

How do I use the STDEV.S function in Excel to calculate the standard deviation of a data set?

Authored by
stats writer

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RECOMMENDED CITATION

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The STDEV.S function in Excel is a statistical tool that allows users to calculate the standard deviation of a data set. Standard deviation is a measure of how spread out the data points are from the average or mean. To use the STDEV.S function, first select the cell where you want the result to be displayed. Then, enter "=STDEV.S(" into the cell, followed by the range of data you want to calculate the standard deviation for, enclosed in parentheses. For example, if your data is in cells A1 to A10, you would enter "=STDEV.S(A1:A10)". Press enter and the result will be displayed in the selected cell. This function is useful for analyzing and understanding the variability of a data set and can aid in making informed decisions based on the data.

Excel STDEV.S Function

STDEV.S Function

The **STDEV.S** function is a premade function in Excel, which calculates the **Standard Deviation (Std)** for a sample.

It is typed =STDEV.S

Note: This function ignores cells with text and logic.

Note: Standard deviation (σ) measures how far a 'typical' observation is from the average of the data (μ). You can read more about standard deviation in our Statistics - Standard Deviation Tutorial.

Tip: There is another function called STDEV.P that can be used if you have the data for the entire population.

How to use the =STDEV.S function:

Select a cell (H5) Type =STDEV.S Double click the **STDEV.S** command Select a range (E2:E21) Hit enter

Let's have a look at an example!

Find the Standard Deviation for the sample of Pokemon total stats in the range E2:E21:

	A	B	C	D	E	F	G	H
1	ID#	Name	Type 1	Type 2	Total			
2	1	Bulbasaur	Grass	Poison	318			
3	2	Ivysaur	Grass	Poison	405			
4	3	Venusaur	Grass	Poison	525			
5	4	Charmander	Fire		309		STDEV.S	=
6	5	Charmeleon	Fire		405			
7	6	Charizard	Fire	Flying	534			
8	7	Squirtle	Water		314			
9	8	Wartortle	Water		405			
10	9	Blastoise	Water		530			
11	10	Caterpie	Bug		195			
12	11	Metapod	Bug		205			
13	12	Butterfree	Bug	Flying	395			
14	13	Weedle	Bug	Poison	195			
15	14	Kakuna	Bug	Poison	205			
16	15	Beedrill	Bug	Poison	395			
17	16	Pidgey	Normal	Flying	251			
18	17	Pidgeotto	Normal	Flying	349			
19	18	Pidgeot	Normal	Flying	479			
20	19	Rattata	Normal		253			
21	20	Raticate	Normal		413			
22								

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6	5	Charmeleon	Fire		405				STDEV.S (number1; [number2]; ...)		
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6	5	Charmeleon	Fire		405				STDEV.S (number1; [number2]; ...)		
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That's the way! The **STDEV.S** function has successfully returned the **Standard Deviation** 113,2319 for the sample of Pokemons Total stats.

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