

# How do I use the CONFIDENCE.T function in Google Sheets?

Authored by  
**stats writer**

June 30, 2024

## RECOMMENDED CITATION

stats writer (2024). *How do I use the CONFIDENCE.T function in Google Sheets?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=162158>

The CONFIDENCE.T function in Google Sheets is a statistical tool that calculates the confidence interval for a population mean based on a sample of data. To use this function, you need to specify the desired confidence level and the standard deviation of the sample. The result will provide a range of values within which the true population mean is likely to fall. This can be useful in making informed decisions and drawing conclusions based on collected data. Simply input the required parameters and the function will automatically calculate the confidence interval for you. This tool is particularly helpful in business and research contexts where accurate estimates of population means are necessary.

## CONFIDENCE.T function

The CONFIDENCE.T function calculates the width of half the confidence interval for a student's t-distribution.

### Parts of a CONFIDENCE.T function

`CONFIDENCE.T(alpha, standard_deviation, size)`

Part	Description
alpha	One minus the desired confidence level. E.g. 0.1 for 0.9, or 90%, confidence.
standard_deviation	The standard deviation of the population.
size	The size of the population.

### Note

CONFIDENCE.T calculates the width of half the confidence interval such that a value picked at random from the data set has  $1-\alpha$  probability of lying within the mean plus or minus the result of CONFIDENCE.T.

### Examples

	A	B	C	D	E	F
1	Alpha	STDEV	size	Result	Formula	Confidence Interval (Supposed Mean=40)
2	0.05	6.43	27	2.56340262541175	=CONFIDENCE.T(A2, B2, C2)	

## Related functions

CONFIDENCE.NORM: Calculates the width of half the confidence interval for a normal distribution.

ARABPSYCHOLOGY.COM