

FLOOR Function

Computes the largest integer that is not more than the input value. Input can be an Integer, a Decimal, a column reference, or an expression.

Basic Usage

Numeric literal example:

```
derive type:single value: FLOOR(2.5)
```

Output: Generates a column with each row's value 2.

Expression example:

```
derive type:single value: FLOOR(MyValue + 2.5)
```

Output: Generates a column containing the largest integer that is less than the sum of 2.5 and the value in the `MyValue` column.

Syntax and Arguments

```
derive type:single value: FLOOR(numeric_value)
```

Argument	Required?	Data Type	Description
numeric_value	Y	string, decimal, or integer	Name of column or Decimal or Integer literal to apply to the function

For more information on syntax standards, see *Language Documentation Syntax Notes*.

numeric_value


Name of the column, numeric literal, or numeric expression.

- Missing input values generate missing results.
- Literal numeric values should not be quoted. Quoted values are treated as strings.
- Multiple columns and wildcards are not supported.

Usage Notes:

Required?	Data Type	Example Value
Yes	String (column reference) or Integer or Decimal literal	2 . 5

Examples

 **Tip:** For additional examples, see *Common Tasks*.

Example - Exponential functions

The following example demonstrates how the rounding functions work together. These functions include the following:

- FLOOR - largest integer that is not greater than the input value. See *FLOOR Function*.
- CEILING - smallest integer that is not less than the input value. See *CEILING Function*.
- ROUND - nearest integer to the input value. See *ROUND Function*.
- MOD - remainder integer when input1 is divided by input2. See *Numeric Operators*.

Source:

rowNum	X
1	-2.5
2	-1.2
3	0
4	1
5	1.5
6	2.5
7	3.9
8	4
9	4.1
10	11

Transform:

derive type: single value: FLOOR (X) as: 'floorX'

derive type: single value: CEILING (X) as: 'ceilingX'

derive type: single value: ROUND (X) as: 'roundX'

derive type: single value: (X % 2) as: 'modX'

Results:

rowNum	X	modX	roundX	ceilingX	floorX
1	-2.5		-2	-2	-3
2	-1.2		-1	-1	-2
3	0	0	0	0	0
4	1	1	1	1	1
5	1.5		2	2	1
6	2.5		3	3	2
7	3.9		4	4	3
8	4	0	4	4	4
9	4.1		4	5	4
10	11	1	11	11	11