

How can I color a scatterplot by value in Excel?

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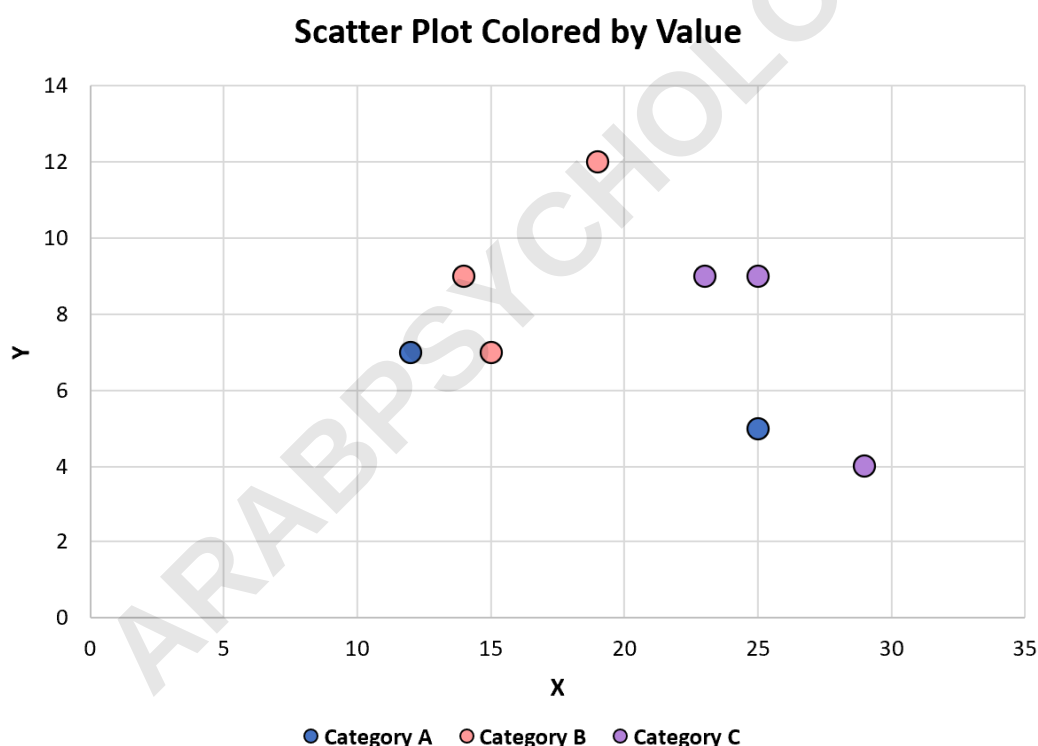
RECOMMENDED CITATION

stats writer (2024). *How can I color a scatterplot by value in Excel?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=146238>

To color a scatterplot by value in Excel, first select the data points on the scatterplot that you want to color. Then, go to the "Format" tab and select "Shape Fill" or "Shape Outline." From there, choose a color or create a custom color based on the values of your data points. This will allow you to visually represent the different values on your scatterplot with different colors, making it easier to analyze and interpret the data.

Excel: Color a Scatterplot by Value

Often you may want to color the points in a scatterplot in Excel based on a value or category, similar to the plot below:



Fortunately this is easy to do in Excel.

The following step-by-step example shows exactly how

to do so.

Step 1: Enter the Data

First, let's enter the following (X, Y) values for three different categories:

	A	B	C	D	E	F
1	x	y	category			
2	25	5	A			
3	12	7	A			
4	15	7	B			
5	14	9	B			
6	19	12	B			
7	23	9	C			
8	25	9	C			
9	29	4	C			
10						
11						
12						
13						
14						
15						
16						

Step 2: Format the Data

Before we can create a scatterplot to visualize the (X, Y) coordinates for each group, we must first format the data in a specific manner.

First, we'll enter the unique values for each category

along the top row and then type the following formula into cell D2:

=IF(\$C2=D\$1, \$B2, NA())

We can then drag this formula to the right to cell F2.

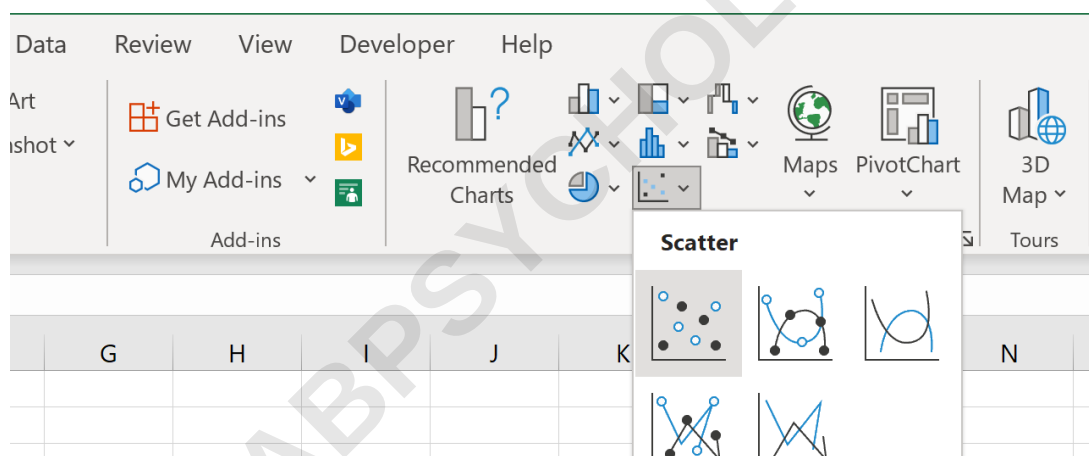
We can then drag it down until we hit cell F9:

D2 ▾ : ✕ ✓ <i>fx</i> =IF(\$C2=D\$1, \$B2, NA())							
	A	B	C	D	E	F	G
1	x	y	category	A	B	C	
2	25	5	A	5	#N/A	#N/A	
3	12	7	A	7	#N/A	#N/A	
4	15	7	B	#N/A	7	#N/A	
5	14	9	B	#N/A	9	#N/A	
6	19	12	B	#N/A	12	#N/A	
7	23	9	C	#N/A	#N/A	9	
8	25	9	C	#N/A	#N/A	9	
9	29	4	C	#N/A	#N/A	4	
10							
11							
12							
13							
14							
15							

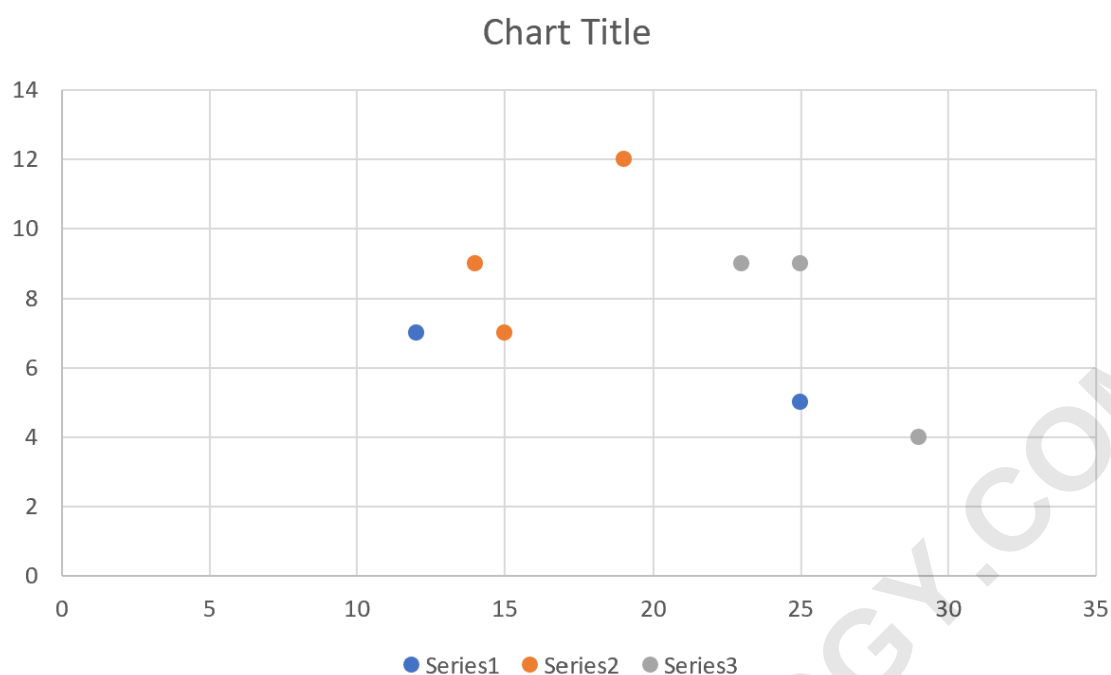
Step 3: Insert the Scatterplot

Next, highlight the range A2:A9. Then, hold Ctrl and highlight every cell in the range D2:F9.

	A	B	C	D	E	F	G
1	x	y	category	A	B	C	
2	25	5	A	5	#N/A	#N/A	
3	12	7	A	7	#N/A	#N/A	
4	15	7	B	#N/A	7	#N/A	
5	14	9	B	#N/A	9	#N/A	
6	19	12	B	#N/A	12	#N/A	
7	23	9	C	#N/A	#N/A	9	
8	25	9	C	#N/A	#N/A	9	
9	29	4	C	#N/A	#N/A	4	
10							
11							
12							
13							
14							
15							



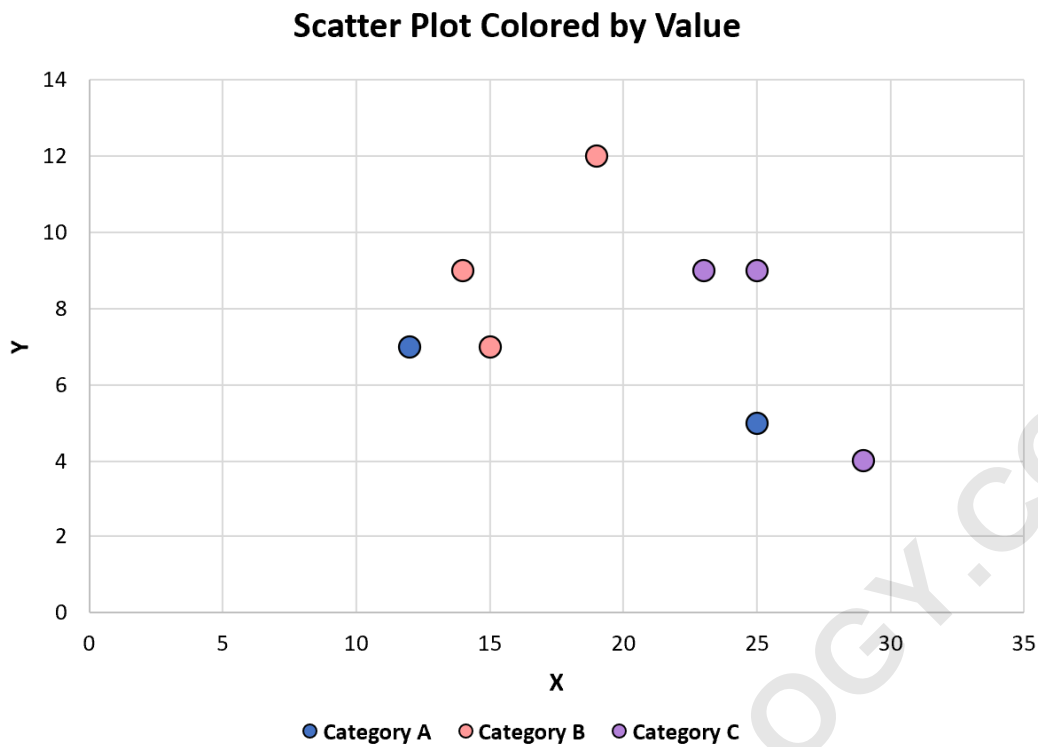
The following scatterplot will appear:



Each of the (X, Y) coordinates from the dataset are shown on the scatterplot and each of the points are colored based on the category they belong to.

Step 4: Modify Appearance of Scatterplot (Optional)

Lastly, feel free to modify the colors, point sizes, and labels to make the plot more aesthetically pleasing:



The following tutorials explain how to perform other common functions with scatterplots in Excel: