

How do you graph three variables in Excel, and can you provide an example?

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Graphing three variables in Excel is a useful tool for visualizing and analyzing data with multiple factors. To graph three variables in Excel, you will need to create a three-dimensional graph, also known as a 3D graph. This can be done by selecting the data for each variable and using the chart wizard to create a scatter plot, line graph, or bar graph.

For example, let's say you want to graph the relationship between temperature, humidity, and air pressure. First, you would enter the data for each variable into individual columns in Excel. Then, select all three columns and go to the Insert tab and click on the recommended chart type for your data. This will create a 3D graph, where each axis represents one of the variables.

You can also customize the graph by adding titles, labels, and changing the style and colors. This allows you to effectively display and compare the data in a visually appealing way. By graphing three variables in Excel, you can easily identify any patterns or correlations between the variables, making it a valuable tool for data analysis.

Graph Three Variables in Excel (With Example)

There are two common ways to create a graph with three variables in Excel:

1. Create a Line Graph with Three Lines

2. Create a Bar Graph with Clustered Bars

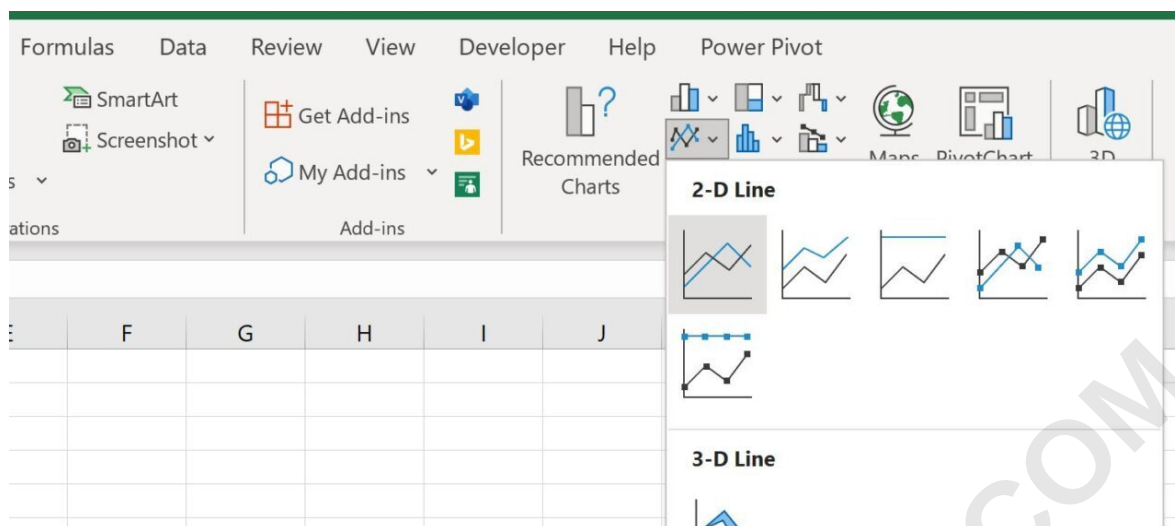
The following examples show how to create both of these graphs using the following dataset in Excel that shows the sales of three different products during various years:

	A	B	C	D	E	F	G
1	Year	Product A	Product B	Product C			
2	2015	2	5	1			
3	2016	4	7	2			
4	2017	4	8	2			
5	2018	5	9	3			
6	2019	6	13	5			
7	2020	8	16	5			
8	2021	12	19	6			
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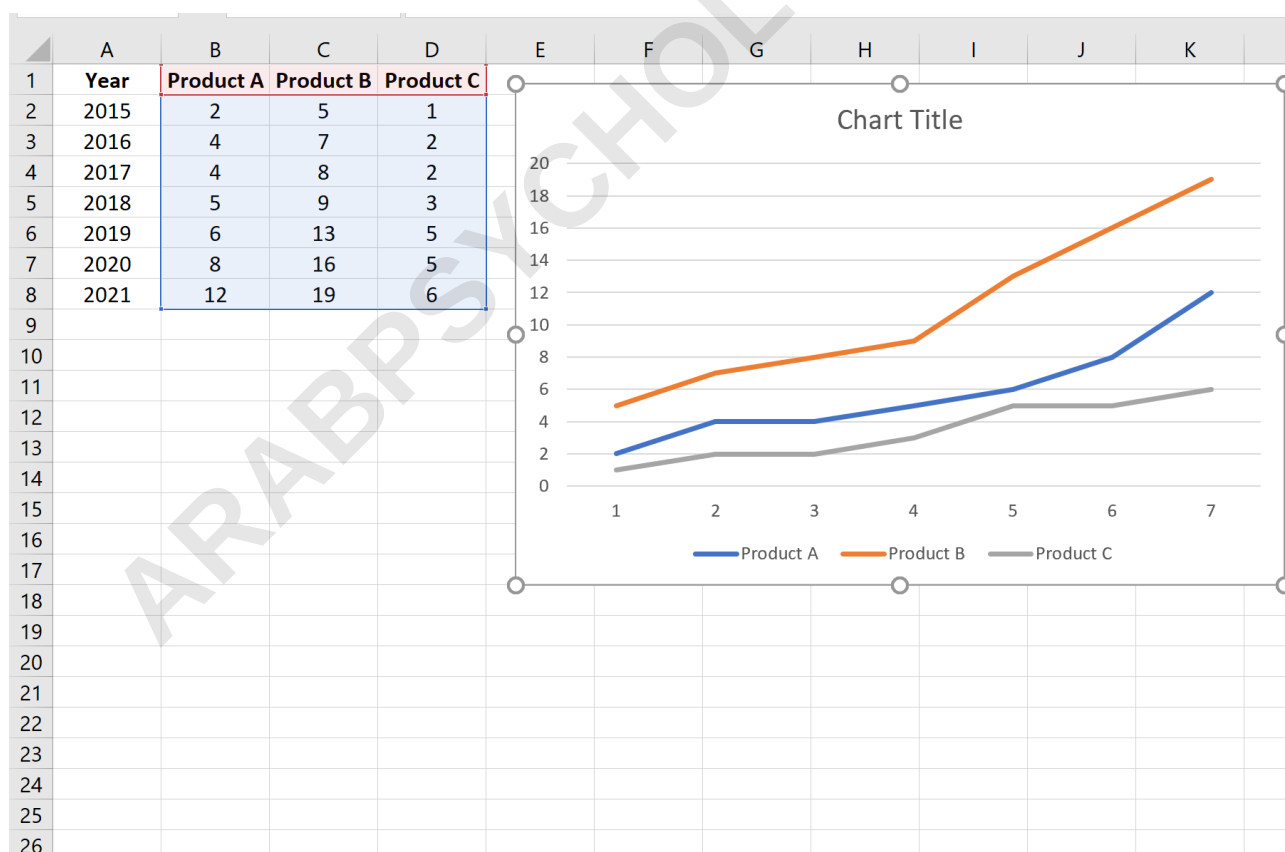
Example 1: Create a Line Graph with Three Lines

We can use the following steps to plot each of the product sales as a line on the same graph:

Highlight the cells in the range B1:D8. Click the Insert Tab along the top ribbon. In the Charts group, click the first chart option in the section titled Insert Line or Area Chart.



The following chart will appear:



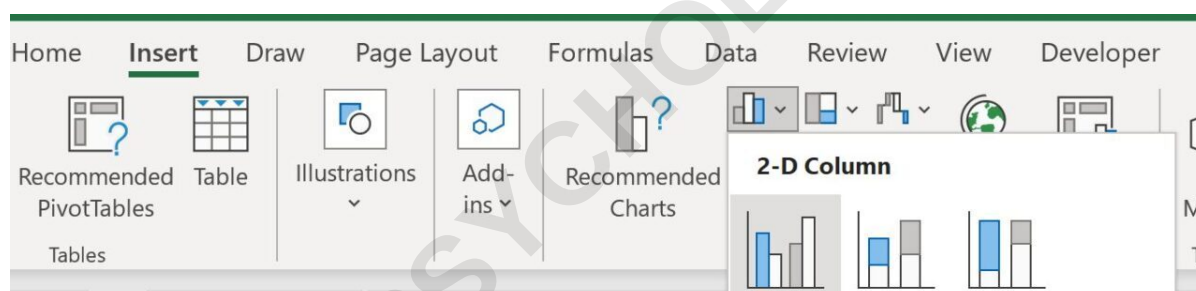
Each line represents the sales of one of the three

products during each year.

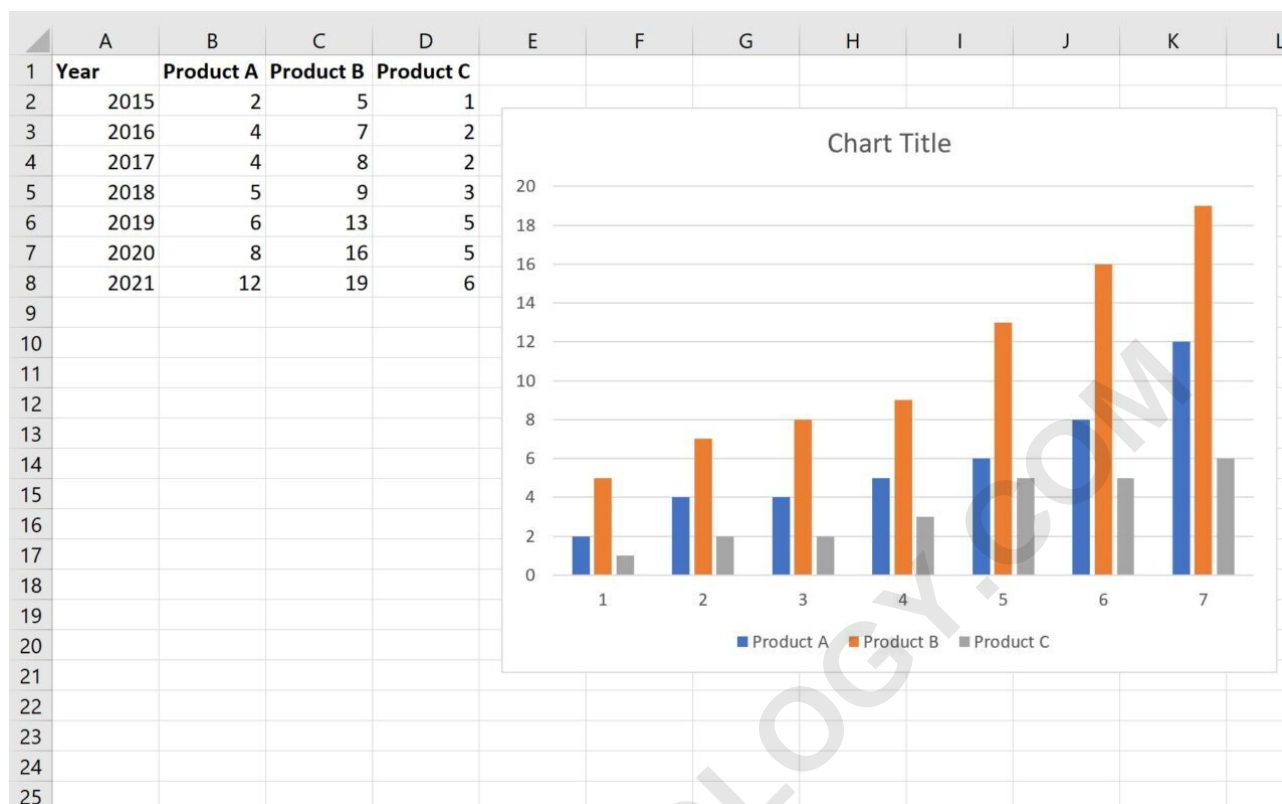
Example 2: Create a Bar Graph with Clustered Bars

We can use the following steps to plot each of the product sales as a bar on the same graph:

Highlight the cells in the range B1:D8. Click the Insert Tab along the top ribbon. In the Charts group, click the first chart option in the section titled Insert Column or Bar Chart.



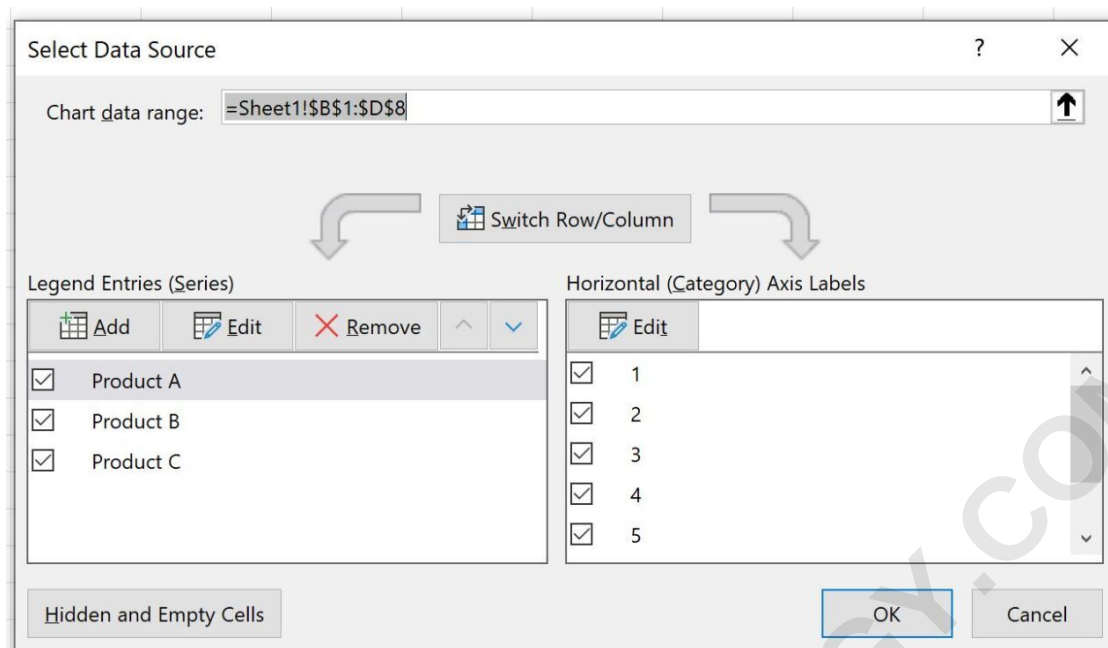
The following chart will appear:



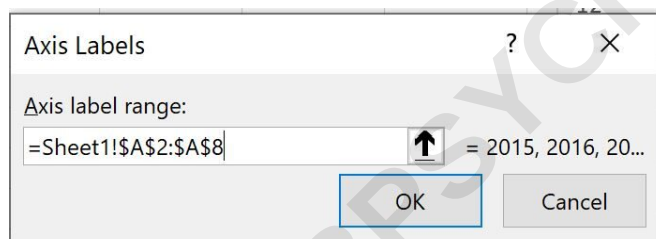
Each bar represents the sales of one of the three products during each year.

If you'd like to modify the x-axis to display the years, simply right click the x-axis and click Select Data from the dropdown.

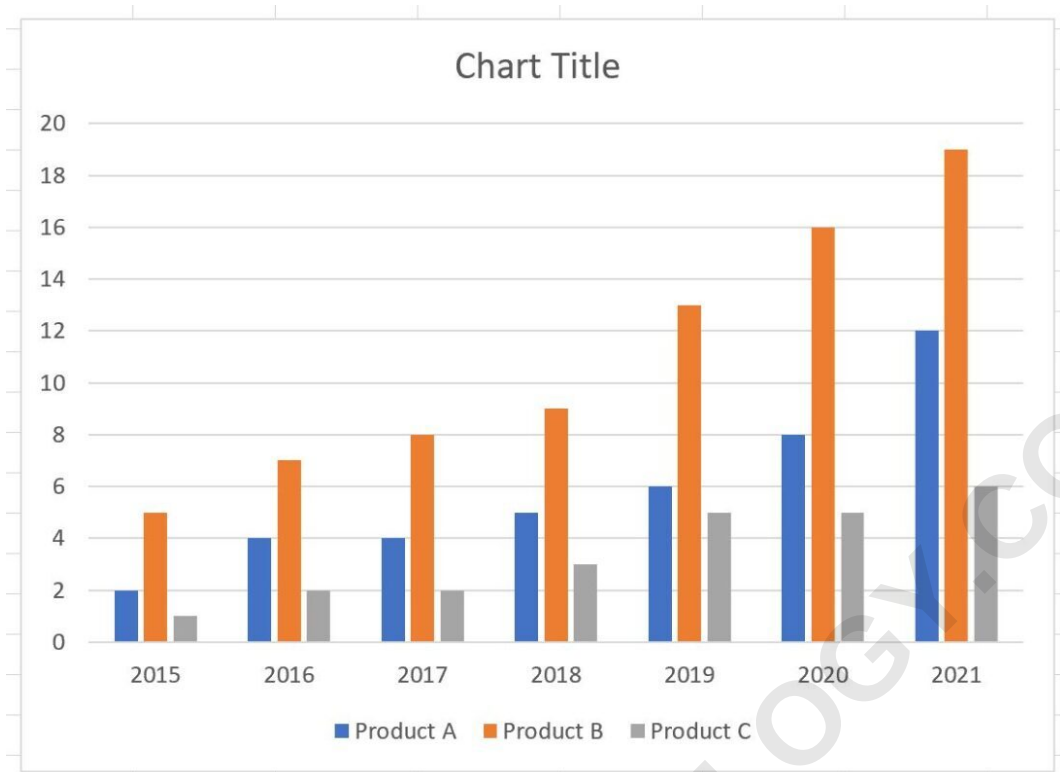
In the new window that appears, click the Edit button under Horizontal Axis Labels:



Then choose A2:A8 as the Axis label range:



Once you click OK, the x-axis labels will be updated to display the years:



The following tutorials explain how to create other common graphs in Excel: