

How can I calculate year over year growth using Google Sheets?

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To calculate year over year growth using Google Sheets, first input the data for the current year and the previous year in separate columns. Then, use the "Growth" function to calculate the percentage change between the two years. This function takes the current year's data as the first parameter and the previous year's data as the second parameter. Finally, format the result as a percentage to see the year over year growth rate. This method allows for a quick and efficient way to track and analyze the growth of a particular metric over a period of time.

Google Sheets: Calculate Year Over Year Growth

You can use the following formula to calculate year over year (YoY) growth for some company:

YoY Growth = (Current Period Revenue / Previous Period Revenue) - 1

For example, suppose a company earns \$8 million in revenue this year and earned \$5 million in revenue last year.

We would calculate their year over year growth to be 60%:

Year over Year Growth = (\$8 million / \$5 million) - 1 = 0.60

The following example shows how to use this formula to calculate year over year growth for a company in

Google Sheets.

Example: Calculate Year Over Year Growth in Google Sheets

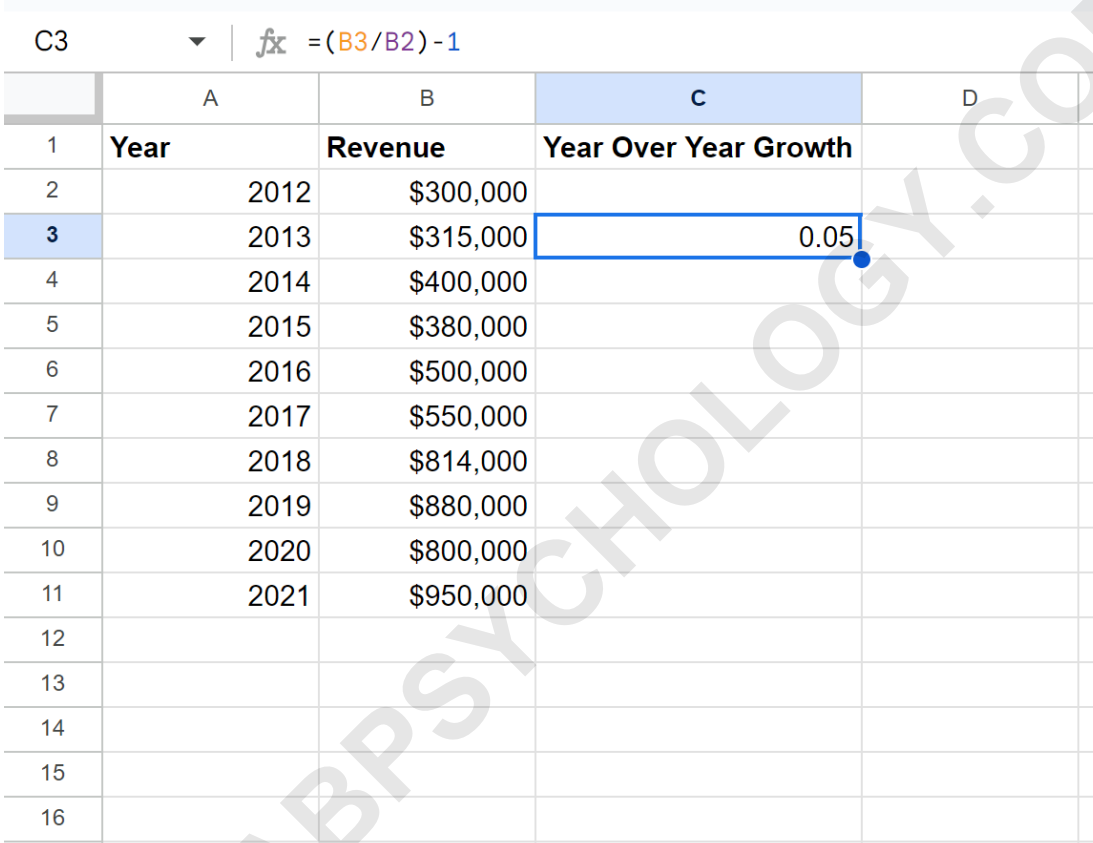
Suppose we have the following dataset that shows the total revenue for some company during 10 consecutive years:

	A	B	C	D
1	Year	Revenue		
2	2012	\$300,000		
3	2013	\$315,000		
4	2014	\$400,000		
5	2015	\$380,000		
6	2016	\$500,000		
7	2017	\$550,000		
8	2018	\$814,000		
9	2019	\$880,000		
10	2020	\$800,000		
11	2021	\$950,000		
12				
13				
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17				
18				

We can type the following formula into cell C3 to calculate the year over year growth between 2012 and 2013:

`=(B3/B2)-1`

Once we press Enter, the year over year growth will be displayed as a decimal:



	A	B	C	D
1	Year	Revenue	Year Over Year Growth	
2	2012	\$300,000		
3	2013	\$315,000	0.05	
4	2014	\$400,000		
5	2015	\$380,000		
6	2016	\$500,000		
7	2017	\$550,000		
8	2018	\$814,000		
9	2019	\$880,000		
10	2020	\$800,000		
11	2021	\$950,000		
12				
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16				

We can see that the year over year growth from 2012 to 2013 is 5%, which was calculated as:

$$\text{Year over Year Growth} = (\$315,000 / \$300,000) - 1 = 0.05$$

We can then drag and fill this formula down to each

remaining cell in column C to calculate the year over year growth each year:

C3:C11 $\text{fx} = (B3/B2) - 1$

	A	B	C	D
1	Year	Revenue	Year Over Year Growth	
2	2012	\$300,000		
3	2013	\$315,000	0.05	
4	2014	\$400,000	0.2698412698	
5	2015	\$380,000	-0.05	
6	2016	\$500,000	0.3157894737	
7	2017	\$550,000	0.1	
8	2018	\$814,000	0.48	
9	2019	\$880,000	0.08108108108	
10	2020	\$800,000	-0.09090909091	
11	2021	\$950,000	0.1875	
12				
13				
14				
15				
16				

The screenshot shows the Google Sheets interface with the following data in the spreadsheet:

	A	B	C	D
1	Year	Revenue	Year Over Year Growth	
2	2012	\$300,000		
3	2013	\$315,000	5.00%	
4	2014	\$400,000	26.98%	
5	2015	\$380,000	-5.00%	
6	2016	\$500,000	31.58%	
7	2017	\$550,000	10.00%	
8	2018	\$814,000	48.00%	
9	2019	\$880,000	8.11%	
10	2020	\$800,000	-9.09%	
11	2021	\$950,000	18.75%	
12				
13				
14				

The formula bar shows the formula: $\text{fx} = (B3/B2) - 1$

The year over year growth values are now formatted as percentages.

Notice that whenever revenue is down in a given year, the year over year growth percentage is negative.

For example, consider the years 2019 and 2020.

Here is how the year over year growth was calculated for 2020:

$$\text{Year over Year Growth} = (\$800,000 / \$880,000) - 1 =$$

-0.0909

The year over year growth is -9.09% since revenue decreased from the current year compared to the previous year.

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

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