

How can I convert a date to a decimal year in Excel?

Authored by
stats writer

June 23, 2024

RECOMMENDED CITATION

stats writer (2024). *How can I convert a date to a decimal year in Excel?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=149048>

To convert a date to a decimal year in Excel, follow these steps:

1. Select the cell where you want the decimal year to appear.
2. Enter the date you want to convert in the format of mm/dd/yyyy.
3. In the cell next to the date, enter the formula =YEAR(A1), where A1 is the cell with the date.
4. Press Enter to calculate the year.
5. In the cell below the calculated year, enter the formula =MONTH(A1)/12, where A1 is the cell with the date.
6. Press Enter to calculate the decimal month.
7. In the cell below the calculated decimal month, enter the formula =DAY(A1)/365, where A1 is the cell with the date.
8. Press Enter to calculate the decimal day.
9. Add the three calculated values (decimal year, decimal month, and decimal day) together to get the decimal year.
10. Format the cell as a decimal or number to display the result as a decimal year. This method can be used to convert any date to a decimal year in Excel.

Convert Date to Decimal Year in Excel

You can use the following basic syntax to convert a date to a decimal year in Excel:

=YEARFRAC(1,A2)+1900

This particular formula converts the date in cell A2 to a decimal year.

For example, if the date in cell A2 is 2/5/2023 then this formula will convert it to 2023.094.

This formula works by using the YEARFRAC function, which calculates the fraction of a year represented by

the number of whole days between a start and end date.

The value 1 in YEARFRAC represents January 1, 1900.

Thus, YEARFRAC(1, A2) calculates the number of fractional years since January 1, 1900 and then we add 1900 to convert this value to the current year.

The following example shows how to use this formula in practice.

Example: Convert Date to Decimal Year in Excel

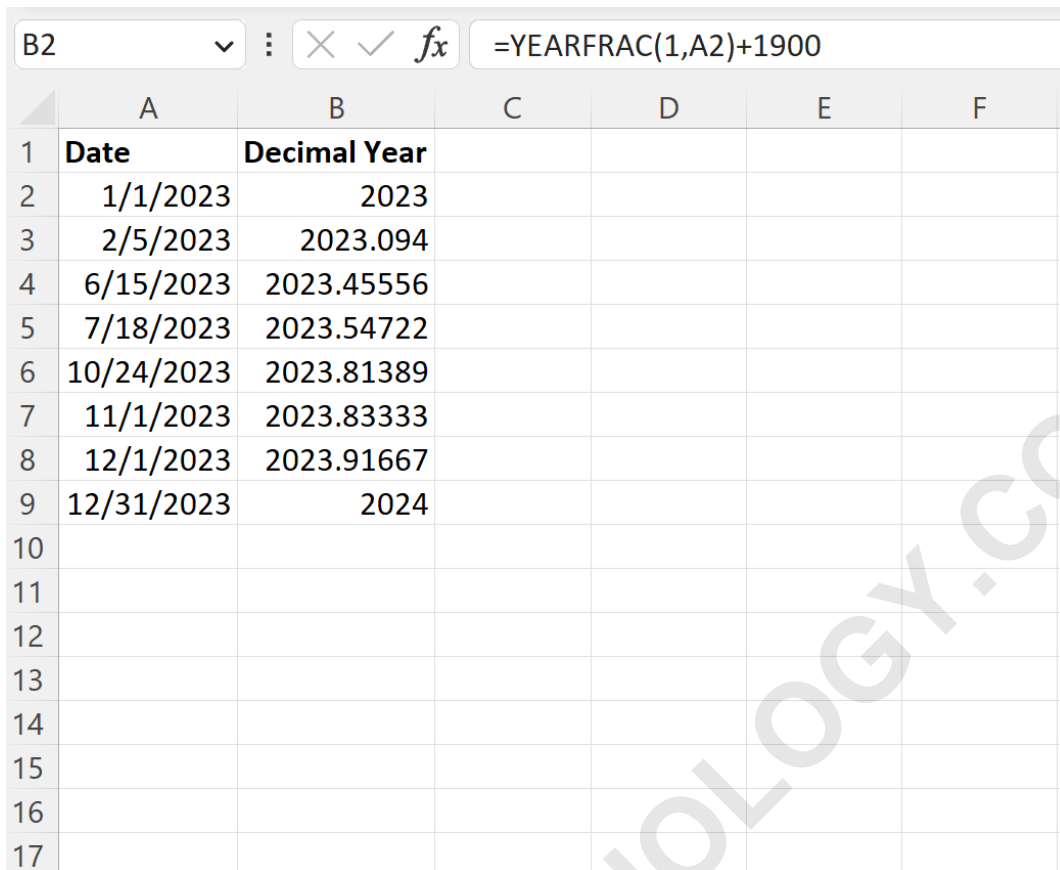
Suppose we have the following column of dates in Excel:

	A	B	C	D	E	F
1	Date					
2	1/1/2023					
3	2/5/2023					
4	6/15/2023					
5	7/18/2023					
6	10/24/2023					
7	11/1/2023					
8	12/1/2023					
9	12/31/2023					
10						
11						
12						
13						
14						
15						
16						
17						

We can type the following formula into cell B2 to convert the cell in A2 to a decimal year:

=YEARFRAC(1,A2)+1900

We can then click and drag this formula down to each remaining cell in column B:



The image shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F
1	Date	Decimal Year				
2	1/1/2023	2023				
3	2/5/2023	2023.094				
4	6/15/2023	2023.45556				
5	7/18/2023	2023.54722				
6	10/24/2023	2023.81389				
7	11/1/2023	2023.83333				
8	12/1/2023	2023.91667				
9	12/31/2023	2024				
10						
11						
12						
13						
14						
15						
16						
17						

The formula bar shows the formula: `=YEARFRAC(1,A2)+1900`

Each value in column B represents the decimal year for the corresponding cell in column A.

For example:

1/1/2023 as a decimal year is 2023.2/5/2023 as a decimal year is 2023.094.6/15/2023 as a decimal year is 2023.45556.

And so on.

Note: You can find the complete documentation for the

Excel YEARFRAC function .

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

ARABPSYCHOLOGY.COM