

How to use Microsoft Excel: plot data, add trendline

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ADDING A PLOT

Insert

The screenshot displays the Microsoft Excel ribbon interface. The 'Insert' tab is highlighted with a red circle. The ribbon is divided into three main sections: Tables, Illustrations, and Charts. The Tables section contains 'PivotTable' and 'Table'. The Illustrations section contains 'Picture', 'Clip Art', 'Shapes', and 'SmartArt'. The Charts section contains 'Column', 'Line', 'Pie', 'Bar', 'Area', 'Scatter', and 'Other Charts'. Below the ribbon, the spreadsheet grid is visible, with column A selected and cell A1 active.

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4									
5									

Scatter-type plot

The image shows the Microsoft Excel interface with the 'Insert' ribbon selected. In the 'Charts' group, the 'Scatter' icon is highlighted, and its dropdown menu is open. The 'Scatter' icon, which depicts a grid of blue dots, is circled in red. Other chart types visible in the dropdown include 'Line with markers', 'Line with smooth lines', and 'Line with smooth lines and markers'. The background shows a blank Excel spreadsheet with cell A1 selected.

Select Data to insert

Book1 - Microsoft Excel

Home Insert Page Layout Formulas Data Review View

Change Chart Type Save As Chart Template

Switch Row/Column Data Select Data

Chart Layouts

Chart 3

	A	B	C	G
1				
2		3	56	
3		4	6	
4				

Select Data

Change the data range included in the chart.

Add selected

The screenshot shows the Microsoft Excel interface with the 'Select Data Source' dialog box open. The dialog box is titled 'Select Data Source' and has a 'Chart data range' field containing '=Sheet1!\$D:\$5'. Below this, there are two sections: 'Legend Entries (Series)' and 'Horizontal (Category) Axis Labels'. In the 'Legend Entries (Series)' section, there is an 'Add' button circled in red, along with 'Edit', 'Remove', and arrow buttons. In the 'Horizontal (Category) Axis Labels' section, there is an 'Edit' button. The background spreadsheet shows data in columns D and E, with a dashed box around cell D5. The 'Design' tab of the 'Chart Tools' ribbon is active.

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2			3	56								
3			4	6								
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												

Add data to plot

The screenshot shows the Microsoft Excel interface with the 'Chart Tools' ribbon active. The 'Design' tab is selected, showing 'Chart Layouts'. A chart is displayed on the right side of the screen, showing a scatter plot with a linear trendline. The chart area is currently empty, but the 'Edit Series' dialog box is open, allowing for data to be added.

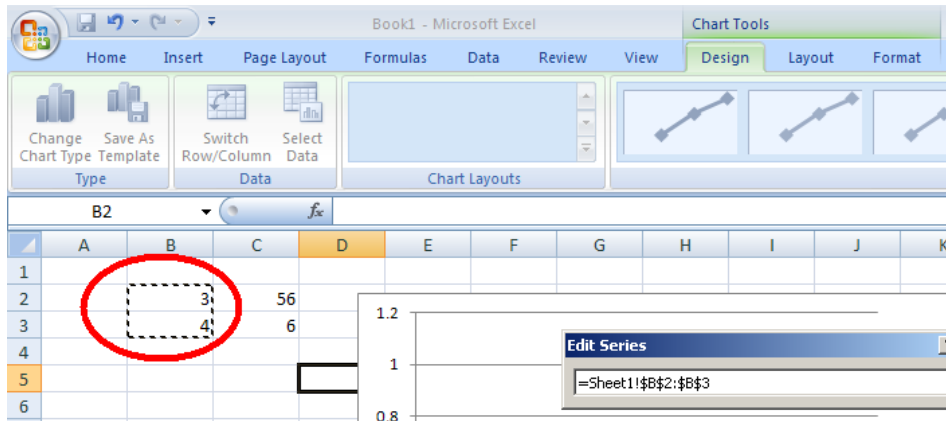
The 'Edit Series' dialog box has the following fields:

- Series name: [Empty]
- Series X values: [Empty] (The 'Select Range' button next to this field is circled in red.)
- Series Y values: $=\{1\}$

The background spreadsheet shows the following data:

	A	B	C	D	E	F	G	H	I	J	K
1											
2			3	56							
3			4	6							
4											
5											
6											
7											
8											
9											
10											
11											
12											

select X values input



select X values cells

The screenshot shows the Microsoft Excel interface with the 'Chart Tools' ribbon active. The 'Design' tab is selected, and the 'Edit Series' dialog box is open. The dialog box displays the formula `=Sheet1!B2:B3` and has a red circle around the 'Data Source Range' icon. The background shows a spreadsheet with data in columns B and D, and a chart with a single data point at (3, 6).

	A	B	C	D	E	F	G	H	I	J	K
1											
2		3	56								
3		4	6								
4											
5											
6											

select Y values input

The screenshot displays the Microsoft Excel interface with the 'Chart Tools' ribbon active. The 'Design' tab is selected, showing various chart layout options. The active worksheet is 'Book1 - Microsoft Excel'. The formula bar shows 'B2'. The spreadsheet grid shows data in columns A, B, and C, with row 5 highlighted. A chart is visible on the right side of the screen, showing a line graph with data points. The 'Edit Series' dialog box is open, allowing the user to modify the series data. The 'Series Y values' field is highlighted with a red circle, indicating the current focus.

	A	B	C	D	E	F	G	H	I	J	K
1											
2			3	56							
3			4	6							
4											
5											
6											
7											
8											
9											
10											
11											
12											

Edit Series

Series name: Select Range

Series X values: = 3, 4

Series Y values: = 1

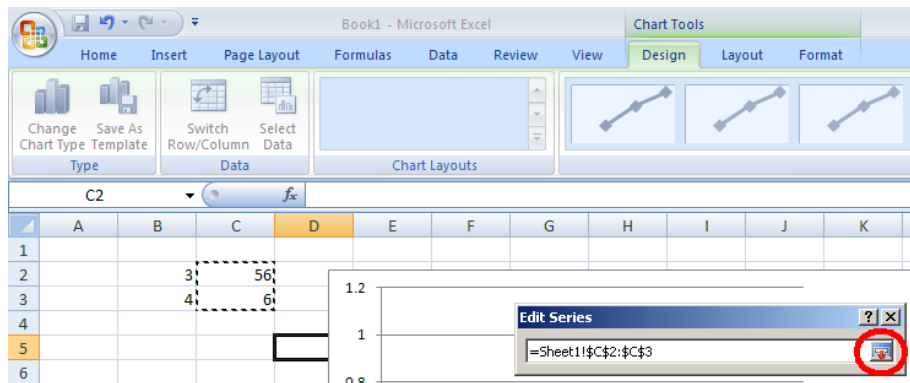
OK Cancel

select Y values

The screenshot shows the Microsoft Excel interface with the 'Chart Tools' ribbon active. The 'Design' tab is selected, and the 'Edit Series' dialog box is open, displaying the formula `=Sheet1!C2:C3`. The spreadsheet data is as follows:

	A	B	C	D	E	F	G	H	I	J
1										
2			3	56						
3			4	6						
4										
5										
6										
7										

Y enter



Data entered; OK

The screenshot displays the Microsoft Excel interface with the following elements:

- Workbook:** Book1 - Microsoft Excel
- Chart Tools:** Design, Layout, Format
- Home Tab:** Change Chart Type, Save As Template, Switch Row/Column, Select Data, Chart Layouts
- Worksheet:** C2 (active cell), data points at (B,3), (C,56), (D,4), (C,6)
- Chart:** A line chart with a y-axis from 10 to 60 and an x-axis from 1 to 12. The data points are plotted at (3, 56) and (4, 6).
- Edit Series Dialog Box:**
 - Series name: [Empty]
 - Series X values: =Sheet1!\$B\$2:\$B\$3 = 3, 4
 - Series Y values: =Sheet1!\$C\$2:\$C\$3 = 56, 6
 - OK** button is circled in red.

Data series; OK

The screenshot shows Microsoft Excel with a chart and the 'Select Data Source' dialog box open. The chart is a line graph with a vertical axis from 0 to 60 and a horizontal axis from 0 to 10. The data points are (3, 56) and (4, 6). The 'Select Data Source' dialog box is open, showing the chart data range as '=Sheet1!\$B\$2:\$C\$3'. The 'Legend Entries (Series)' section shows 'Series 1' with an 'Add' button. The 'Horizontal (Category) Axis Labels' section shows '3' and '4'. The 'OK' button is circled in red.

Book1 - Microsoft Excel

Chart Tools: Design, Layout, Format

Home, Insert, Page Layout, Formulas, Data, Review, View

Change Chart Type, Save As Template, Switch Row/Column, Select Data

Type, Data, Chart Layouts

D5

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2			3	56								
3			4	6								
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												

Select Data Source

Chart data range: =Sheet1!\$B\$2:\$C\$3

Switch Row/Column

Legend Entries (Series)

Series 1

Horizontal (Category) Axis Labels

3

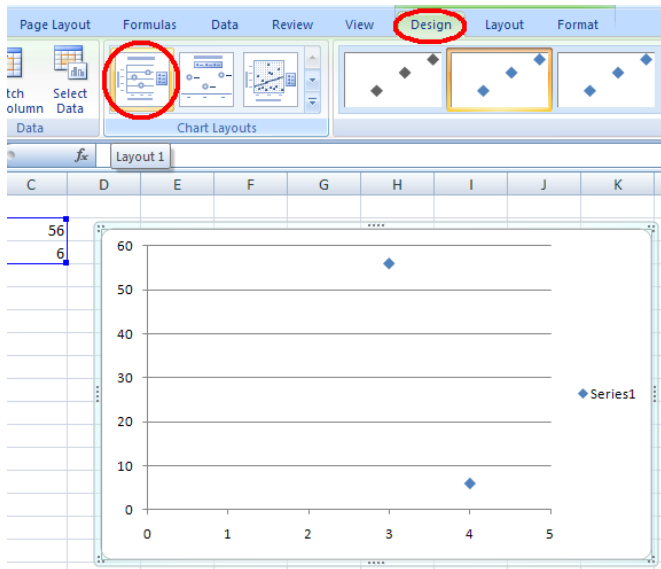
4

Hidden and Empty Cells

OK

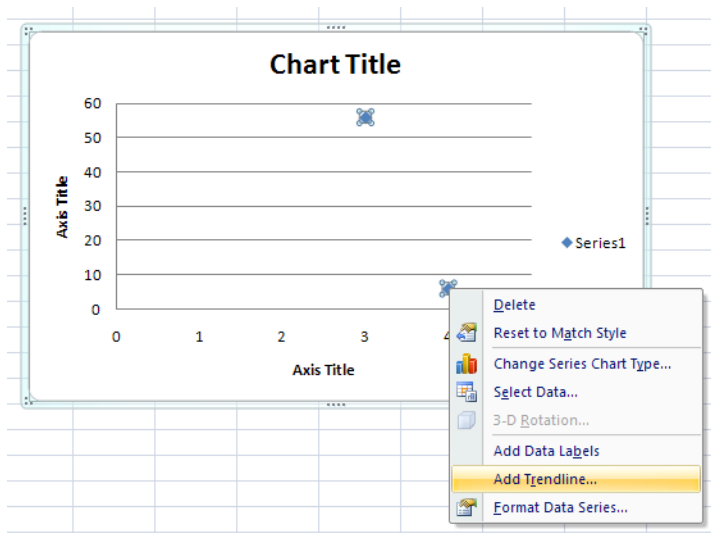
Cancel

Chart label: axis, title



ADDING A TRENDLINE

Add trendline by right-clicking on a data point



Trendline options: choose curve type. Display equation

The screenshot shows the 'Format Trendline' dialog box in Microsoft Excel. The 'Trendline Options' tab is active. Under 'Trend/Regression Type', the 'Linear' option is selected. Under 'Trendline Name', the 'Automatic' option is selected, showing 'Linear (Series1)'. The 'Forecast' section has 'Forward' and 'Backward' values set to 0.0. The 'Set Intercept' checkbox is unchecked with a value of 0.0. The 'Display Equation on chart' and 'Display R-squared value on chart' checkboxes are checked. The 'Close' button is highlighted.

	A	B	C
1			
2		3	
3		4	
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			

Trendline equation

