

Rounding


by Dick Evans

The value displaying in a cell is a rounded up value based on the formatted number of decimal places. This is fine for most situation, but there are times when an exact value is necessary. This paper shows how to round a result in Excel.

Start Excel

	A
1	12.123
2	12.345
3	12.567
4	12.678

Enter these four values

	A	B	C
1	12.123	=round	
2	12.345		
3	12.567		
4	12.678		

There are three ways to round. We usually think of rounding as bringing a value like 12.56 to 13 and 12.123 to 12—if it is 5 or over we go up, otherwise we go down. This is how Round handles it. Rounddown always drops to the lower value and Roundup always goes to the higher value.

	A	B	C	D	E	F	G	H	I
1	12.123	=ROUNDUP(A1)							
2	12.345								
3	12.567								
4	12.678								
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									

Function Arguments

ROUNDUP

Number: A1 = 12.123

Num_digits: = number = 13

Rounds a number up, away from zero.

Num_digits is the number of digits to which you want to round. Negative rounds to the left of the decimal point; zero or omitted, to the nearest integer.

Formula result = 13

[Help on this function](#)

OK Cancel

There are two arguments. Number points to the cell where the value is found. Num_digits is the number of decimal places to round to. Enter 0 to round to a whole number.

	A	B
1	12.123	13
2	12.345	13
3	12.567	13
4	12.678	13

All values were increased to the next whole number

Try using =ROUND(A1,0) in all four cells

	A	B
1	12.123	12
2	12.345	12
3	12.567	13
4	12.678	13

Only those cells containing .5 or greater were increased

Try using =ROUNDDOWN(A1,0)

	A	B
1	12.123	12
2	12.345	12
3	12.567	12
4	12.678	12

All four were reduced to the lower whole number.