



Mathematical Functions in Excel

Microsoft Excel has plenty of mathematical functions that help perform various mathematical operations. In this article, you will get to know 44 mathematical functions in Excel.

Table of Contents

Introduction	1
Most Common Excel Mathematical Functions	2
The AVERAGE Function	2
	3
The CEILING Function	4
The COUNT Function	5
	6
	7
The EVEN Function	8
The FLOOR Function	9
	10
The INT Function	11
The LARGE Function	12
The LCM Function	13
The MAX Function	14
The MIN Function	15
	16
The MOD Function	17
The ODD Function	18
The PRODUCT Function	19
The RAND Function	20
The RANDBETWEEN Function	21
The ROUND Function	22
The ROUNDUP Function	23
The ROUNDDOWN Function	24
The SQRT Function	25
The SMALL Function	26
The SUM Function	27
The SUMPRODUCT Function	28
The TRUNC Function	29
More Mathematical Functions in Excel	30
The ABS Function	30
The AGGREGATE Function	31

The ARABIC Function	32
The BASE Function	33
The COMBIN Function	34
The DECIMAL Function	35
The EXP Function	36
The FACT Function	37
The FACTDOUBLE Function	38
The LN Function	39
The LOG Function	40
The MEDIAN Function	41
The MROUND Function	42
The POWER Function	43
The QUOTIENT Function	44
The SUMSQ Function	45
Conclusion	46

Most Common Excel Mathematical Functions

1. The AVERAGE Function

- **Function Objective:**
The [AVERAGE function](#) calculates the average of numbers in a range of cells.
- **Syntax:**
AVERAGE(number1, [number2], ...)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number1	Required	The first number for which you want to calculate the average.
number2	Optional	The second number for which you want to calculate the average.

- **Return Parameter:**
The average of all the numbers in a range of cells.
- **AVERAGE Function in Action:**

	A	B	C	D
1				
2		Usage of AVERAGE Function		
3				
4		Number1	Number2	Average
5		34	27	=AVERAGE(B5:C5)
6		33	88	60.5
7		57	78	67.5
8		61	33	47
9		87	43	65
10		53	93	73
11		49	39	44
12		45	100	72.5

2. The AVERAGEA Function

- Function Objective:**
 The [AVERAGEA function](#) calculates the arithmetic mean of numbers in a range of cells.
- Syntax:**
 $AVERAGEA(value1, [value2], ...)$
- Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
value1	Required	The first number for which you want to calculate the arithmetic mean.
value2	Optional	The second number for which you want to calculate the arithmetic mean.

- Return Parameter:**
 The arithmetic mean of all the numbers in a range of cells.
- AVERAGEA Function in Action:**

	A	B	C	D
1				
2		Usage of AVERAGEA Function		
3				
4		Number1	Number2	Arithmetic Mean
5		34	27	=AVERAGEA(B5:C5)
6		33	88	60.5
7		57	78	67.5
8		61	33	47
9		87	43	65
10		53	93	73
11		49	39	44
12		45	100	72.5

3. The CEILING Function

- **Function Objective:**
The [CEILING function](#) rounds a number away from zero, to the nearest multiple of the significance.
- **Syntax:**
CEILING(number, significance)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The fraction number that you want to round off.
<i>significance</i>	Required	The number to which you want to round off values.

- **Return Parameter:**
Rounded off version of an input number.
- **CEILING Function in Action:**

	A	B	C
1			
2		Usage of CEILING Function	
3			
4		Number1	Rounded off
5		34.3	=CEILING(B5,3)
6		3.3	6
7		5.7	6
8		6.1	9
9		8.7	9
10		5.3	6
11		4.9	6
12		4.5	6

4. The COUNT Function

- **Function Objective:**
The [COUNT function](#) counts the number of cells that contain numbers.
- **Syntax:**
COUNT(value1, [value2], ...)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
value1	Required	The first cell to count.
value2	Optional	The second cell to count.

- **Return Parameter:**
The count value of a number of cells that contain numbers.
- **COUNT Function in Action:**

	A	B	C	D
1				
2		Usage of COUNT Function		
3				
4		Number1	Number2	Count
5		34	27	=COUNT(B5:C5)
6		33	88	2
7		57	78	2
8		61	33	2
9		87	43	2
10		53	93	2
11		49	39	2
12		45	100	2

5. The COUNTA Function

- **Function Objective:**
The [COUNTA function](#) counts the number of cells that are not blank.
- **Syntax:**
COUNTA(value1, [value2], ...)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
value1	Required	The first cell to count.
value2	Optional	The second cell to count.

- **Return Parameter:**
The count value of a number of cells that are not empty.
- **COUNTA Function in Action:**

	A	B	C	D
1				
2		Usage of COUNTA Function		
3				
4		Number1	Number2	Count
5		34	27	=COUNTA(B5:C5)
6		33		1
7		57	78	2
8		61		1
9		87		1
10		53		1
11		49	39	2
12		45	100	2

6. The COUNTBLANK Function

- **Function Objective:**
The [COUNTBLANK function](#) counts the number of blank cells in a range of cells.
- **Syntax:**
COUNTBLANK(range)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
range	Required	The range within which you want to count the number of blank cells.

- **Return Parameter:**
The count number of the blank cells.
- **COUNTBLANK Function in Action:**

	A	B	C	D
1				
2		Usage of COUNTBLANK Function		
3				
4		Number1	Number2	Count Blanks
5		34	27	=COUNTBLANK(B5:C5)
6		33		1
7		57	78	0
8		61		1
9		87		1
10		53		1
11		49	39	0
12		45	100	0

7. The EVEN Function

- **Function Objective:**
The [EVEN function](#) rounds up numbers to the nearest even integer.
- **Syntax:**
EVEN(number)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number to be rounded up to the nearest even integer.

- **Return Parameter:**
The rounded up number to the nearest even integer.
- **EVEN Function in Action:**

	A	B	C
1			
2		Usage of EVEN Function	
3			
4		Number1	Nearest Even Integer
5		34	=EVEN(B5)
6		33	34
7		57	58
8		61	62
9		87	88
10		53	54
11		49	50
12		45	46

8. The FLOOR Function

- Function Objective:**
 The [FLOOR function](#) rounds a number towards zero, to the nearest multiple of the significance.
- Syntax:**
FLOOR(number, significance)
- Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The fraction number that you want to round off.
significance	Required	The number to which you want to round off values.

- Return Parameter:**
 Rounded off version of an input number.
- FLOOR Function in Action:**

	A	B	C
1			
2		Usage of FLOOR Function	
3			
4		Number1	Rounded off
5		34.3	=FLOOR(B5,3)
6		3.3	3
7		5.7	3
8		6.1	6
9		8.7	6
10		5.3	3
11		4.9	3
12		4.5	3

9. The GCD Function

- **Function Objective:**

The [GCD function](#) calculates the greatest common divisor of two or more integer numbers.

- **Syntax:**

GCD(number1, [number2], ...)

- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number1	Required	The first number to calculate the GCD.
number2	Required	The second number to calculate the GCD.

- **Return Parameter:**

GCD of two or more integers.

- **GCD Function in Action:**

	A	B	C	D
1				
2		Usage of GCD Function		
3				
4		Number1	Number2	GCD
5		34	27	=GCD(B5:C5)
6		33	88	11
7		57	78	3
8		61	33	1
9		87	43	1
10		53	93	1
11		49	39	1
12		45	100	5

10. The INT Function

- **Function Objective:**
The [INT function](#) rounds up numbers to the nearest integer.
- **Syntax:**
INT(number)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number to be rounded up to the nearest integer.

- **Return Parameter:**
The rounded up number to the nearest integer.
- **INT Function in Action:**

	A	B	C
1			
2		Usage of INT Function	
3			
4		Number1	Nearest Integer
5		34.3	=INT(B5)
6		3.3	5
7		5.7	7
8		6.1	7
9		8.7	9
10		5.3	7
11		4.9	5
12		4.5	5

11. The LARGE Function

- **Function Objective:**

The [LARGE function](#) returns the k-th largest value in a range of numbers or arrays.

- **Syntax:**

LARGE(array, k)

Arguments Explanation:

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
array	Required	The range of numbers where to find the largest number.
k	Required	The position in a range of numbers of arrays that is to return.

- **Return Parameter:**

The k-th largest number in an array..

- **LARGE Function in Action:**

The screenshot shows an Excel spreadsheet with the following content:

Number1
34.3
3.3
5.7
6.1
8.7
5.3
4.9
4.5

Below the table, the 'K-th Largest Number' is shown as 34.3. The formula bar at the top displays the formula `=LARGE(B5:B12,1)`.

12. The LCM Function

- Function Objective:**
 The [LCM function](#) calculates the least common multiple of two or more integer numbers.
- Syntax:**
 $LCM(\text{number1}, [\text{number2}], \dots)$
- Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number1	Required	The first number to calculate the LCM.
number2	Required	The second number to calculate the LCM.

- Return Parameter:**
 LCM of two or more integers.
- LCM Function in Action:**

	A	B	C	D
1				
2		Usage of LCM Function		
3				
4		Number1	Number2	LCM
5		34	27	=LCM(B5:C5)
6		33	88	264
7		57	78	1482
8		61	33	2013
9		87	43	3741
10		53	93	4929
11		49	39	1911
12		45	100	900

13. The MAX Function

- **Function Objective:**
The [MAX function](#) returns the largest number in a set of numbers.
- **Syntax:**
MAX(number1, [number2], ...)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number1	Required	The first number in the list to return the largest among them.
number2	Optional	The second number in the list to return the largest among them.

- **Return Parameter:**
The largest number in a set of numbers.
- **MAX Function in Action:**

	A	B	C	D
1				
2		Usage of MAX Function		
3				
4		Number1	Number2	Largest Number
5		34	27	=MAX(B5:C5)
6		33	88	88
7		57	78	78
8		61	33	61
9		87	43	87
10		53	93	93
11		49	39	49
12		45	100	100

14. The MIN Function

- **Function Objective:**
The [MIN function](#) returns the smallest number in a set of numbers.
- **Syntax:**
MIN(number1, [number2], ...)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number1	Required	The first number in the list to return the smallest among them.
number2	Optional	The second number in the list to return the smallest among them.

- **Return Parameter:**
The smallest number in a set of numbers.
- **MIN Function in Action:**

	A	B	C	D
1				
2		Usage of MIN Function		
3				
4		Number1	Number2	Smallest Number
5		34	27	=MIN(B5:C5)
6		33	88	33
7		57	78	57
8		61	33	33
9		87	43	43
10		53	93	53
11		49	39	39
12		45	100	45

15. The MMULT Function

- **Function Objective:**
The [MMULT function](#) returns the matrix product of two arrays.
- **Syntax:**
MMULT(array1, array2)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
array1	Required	The first array to calculate the matrix product.
array2	Optional	The second array to calculate the matrix product.

- **Return Parameter:**
Matrix product of two arrays.
- **MMULT Function in Action:**

	A	B	C	D
1				
2		Usage of MMULT Function		
3				
4		Number1	Number2	Matrix Product
5		34	27	=MMULT(B5,C5)
6		33	88	2904
7		57	78	4446
8		61	33	2013
9		87	43	3741
10		53	93	4929
11		49	39	1911
12		45	100	4500

16. The MOD Function

- **Function Objective:**

The [MOD function](#) returns the remainder when a number is divided by a divisor.

- **Syntax:**

MOD(number, divisor)

- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number which you want to divide.
divisor	Required	The number with which you want to divide another number.

- **Return Parameter:**

The remainder when a number is divided by a divisor.

- **MOD Function in Action:**

	A	B	C
1			
2		Usage of MOD Function	
3			
4		Number1	Remainder
5		34	=MOD(B5,3)
6		34	1
7		58	1
8		62	2
9		88	1
10		54	0
11		50	2
12		46	1

17. The ODD Function

- **Function Objective:**
The [ODD function](#) rounds up numbers to the nearest odd integer.
- **Syntax:**
ODD(number)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number to be rounded up to the nearest odd integer.

- **Return Parameter:**
The rounded up number to the nearest odd integer.
- **ODD Function in Action:**

	A	B	C
1			
2		Usage of ODD Function	
3			
4		Number1	Nearest Odd Integer
5		34	=ODD(B5)
6		33	33
7		57	57
8		61	61
9		87	87
10		53	53
11		49	49
12		45	45

18. The PRODUCT Function

- **Function Objective:**
The [PRODUCT function](#) multiplies all the numbers given as arguments.
- **Syntax:**
PRODUCT(number1, [number2], ...)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number1	Required	The first number to multiply.
number2	Optional	The second number to multiply.

- **Return Parameter:**
The product of input numbers.
- **PRODUCT Function in Action:**

	A	B	C	D
1				
2		Usage of PRODUCT Function		
3				
4		Number1	Number2	Product
5		34	27	=PRODUCT(B5:C5)
6		33	88	2904
7		57	78	4446
8		61	33	2013
9		87	43	3741
10		53	93	4929
11		49	39	1911
12		45	100	4500

19. The RAND Function

- **Function Objective:**
The [RAND function](#) returns a random value in between 0 and 1.
- **Syntax:**
RAND()
- **Arguments Explanation:**
It has no argument.
- **Return Parameter:**
A random value in between 0 and 1.
- **RAND Function in Action:**

	A	B
1		
2		Usage of RAND Function
3		
4		Random Numbers
5		=RAND()
6		0.568030737
7		0.946127954
8		0.972475188
9		0.371765166
10		0.967998599
11		0.022501157
12		0.322255189

20. The RANDBETWEEN Function

- **Function Objective:**

The [RANDBETWEEN function](#) returns a random number between a top and a bottom number.

- **Syntax:**

RANDBETWEEN(bottom, top)

- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
bottom	Required	The lowest number of the range.
top	Required	The highest number of the range.

- **Return Parameter:**

A random number between a top and a bottom number.

- **RANDBETWEEN Function in Action:**

	A	B
1		
2		Usage of RANDBETWEEN Function
3		
4		Random Numbers
5		=RANDBETWEEN(10,20)
6		14
7		13
8		10
9		12
10		20
11		14
12		17

21. The ROUND Function

- **Function Objective:**
The [ROUND function](#) rounds a number to a certain decimal place.
- **Syntax:**
ROUND(number, num_digits)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The fraction number that you want to round off.
<i>num_digits</i>	Required	The number of digits that you want to allow after the decimal point.

- **Return Parameter:**
Rounded off version of an input number.
- **ROUND Function in Action:**

	A	B	C
1			
2		Usage of ROUND Function	
3			
4		Number1	Rounded off
5		34.33	=ROUND(B5,1)
6		3.53	3.5
7		5.77	5.8
8		6.561	6.6
9		8.567	8.6
10		5.733	5.7
11		4.656359	4.7
12		4.556	4.6

22. The ROUNDUP Function

- **Function Objective:**
The [ROUNDUP function](#) rounds a number off, away from zero.
- **Syntax:**
ROUNDUP(number, num_digits)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The fraction number that you want to round off.
<i>num_digits</i>	Required	The number of digits that you want to allow after the decimal point.

- **Return Parameter:**
Rounded off version of an input number.
- **ROUNDUP Function in Action:**

	A	B	C
1			
2		Usage of ROUNDUP Function	
3			
4		Number1	Rounded off
5		34.33	=ROUNDUP(B5,1)
6		3.53	3.6
7		5.77	5.8
8		6.561	6.6
9		8.567	8.6
10		5.733	5.8
11		4.656359	4.7
12		4.556	4.6

23. The ROUNDDOWN Function

- **Function Objective:**
The [ROUNDDOWN function](#) rounds a number towards zero.
- **Syntax:**
ROUNDDOWN(number, num_digits)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The fraction number that you want to round off.
<i>num_digits</i>	Required	The number of digits that you want to allow after the decimal point.

- **Return Parameter:**
Rounded off version of an input number.
- **ROUNDDOWN Function in Action:**

	A	B	C
1			
2		Usage of ROUNDDOWN Function	
3			
4		Number1	Rounded off
5		34.33	=ROUNDDOWN(B5,1)
6		3.53	3.5
7		5.77	5.7
8		6.561	6.5
9		8.567	8.5
10		5.733	5.7
11		4.656359	4.6
12		4.556	4.5

24. The SQRT Function

- **Function Objective:**
The [SQRT function](#) returns the square root of a given number.
- **Syntax:**
SQRT(number)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number to calculate the square root.

- **Return Parameter:**
The square root value of a given number.
- **SQRT Function in Action:**

	A	B	C
1			
2		Usage of SQRT Function	
3			
4		Number1	Square Root
5		34.3	=SQRT(B5)
6		3.3	1.816590212
7		5.7	2.387467277
8		6.1	2.469817807
9		8.7	2.949576241
10		5.3	2.302172887
11		4.9	2.213594362
12		4.5	2.121320344

25. The SMALL Function

- **Function Objective:**
The [SMALL function](#) returns the k-th smallest value in a range of numbers or arrays.
- **Syntax:**
SMALL(array, k)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
array	Required	The range of numbers where to find the smallest number.
k	Required	The position in a range of numbers of arrays that is to return.

- **Return Parameter:**
The k-th smallest number in an array..
- **SMALL Function in Action:**

The screenshot shows an Excel spreadsheet with the following data:

Number1
34.3
3.3
5.7
6.1
8.7
5.3
4.9
4.5

Below the table, the 'K-th Smallest Number' is identified as 3.3. The formula bar shows the function `=SMALL(B5:B12,1)` applied to cell C14.

26. The SUM Function

- **Function Objective:**
The [SUM function](#) adds values in a range of cells.
- **Syntax:**
 $SUM(number1,[number2],...)$
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number1	Required	The first number that you want to add.
number2	Optional	The second number that you want to add.

- **Return Parameter:**
The summation of all the numbers in a range of cells.
- **SUM Function in Action:**

	A	B	C	D
1				
2		Usage of SUM Function		
3				
4		Number1	Number2	SUM
5		34	27	=SUM(B5:C5)
6		33	88	121
7		57	78	135
8		61	33	94
9		87	43	130
10		53	93	146
11		49	39	88
12		45	100	145

27. The SUMPRODUCT Function

- **Function Objective:**
- The SUMPRODUCT function calculates the sum of the product of a range of numbers or arrays..
- **Syntax:**
=SUMPRODUCT(array1, [array2]...)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
array1	Required	The first array to calculate the sum of the product.
array2	Optional	The second array to calculate the sum of the product.

- **Return Parameter:**
The sum of the product of the arrays.
- **SUMPRODUCT Function in Action:**

	A	B	C	D
1				
2		Usage of SUMPRODUCT Function		
3				
4		Number1	Number2	Sum of Product
5		34	27	=SUMPRODUCT(B5:B12,C5:C12)
6		33	88	24444
7		57	78	21540
8		61	33	17094
9		87	43	15081
10		53	93	11340
11		49	39	6411
12		45	100	4500

28. The TRUNC Function

- **Function Objective:**

The [TRUNC function](#) removes the fractional part from a decimal fraction number.

- **Syntax:**

TRUNC(number, [num_digits])

- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The fraction number that you want to truncate.
<i>num_digits</i>	Required	The number of digits that you want to allow after the decimal point.

- **Return Parameter:**

Rounded off version of an input number.

- **TRUNC Function in Action:**

	A	B	C
1			
2		Usage of TRUNC Function	
3			
4		Number1	Rounded off
5		34.3	=TRUNC(B5,0)
6		3.3	3
7		5.7	5
8		6.1	6
9		8.7	8
10		5.3	5
11		4.9	4
12		4.5	4

More Mathematical Functions in Excel

1. The ABS Function

- **Function Objective:**
The [ABS function](#) calculates the absolute value of a number.
- **Syntax:**
ABS(number)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number to calculate the absolute value.

- **Return Parameter:**
The absolute value of a given number.
- **ABS Function in Action:**

	A	B	C
1			
2		Usage of ABS Function	
3			
4		Number1	Absolute Value
5		-34.3	=ABS(B5)
6		-3.3	3.3
7		-5.7	5.7
8		-6.1	6.1
9		-8.7	8.7
10		-5.3	5.3
11		-4.9	4.9
12		-4.5	4.5

2. The AGGREGATE Function

- Function Objective:**
 The [AGGREGATE function](#) returns an aggregate from a list or database.
- Syntax:**
 $AGGREGATE(\text{function_num}, \text{options}, \text{ref1}, [\text{ref2}], \dots)$
- Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
function_num	Required	A number from 1 to 19 representing a function.
options	Required	A number that decides which value to ignore while evaluating the range for a function.
ref1	Required	The first number for functions that take multiple numeric arguments for which you want the aggregate value.

ref2	Optional	Numeric arguments 2 to 253 for which the aggregate value is determined
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- **Return Parameter:**
The aggregate value of function.
- **AGGREGATE Function in Action:**

	A	B	C
1			
2		Usage of AGGREGATE Function	
3			
4		Number1	Aggregate
5		-34.3	=AGGREGATE(4, 6, B5:B12)
6		-3.3	-3.3
7		-5.7	-4.5
8		-6.1	-4.5
9		-8.7	-4.5
10		-5.3	-4.5
11		-4.9	-4.5
12		-4.5	-4.5

3. The ARABIC Function

- **Function Objective:**
The [ARABIC function](#) converts roman numerical values to the arabic numerical values.
- **Syntax:**
ARABIC(text)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
text	Required	A string of text enclosed in quotation marks, an empty string (""), or a

		cell reference that contains text.
--	--	------------------------------------

- **Return Parameter:**
Arabic numerical values.
- **ARABIC Function in Action:**

	A	B	C
1			
2		Usage of ARABIC Function	
3			
4		Number1	Arabic Numericals
5		I	=ARABIC(B5)
6		II	2
7		III	3
8		M	1000
9		C	100
10		L	50
11		X	10
12		XI	11

4. The BASE Function

- **Function Objective:**
The [BASE function](#) converts a number into a certain radix of text representation.
- **Syntax:**
BASE(Number, Radix [Min_length])
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
Number	Required	The number that you want to convert.
Radix	Required	The base radix that you want your number to be converted into.

Min_length	Optional	Minimum length of the returned string.
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- **Return Parameter:**
A text of certain radix.
- **BASE Function in Action:**

	A	B	C
1			
2		Usage of BASE Function	
3			
4		Number1	Binary
5		1	=BASE(B5, 2)
6		2	10
7		3	11
8		1000	1111101000
9		100	1100100
10		50	110010
11		10	1010
12		11	1011

5. The COMBIN Function

- **Function Objective:**
The [COMBIN function](#) returns the number of possible combinations of a given number.
- **Syntax:**
COMBIN(number, number_chosen)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number of items to calculate the combination number.
number_chosen	Required	The number in each combination.

- **Return Parameter:**
The number of combinations.
- **COMBIN Function in Action:**

	A	B	C	D
1				
2		Usage of COMBIN Function		
3				
4		Number1	Number2	No. of Combination
5		34	2	=COMBIN(B5,C5)
6		33	3	5456
7		57	4	395010
8		61	5	5949147
9		87	6	504981379
10		53	7	154143080
11		49	8	450978066
12		45	9	886163135

6. The DECIMAL Function

- **Function Objective:**
The [DECIMAL function](#) converts a given base into a decimal number.
- **Syntax:**
DECIMAL(text, radix)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
text	Required	The item to convert into decimal.
radix	Required	An integer value that defines the radix.

- **Return Parameter:**
The decimal representation of texts.
- **DECIMAL Function in Action:**

	A	B	C
1			
2		Usage of DECIMAL Function	
3			
4		Number1	Decimal
5		1	=DECIMAL(B5, 2)
6		10	2
7		11	3
8		1111101000	1000
9		1100100	100
10		110010	50
11		1010	10
12		1011	11

7. The EXP Function

- Function Objective:**
 The [EXP function](#) returns the value of exponent applied to the base e.
- Syntax:**
 $EXP(number)$
- Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number that you want to apply to the base e.

- Return Parameter:**
 The value of exponent applied to the base e.
- EXP Function in Action:**

	A	B	C
1			
2			Usage of EXP Function
3			
4		Number1	Exponent
5		1	=EXP(B5)
6		2	7.389056099
7		3	20.08553692
8		100	2.68812E+43
9		100	2.68812E+43
10		50	5.18471E+21
11		10	22026.46579
12		11	59874.14172

8. The FACT Function

- **Function Objective:**
The [FACT function](#) returns the factorial of a number.
- **Syntax:**
FACT(number)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number to calculate the factorial.

- **Return Parameter:**
The factorial of a given number.
- **FACT Function in Action:**

	A	B	C
1			
2		Usage of FACT Function	
3			
4		Number1	Factorial
5		1	=FACT(B5)
6		2	2
7		3	6
8		4	24
9		5	120
10		6	720
11		7	5040
12		8	40320

9. The FACTDOUBLE Function

- **Function Objective:**
The [FACTDOUBLE function](#) returns the double factorial of a number.
- **Syntax:**
FACTDOUBLE(number)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number to calculate the double factorial.

- **Return Parameter:**
The double factorial value of a given number.
- **FACTDOUBLE Function in Action:**

	A	B	C
1			
2		Usage of FACTDOUBLE Function	
3			
4		Number1	Double Factorial
5		1	=FACTDOUBLE(B5)
6		2	2
7		3	3
8		4	8
9		5	15
10		6	48
11		7	105
12		8	384

10. The LN Function

- **Function Objective:**
The [LN function](#) returns the natural logarithm of a number.
- **Syntax:**
LN(number)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The number to calculate the natural logarithm.

- **Return Parameter:**
The natural logarithm of a given number.
- **LN Function in Action:**

	A	B	C
1			
2			Usage of LN Function
3			
4		Number1	Natural Logarithm
5		1	=LN(85)
6		2	0.693147181
7		3	1.098612289
8		4	1.386294361
9		5	1.609437912
10		6	1.791759469
11		7	1.945910149
12		8	2.079441542

11. The LOG Function

- **Function Objective:**
The [LOG function](#) returns the logarithm of a specific base.
- **Syntax:**
 $LOG(number, [base])$
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The positive real number to calculate the logarithm.
base	Optional	The base of the logarithm.

- **Return Parameter:**
The logarithm of a specific base.
- **LOG Function in Action:**

	A	B	C
1			
2		Usage of LOG Function	
3			
4		Number1	Logarithm
5		1	=LOG(B5,10)
6		2	0.301029996
7		3	0.477121255
8		4	0.602059991
9		5	0.698970004
10		6	0.77815125
11		7	0.84509804
12		8	0.903089987

12. The MEDIAN Function

- **Function Objective:**
- The [MEDIAN function](#) calculates the median of a range of cells of numbers.
- **Syntax:**
MEDIAN(number1, [number2], ...)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number1	Required	The first number to calculate the median.
number2	Optional	The second number to calculate the median.

- **Return Parameter:**
The median of all the numbers in a range of cells.
- **MEDIAN Function in Action:**

	A	B	C	D
1				
2		Usage of MEDIAN Function		
3				
4		Number1	Number2	Median
5		34	27	=MEDIAN(B5:C5)
6		33	88	60.5
7		57	78	67.5
8		61	33	47
9		87	43	65
10		53	93	73
11		49	39	44
12		45	100	72.5

13. The MROUND Function

- **Function Objective:**
The [MROUND function](#) rounds off a number to the desired multiple.
- **Syntax:**
MROUND(number, multiple)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The fraction number that you want to round off.
<i>multiple</i>	Required	The number to which you want to round off your number to.

- **Return Parameter:**
Rounded off version of an input number.
- **MROUND Function in Action:**

	A	B	C
1			
2		Usage of MROUND Function	
3			
4		Number1	Rounded off
5		34.33	=MROUND(B5,2)
6		3.53	4
7		5.77	6
8		6.561	6
9		8.567	8
10		5.733	6
11		4.656359	4
12		4.556	4

14. The POWER Function

- **Function Objective:**
The [POWER function](#) calculates the number raised to a power.
- **Syntax:**
POWER(number, power)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number	Required	The base number to insert.
power	Required	The exponent to which the base number is raised.

- **Return Parameter:**
The result of a number raised to an exponent.
- **POWER Function in Action:**

	A	B	C	D
1				
2		Usage of POWER Function		
3				
4		Number1	Number2	Result
5		2	1	=POWER(B5,C5)
6		4	2	16
7		6	3	216
8		8	4	4096
9		10	5	100000
10		12	6	2985984
11		14	7	105413504
12		16	8	4294967296

15. The QUOTIENT Function

- **Function Objective:**
The [QUOTIENT function](#) returns the integer part of a division.
- **Syntax:**
QUOTIENT(numerator, denominator)
- **Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
numerator	Required	The dividend.
denominator	Required	The divisor.

- **Return Parameter:**
The integer part of a division.
- **QUOTIENT Function in Action:**

	A	B	C	D
1				
2		Usage of QUOTIENT Function		
3				
4		Number1	Number2	Quotient
5		21	1	=QUOTIENT(B5,C5)
6		43	2	21
7		65	3	21
8		81	4	20
9		130	5	26
10		123	6	20
11		141	7	20
12		163	8	20

16. The SUMSQ Function

- Function Objective:**
 The [SUMSQ function](#) returns the sum of the squares of the numbers.
- Syntax:**
 $SUMSQ(number1, [number2], ...)$
- Arguments Explanation:**

ARGUMENTS	REQUIRED/OPTIONAL	EXPLANATION
number1	Required	The first number to calculate the sum of the squares.
number2	Optional	The second number to calculate the sum of the squares.

- Return Parameter:**
 The sum of the squares of the numbers.
- SUMSQ Function in Action:**

	A	B	C	D
1				
2		Usage of SUMSQ Function		
3				
4		Number1	Number2	Sum of Square
5		34	27	=SUMSQ(B5:C5)
6		33	88	8833
7		57	78	9333
8		61	33	4810
9		87	43	9418
10		53	93	11458
11		49	39	3922
12		45	100	12025

Conclusion

To sum up, we have discussed 44 mathematical functions used in Excel. Please visit our website [Exceldemy](https://www.exceldemy.com) to explore more.