How do I find the Y-intercept of a graph in Excel?”

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Finding the y-intercept of a graph in Excel is a process that allows users to determine the point at which a line intersects with the y-axis. This can be achieved by first plotting the data points on a graph, then using the built-in trendline function to generate a line of best fit. Once the trendline is added, the y-intercept value can be easily found by selecting the trendline and viewing the equation in the chart options. This method is useful for analyzing data and understanding the relationship between variables in a graphical format.

Find Y-Intercept of a Graph in Excel

The y-intercept of a graph represents the point where a line crosses the y-axis when x is equal to zero.

To find the y-intercept of a line in Excel, we can use the INTERCEPT function.

This functions uses the following syntax:

INTERCEPT(known_y's, known_x's)

where:

known_y's: The range of y-valuesknown_x's: The range of x-values

The following example shows how to use this function in practice to calculate the y-intercept of a graph in Excel.

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Step 1: Create the Data

First, let's create a dataset with two variables in Excel:

	A	B	C	D	E	F
1	**x**	**y**				
2	2	13				
3	3	15				
4	4	16				
5	4	14				
6	5	17				
7	7	19				
8	8	22				
9	9	24				
10	12	22				
11	13	25				
12	15	28				
13	17	25				
14	18	27				
15	19	30				
16	22	35				
17	24	37				
18	27	36				
19	30	39				
20	31	41				
21	34	43				
22						
23						

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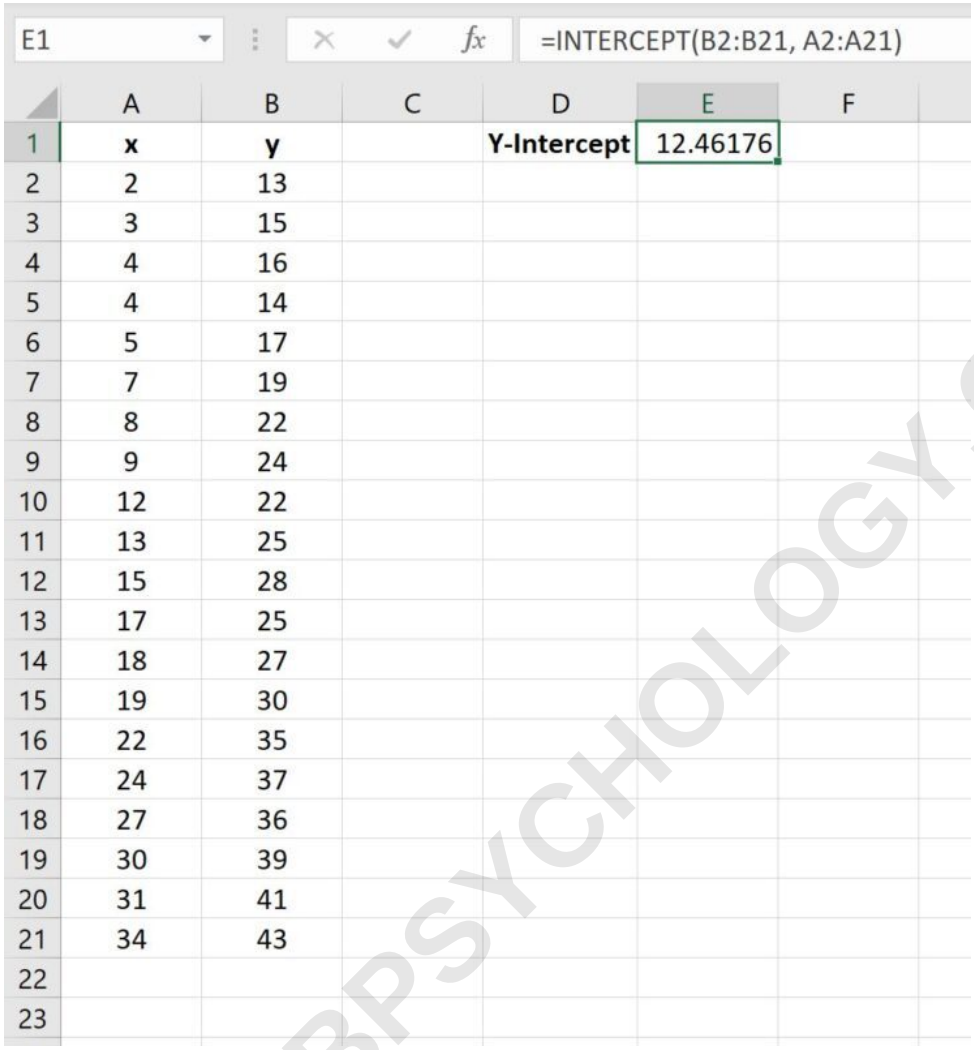
Step 2: Calculate Y-Intercept Value

Next, let's type the following formula into cell E1 to calculate the y-intercept for this dataset:

=INTERCEPT(B2:B21, A2:A21)

The following screenshot shows how to use this

formula in practice:



	A	B	C	D	E	F
1	x	y		Y-Intercept	12.46176	
2	2	13				
3	3	15				
4	4	16				
5	4	14				
6	5	17				
7	7	19				
8	8	22				
9	9	24				
10	12	22				
11	13	25				
12	15	28				
13	17	25				
14	18	27				
15	19	30				
16	22	35				
17	24	37				
18	27	36				
19	30	39				
20	31	41				
21	34	43				
22						
23						

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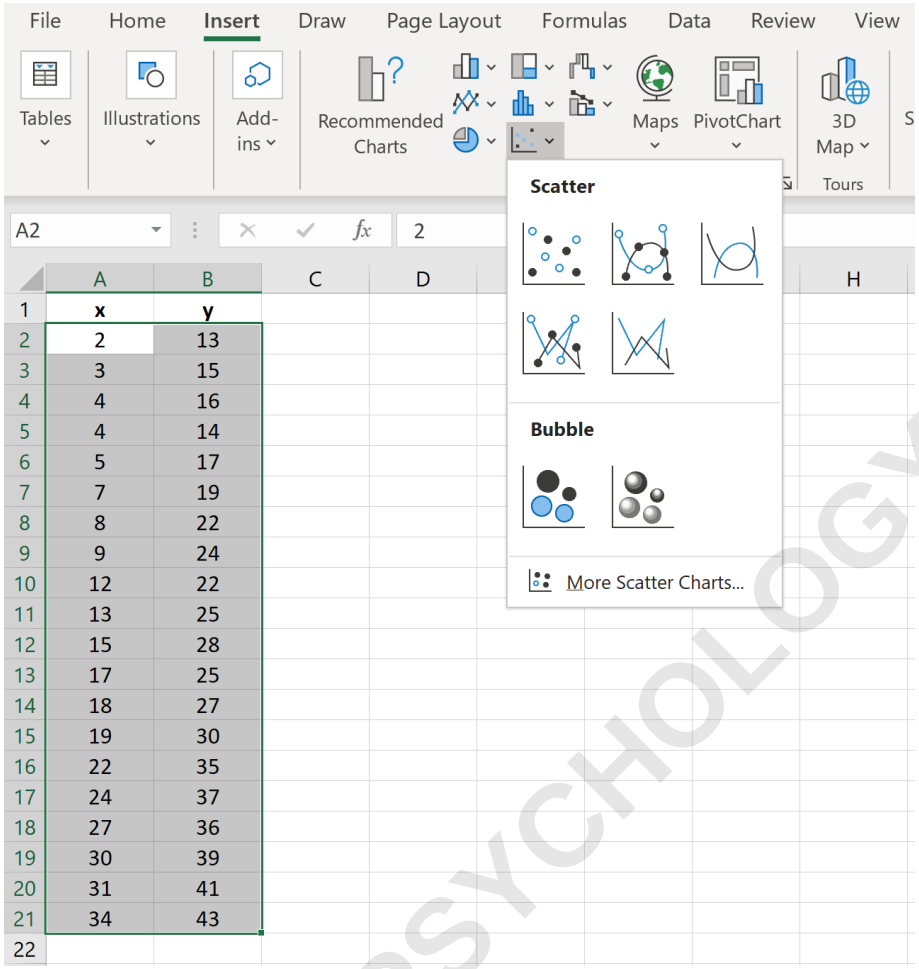
From the output we can see that the y-intercept is 12.46176.

Step 3: Visualize the Y-Intercept Value

To do so, highlight the values in the range A2:B21, then click the Insert tab, then click Insert Scatter (X, Y) in the Charts group and click the first option to create a

scatterplot:



The following scatterplot will appear:

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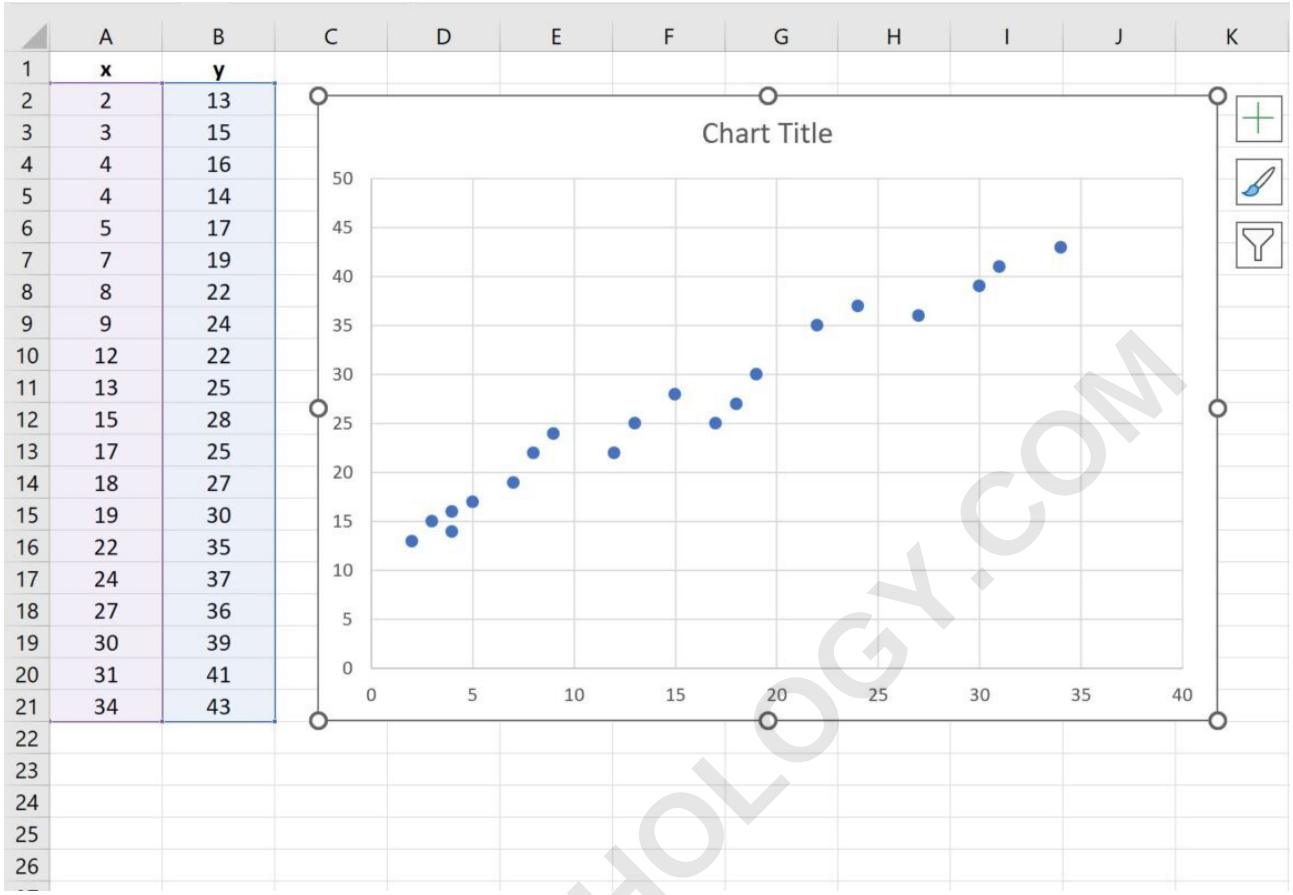

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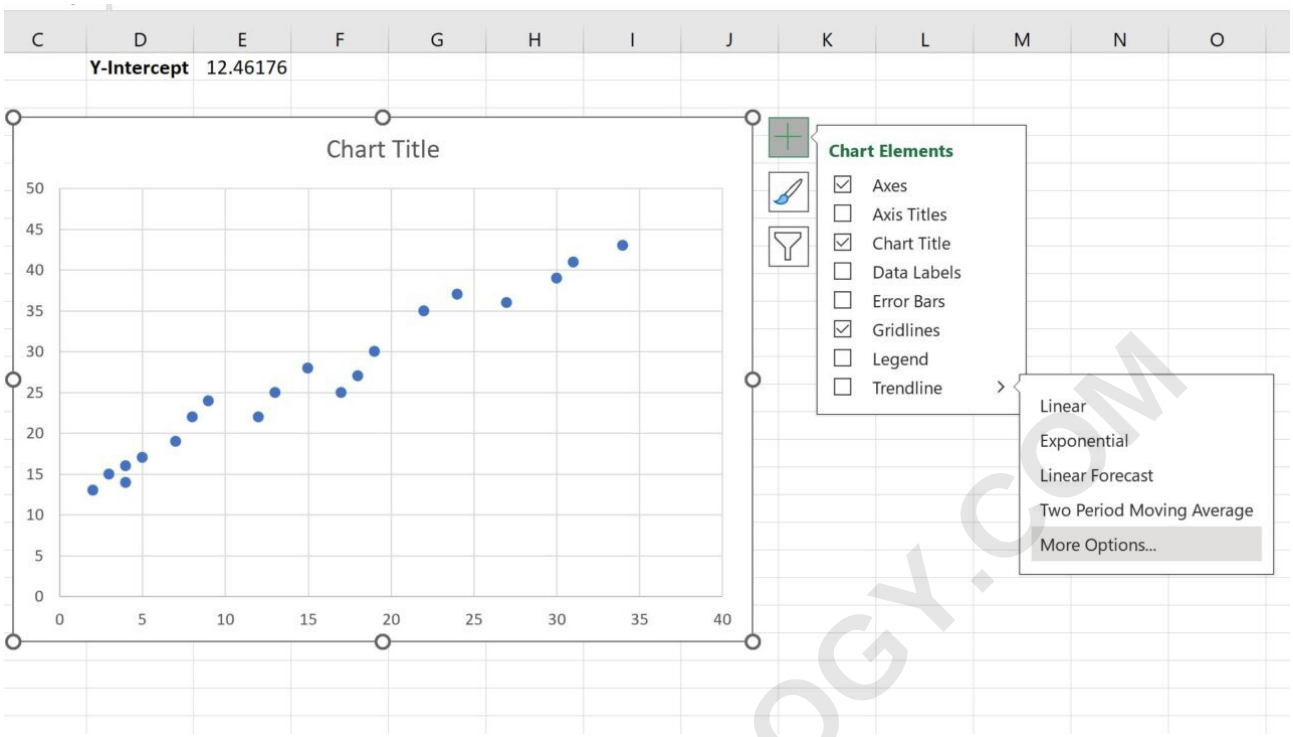
Next, click the green plus sign in the top right corner of the plot, then click the arrow next to Trendline and click More Options:



In the Format Trendline panel that appears on the right side of the screen, click the Linear trendline option, then check the box next to Display Equation on chart:

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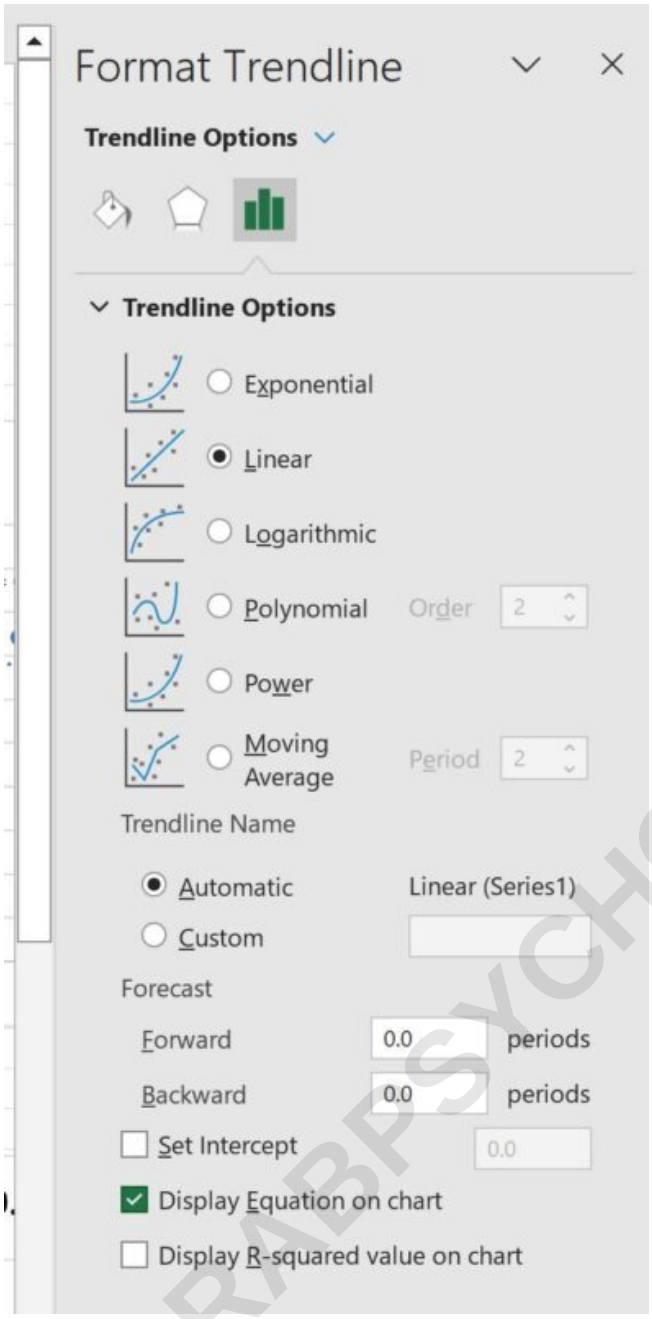

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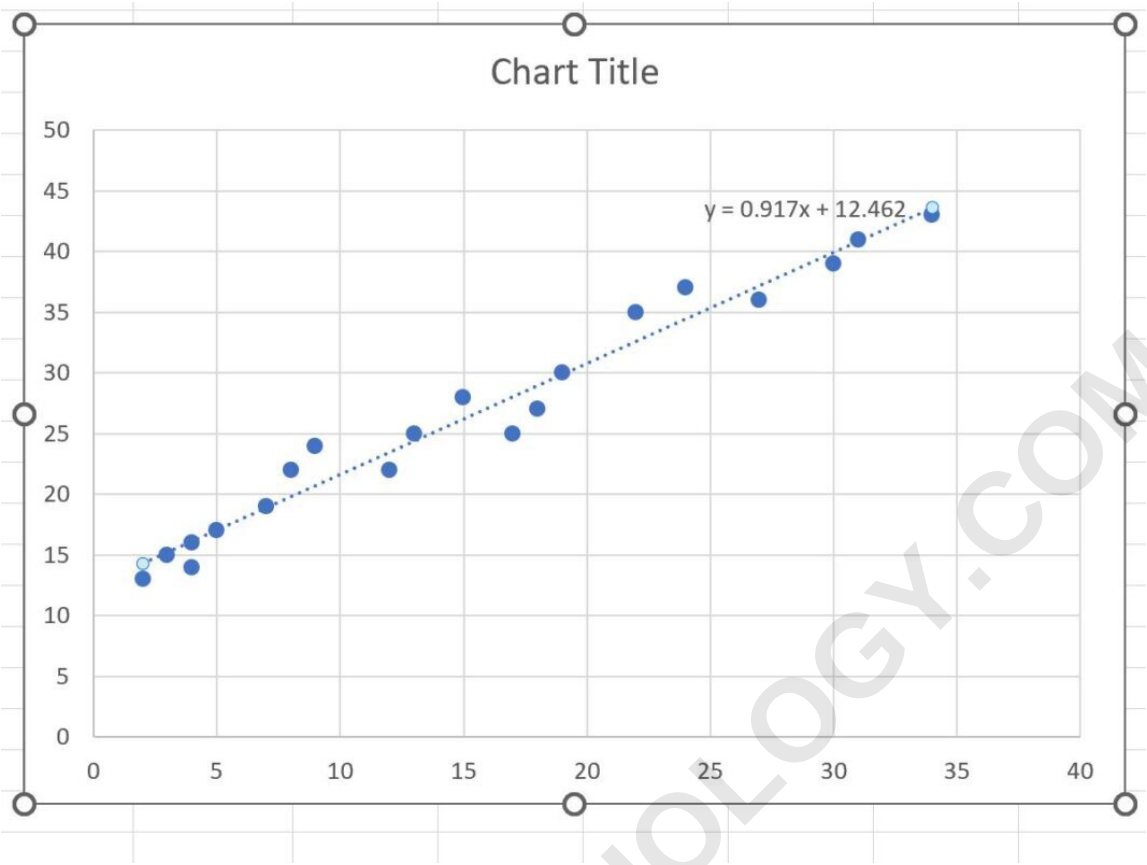
The linear trendline and the equation for the linear trendline will be displayed on the chart:



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From the output we can see the formula for the linear trendline:

y = 0.917x + 12.462

This means that when x is equal to zero, the estimated value of y (i.e. the y-intercept) is 12.462.

If we imagine that the linear trendline extends all the way to the left until it reaches the y-axis, it does indeed look like the line would cross the y-axis at a value of y = 12.462.

The following tutorials explain how to perform other common tasks in Excel:

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