

How do you perform a Standard Deviation IF calculation in Excel?

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The process of performing a Standard Deviation IF calculation in Excel involves using the built-in function "STDEV.S" to calculate the standard deviation of a specific set of data that meets a certain criteria. This can be achieved by first selecting the data range and then using the "IF" function to specify the criteria. The resulting standard deviation value can then be used to measure the variation or dispersion of the data from its mean. This calculation is commonly used in statistical analysis to evaluate the consistency and variability of a data set.

Perform a Standard Deviation IF Calculation in Excel

You can use the following formulas to perform a standard deviation IF calculation in Excel:

Method 1: Standard Deviation IF (One Criteria)

=STDEV(IF(A:A="Value",C:C))

This formula calculates the standard deviation of values in column C where the values in column A are equal to "Value."

Method 2: Standard Deviation IF (Multiple Criteria)

=STDEV(IF((A:A="Value1")*(B:B="Value2"),C:C,""))

This formula calculates the standard deviation of values in column C where the values in column A are equal to "Value1" and the values in column B are equal to "Value2."

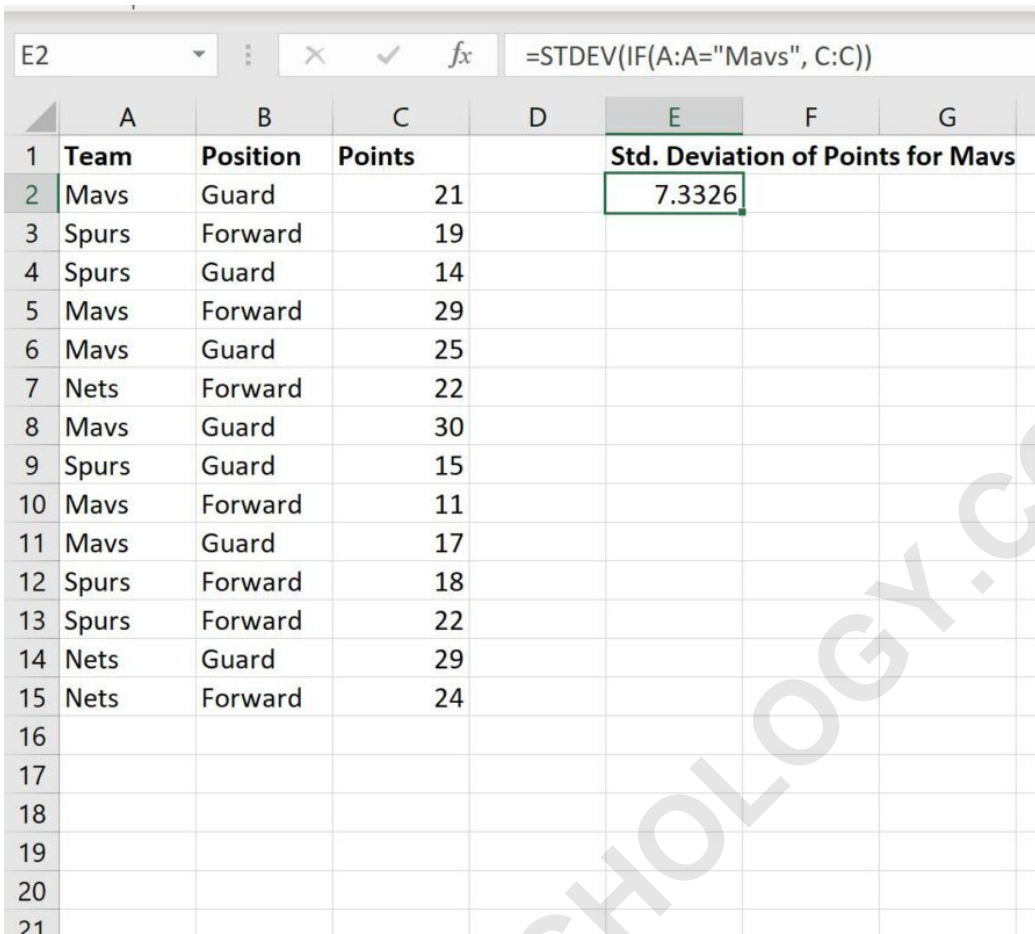
The following examples show how to use each formula in practice.

Example 1: Calculate Standard Deviation IF (One Criteria)

We can use the following formula to calculate the standard deviation of the values in the Points column where the value in the Team column is equal to "Mavs":

=STDEV(IF(A:A="Mavs",C:C))

The following screenshot shows how to use this formula in practice:



The screenshot shows an Excel spreadsheet with the following data and formula:

	A	B	C	D	E	F	G
1	Team	Position	Points		Std. Deviation of Points for Mavs		
2	Mavs	Guard	21		7.3326		
3	Spurs	Forward	19				
4	Spurs	Guard	14				
5	Mavs	Forward	29				
6	Mavs	Guard	25				
7	Nets	Forward	22				
8	Mavs	Guard	30				
9	Spurs	Guard	15				
10	Mavs	Forward	11				
11	Mavs	Guard	17				
12	Spurs	Forward	18				
13	Spurs	Forward	22				
14	Nets	Guard	29				
15	Nets	Forward	24				
16							
17							
18							
19							
20							
21							

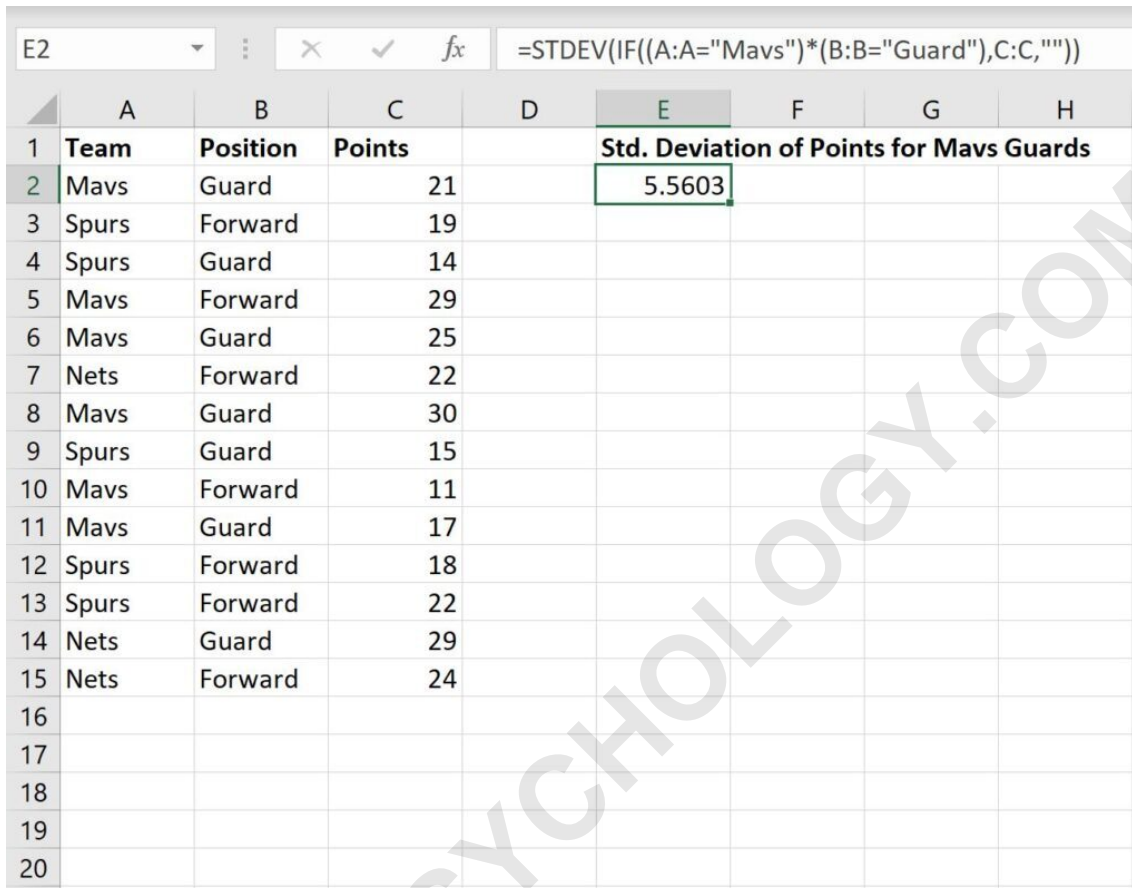
The formula bar shows: `=STDEV(IF(A:A="Mavs", C:C))`

The standard deviation of Points for the rows where Team is equal to "Mavs" is 7.3326.

Example 2: Calculate Standard Deviation IF (Multiple Criteria)

We can use the following formula to calculate the standard deviation of the values in the Points column where the value in the Team column is equal to "Mavs" and the value in the Position column is equal to "Guard":

=STDEV(IF((A:A="Mavs")*(B:B="Guard"),C:C,""))



	A	B	C	D	E	F	G	H
1	Team	Position	Points		Std. Deviation of Points for Mavs Guards			
2	Mavs	Guard	21		5.5603			
3	Spurs	Forward	19					
4	Spurs	Guard	14					
5	Mavs	Forward	29					
6	Mavs	Guard	25					
7	Nets	Forward	22					
8	Mavs	Guard	30					
9	Spurs	Guard	15					
10	Mavs	Forward	11					
11	Mavs	Guard	17					
12	Spurs	Forward	18					
13	Spurs	Forward	22					
14	Nets	Guard	29					
15	Nets	Forward	24					
16								
17								
18								
19								
20								

The standard deviation of Points for the rows where Team is equal to "Mavs" and Position is equal to "Guard" is 5.5603.

Related:

Additional Resources

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