

# How to use the rounding function in Excel simply and effectively

When working with Excel, you will need to round numbers to suit your calculations and reports. Excel provides many rounding functions such as ROUND(), ROUNDUP(), ROUNDDOWN(), which help control rounding according to specific needs.

Rounding numbers in Excel helps make calculations more accurate. Discover how to use the ROUND(), CEILING(), FLOOR() functions to optimize your spreadsheets.

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## 1. ROUND() function - Rounds numbers after and before decimal points

### Syntax:

ROUND(Number to round, num\_digits)

### In there

- **Num\_digits** > 0: làm tròn đến số thập phân được chỉ định
- **Num\_digits** = 0: làm tròn đến số nguyên gần nhất
- **Num\_digits** < 0: làm tròn đến phần nguyên được chỉ định

### Example:

With the number 1234.5678, when you use the **Round** function, the result will be as shown below:

The screenshot shows an Excel spreadsheet with the following content:

Hàm ROUND trong Excel			
Thực hiện: Taimienphi.vn			
STT	Cú pháp	Kết quả hàm tính	
1	=ROUND(1234.5678,3)	1234.568	
2	=ROUND(1234.5678,2)	1234.570	
3	=ROUND(1234.5678,1)	1234.600	
4	=ROUND(1234.5678,0)	1235.000	
5	=ROUND(1234.5678,-1)	1230.000	
6	=ROUND(1234.5678,-2)	1200.000	
7	=ROUND(1234.5678,-3)	1000.000	

## 2. MROUND() function - Rounds to a multiple of another number

### Syntax:

**MROUND(number to round, multiple)**

- **Multiple** : The number you need to round the number to its multiple
- If **Number** and **Multiple** have different signs, the function will report the **#NUM! error**.
- If **Number** and **Multiple** are equal, the result is the number itself.
- **MROUND()** will round up, if the divisor of **Number** by **Multiple** is greater than or equal to  $1/2$  **Multiple** , and round down if the divisor of **Number** by **Multiple** is less than  $1/2$  **Multiple**

### Example:

Suppose you need to round to a multiple of another number, the result of rounding will be as illustrated below:

Hàm MROUND trong Excel		
Thực hiện: Taimienphi.vn		
Cú pháp	Kết quả hàm tính	Ghi chú
=MROUND(5, 2)	6	Do $5/2 > 2/2$ , bội số của 2 gần nhất mà lớn hơn 5 là 6
=MROUND(11, 5)	10	Do $11/5 < 5/2$ , bội số của 5 gần nhất mà nhỏ hơn 11 là 10
=MROUND(13, 5)	15	Do $13/5 > 5/2$ , bội số của 5 gần nhất mà lớn hơn 13 là 15
=MROUND(5, 5)	5	Number và Multiple bằng nhau
=MROUND(7.31, 0.5)	7.5	Do $7.31/0.5 > 0.5/2$ , bội số của 0.5 gần nhất mà lớn hơn 7.31 là 7.5
=MROUND(-11, -5)	-10	Do $-11/-5 > -5/2$ , bội số của -5 gần nhất mà lớn hơn -11 là -10
=MROUND(-11, 5)	#NUM!	Number và Multiple khác dấu

### 3. ROUNDDOWN() and ROUNDUP() functions

These two functions are essentially the same as the **ROUND()** function , except that they only round in one direction: **ROUNDDOWN()** always rounds a number toward **0** , while **ROUNDUP()** always rounds a number away from **0** .

**Syntax:**

**ROUNDDOWN(Number to round, num\_digits)**

**ROUNDUP(number, num\_digits)**

- **Num\_digits**: Là một số nguyên, chỉ cách mà bạn muốn làm tròn
- **Num\_digits** > 0: làm tròn đến số thập phân được chỉ định
- **Num\_digits** = 0: làm tròn đến số nguyên gần nhất
- **Num\_digits** < 0: làm tròn đến phần nguyên được chỉ định

**Example:**

You can see the comparison result between **ROUNDDOWN()** and **ROUNDUP()** functions in the Excel table below:

	A	B	C	D	E
1	<b>Hàm ROUNDDOWN và ROUNDUP trong Excel</b> Thực hiện: Taimienphi.vn				
2	<b>Number</b>	<b>Num_digits</b>	<b>ROUNDDOWN()</b>	<b>ROUNDUP()</b>	
3	1.3	0	1	2	
4	1.6789	2	2	2	
5	1234	-2	1200	1300	
6	-1.1	0	-1	-2	
7	-1234	-2	-1200	-1300	
8					

## 4. CEILING() function and FLOOR() function

These two functions are similar to the **MROUND()** function - rounding to the nearest multiple of a specified number, with a slight difference in the calculation method: **CEILING()** always rounds a number away from **0**, while **FLOOR()** rounds towards **0**.

**Syntax:**

**CEILING(Number to be rounded, significance)**

**FLOOR(number, significance)**

- **Significance** : The number to which you need to round the Number to a multiple of it.
- If **Number** and **Significance** have different signs, the function will report the **#NUM! error**.
- If **Number** is a multiple of **Significance** -> the result is that number.

**Example:**

Suppose we need to compare between **CEILING()**, **FLOOR()** and **MROUND()** - in this example, consider **Significance** as **Multiple of MROUND()** -> you will get the result as shown below:

	A	B	C	D	E
1	<b>Hàm CEILING và FLOOR trong Excel</b> Thực hiện: Taimienphi.vn				
2	<b>Number</b>	<b>Significance</b>	<b>FLOOR</b>	<b>CEILING</b>	<b>MROUND</b>
3	123.456	0.27	123.39	123.66	123.39
4	124.456	0.56	124.32	124.88	124.32
5	125.456	0.75	125.25	126	125.25
6	126.456	1	126	127	126
7	127.456	125	125	250	125
8	128.456	1.5	127.5	129	129
9	129.456	1.75	127.75	129.5	129.5
10	130.456	2	130	132	130
11	131.456	2.5	130	132.5	132.5
12	132.456	0	#DIV/0!	0	0

## 5. EVEN() and ODD() functions

These two functions round very simply. **EVEN()** rounds to the nearest even integer, and **ODD()** rounds to the nearest odd integer. Both round away from zero.

### Syntax:

**EVEN(number)**

**ODD(number)**

### Example:

Suppose you need to round numbers in Excel and use 2 functions **EVEN** and **ODD** , you get the result as illustrated below:

Hàm EVEN và ODD trong Excel		
Thực hiện: Taimienphi.vn		
Number	Cú pháp	Kết quả hàm tính
19.2	EVEN(number)	20
-29		-30
59.1	ODD(number)	61
-8		-9

## 6. INT() and TRUNC() functions

These two functions are almost the same in usage if you want to round a number to an integer.

### Syntax:

**INT(number)**

**TRUNC(number [, num\_digits])**

- **Num\_digits** : Is an integer, indicating how you want to truncate the number
- **Num\_digits** > 0 if **Number** is a decimal number, then **Num\_digits** indicates the number of decimal places you want to keep (after the decimal point)
- **Num\_digits** = 0 or not entered: remove all decimal parts of **Number** (if any)
- **Num\_digits** less than rounds **Number** to an integer and rounds **Number** left to a multiple of 10.

**The INT()** function rounds a number to the nearest integer.

For positive numbers, **INT()** and **TRUNC()** give the same result ( **Num\_digits** of **TRUNC()** = **0** or none), but for negative numbers, the two functions give completely different results.

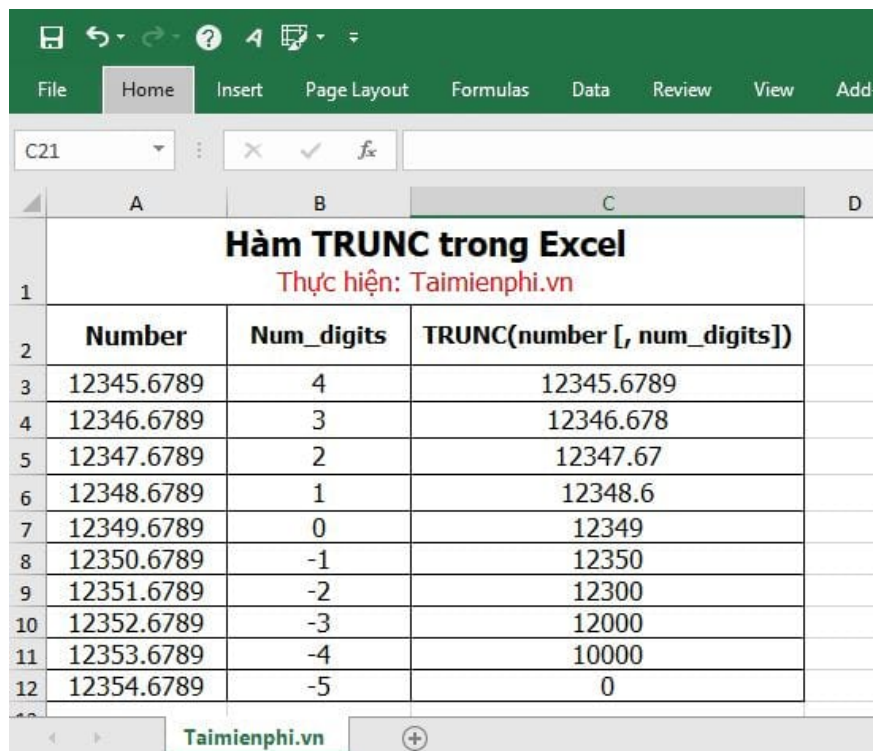
### Example:

$\text{INT}(123,456) = 123$  |  $\text{TRUNC}(123,456) = 123$

$\text{INT}(-123.456) = -124$  |  $\text{TRUNC}(-123.456) = -123$

When **Num\_digits** is not 0, **TRUNC()** is different from **ROUND()** in that: **ROUND()** rounds, while **TRUNC()** only truncates the number but does not round.

Some examples of the **TRUNC()** function to help you visualize:



	A	B	C	D
1	<b>Hàm TRUNC trong Excel</b> Thực hiện: Taimienphi.vn			
2	<b>Number</b>	<b>Num_digits</b>	<b>TRUNC(number [, num_digits])</b>	
3	12345.6789	4	12345.6789	
4	12346.6789	3	12346.678	
5	12347.6789	2	12347.67	
6	12348.6789	1	12348.6	
7	12349.6789	0	12349	
8	12350.6789	-1	12350	
9	12351.6789	-2	12300	
10	12352.6789	-3	12000	
11	12353.6789	-4	10000	
12	12354.6789	-5	0	

TipsMake has just introduced you to how to use rounding functions in Excel, including: ROUND, ROUNDUP, ROUNDDOWN, MROUND, CEILING, FLOOR, EVEN, ODD, INT and TRUNC.

When working with Excel, understanding the rounding functions will help you calculate more accurately and conveniently. In addition, you should also learn the basic functions in Excel to improve work efficiency and process data effectively.

You finished reading the article "**How to use the rounding function in Excel simply and effectively**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.