

# How can absolute values be calculated in SAS? Can you provide an example?

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## RECOMMENDED CITATION

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Absolute values can be calculated in SAS by using the ABS function. This function takes in a numerical value and returns the absolute value of that number. The syntax for using the ABS function in SAS is as follows: `ABS(x)`, where `x` is the numerical value for which you want to calculate the absolute value. For example, if we have a column in our dataset called "Profit" which contains both positive and negative values, we can use the ABS function to calculate the absolute values of these profits, disregarding their sign. This can be done by creating a new column called "Absolute Profit" and using the following code: `Absolute_Profit = ABS(Profit)`. This will return the absolute value of each profit in the "Absolute Profit" column, making it easier to analyze and interpret the data.

## Calculate Absolute Values in SAS (With Example)

**You can use the ABS function in SAS to return the absolute value of a given number.**

**This function uses the following basic syntax:**

**`ABS(argument)`**

**where:**

**argument: A numeric value**

**The following example shows how to use this function to calculate absolute values in practice.**

**Example: How to Calculate Absolute Values in SAS**

**Suppose we have the following dataset in SAS:**

```
/*create dataset*/  
data original_data;  
input values;  
datalines;  
100  
-40  
0  
50  
23.5  
-1.44  
-0.54  
12  
18  
-22  
;  
run;  
  
/*view dataset*/  
proc printdata=original_data;
```

Obs	values
1	100.00
2	-40.00
3	0.00
4	50.00
5	23.50
6	-1.44
7	-0.54
8	12.00
9	18.00
10	-22.00
11	54.00

**We can use the ABS function to calculate the absolute value of each numeric value in the values column:**

```
/*create new dataset*/  
data new_data;  
set original_data;  
abs_values = abs(values);  
run;
```

```
/*view new dataset*/  
proc printdata=new_data;
```

Obs	values	abs_values
1	100.00	100.00
2	-40.00	40.00
3	0.00	0.00
4	50.00	50.00
5	23.50	23.50
6	-1.44	1.44
7	-0.54	0.54
8	12.00	12.00
9	18.00	18.00
10	-22.00	22.00
11	54.00	54.00

**Notice that the new column called abs\_values contains the absolute value of each numeric value from the values column.**

**For example:**

**The absolute value of 100.00 is 100.00. The absolute value of -40.00 is 40.00. The absolute value of 0.00 is 0.00.**

**And so on.**

**The following tutorials explain how to perform other**

## common tasks in SAS:

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