ABS Function

Computes the absolute value of a given numeric value. The value can be a Decimal or Integer literal or a reference to a column containing numeric values.

Basic Usage

Column reference example:

```
abs(MyInteger)
```

Output: Returns the absolute value of each value found in the `MyInteger` column.

Numeric literal example:

```
(abs(MyInteger) == 5)
```

Output: Returns `true` if the absolute value of the entry in the `MyInteger` column is 5.

Syntax and Arguments

```
abs(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 or numeric literal whose absolute value is to be computed.

- 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 value	`-10.5`

Examples

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

Example - Basic ABS function

Source:

Your source data looks like the following, which measures coordinate distances from a fixed point on a grid:

X	Y
-2	4
-6.2	-2
0	-4.2
4	4
15	-0.05

Transform:

You can use the following transform to derive the absolute values of these columns, which now measure distance from the fixed point:

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	abs(X)
Parameter: New column name	'distanceX'

Transformation Name	New formula
Parameter: Formula type	Single row formula
Parameter: Formula	abs(y)
Parameter: New column name	'distanceY'

Results:

X	Y	distanceX	distanceY
-2	4	2	4
-6.2	-2	6.2	2
0	-4.2	0	4.2
4	4	4	4
15	-0.05	15	0.05

You can then use `POW` and `SQRT` functions to compute the total distance.