotted**.



## Open the chart toolbar.

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l			1	Insert Chart				In	sert Sparkl	ines	[	Data :
	1 :	₩:- <	•	<b>-</b>	<u> </u>		• 🜔•	~	11.	••••		
l	Column	Line	Pie	Bar	Area	Scatter	Other	Line	Column	Win/Loss	Select	Switch Plot

With the data selected, drag down on an icon of the toolbar to select the type.



(Use a scatter plot to depict trends, a column or bar chart to show relative quantities, or a pie-chart to show the relative share of a whole.) Release and a graph will appear.



Move the cursor to the corner of the plot (the cursor becomes a diagonal arrow) and drag to resize the plot.

With the chart area selected (it should already be selected), choose *Chart Layout*.

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Current	Selection			Labels			A	kes		An	alysis	
Chart Area		<b>•</b>	- 0 00 -		<b>.</b> .	- 1	- 10	₩# -	1 -	M .	111 -	<sup>₽</sup> , <sup>₽</sup> , -
E Format Sel	lection	Chart Title	Axis	Legend L	Data Da abels Ta	ata ble	Axes	Gridlines	Trendline	Lines	Up/Down Bars	Error Bars

Click on *Axes Titles* or pulldown on the *Current Selection* dialog to select a title. Click in the label on the chart and type to label the axes. Drag the labels to reposition them.

To change anything else, double click the item (for example double click on a point to change the point style and size or on an axis to make a log plot) or right click and select format from the popup menu or select the item in the chart toolbar and then click on the format icon.

Scale	Vertical axis scale Auto Minimum: 0.0 Maximum: 30.0 Major unit: 5.0 Minor unit: 1.0 Horizontal axis crosses at: 0.0
	Display units: None Show display units label on chart
	Logarithmic scale Base: 10.0
	□ Values in reverse order
	Horizontal axis crosses at maximum value

To fit a line to the data use the *Trendline* command in the Chart Layout. Formatting the trendline will let you extrapolate the line forward or backward or display the y = m x + b form of the equation.

✓ Type     ✓ Options	Trendline name
Shadow Glow & Soft Edges	Automatic: Linear (y)     Custom:
	Forecast Forward:
	Backward: 0 (*) Periods
	$\Box$ Set intercept = 0
	Display equation on chart
	Display R-squared value on chart

When the chart area is selected, you can drag the data selected to increase or decrease the data being plotted.

	Α	В
1	x	У
2	1	1
3	2	3
4	4	9
5	8	27
-		

To print only the chart, use copy and paste to move the chart to a different sheet and then print that sheet. (This is a known bug in Office 2011. In other versions you can select the chart and then choose print selection in the printer dialog.)

To make a scatter plot containing two sets of data, put all the *x*-values in one column and put each set of *y*-values in additional columns, with each data pair comprising one row. Select all sets of data and make the graph as above.

