

how do you use the Excel STDEV.P function?

Authored by
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RECOMMENDED CITATION

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The Excel STDEV.P function is a statistical function that calculates the standard deviation for a given set of data. Its purpose is to measure the spread or variability of data points around the mean. This can be useful in analyzing and understanding the distribution of data and identifying any outliers. To use the function, simply input the range of data values as an argument and the function will return the standard deviation value. This value can then be used in further calculations or to compare the variability of different data sets. It is important to note that the STDEV.P function assumes the data set represents the entire population, rather than a sample.

Excel STDEV.P Function

STDEV.P Function

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

It is typed =STDEV.P

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.S that can be used if you have the data for a sample.

How to use the =STDEV.P function:

Select a cell (H5)

Type =STDEV.P

Double click the **STDEV.P** command

Select a range (E2:E755), including all Pokemons

Hit enter

Let's have a look at an example!

Find the Standard Deviation of Pokemon total stats in the range E2:E755:

	A	B	C	D	E	F	G	H
1	#	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.P	=
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	21	Spearow	Normal	Flying	262			
23	22	Fearow	Normal	Flying	442			

The picture is not showing all rows. The range is E2:E755 (753 rows).

	A	B	C	D	E	F	G	H	I	J
1	#	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.P	=STDEV.P(		
6	5	Charmeleon	Fire		405			STDEV.P (number1; [number2]; ...)		
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					
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16	15	Beedrill	Bug	Poison	395					
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4	3	Venusaur	Grass	Poison	525					
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6	5	Charmeleon	Fire		405					
7	6	Charizard	Fire	Flying	534					
8	7	Squirtle	Water		314					
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The **STDEV.P** function has successfully returned the **Standard Deviation** for the whole population as 113,4497844.

★+1

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