

MULTIPLY Function

Returns the value of multiplying the first argument by the second argument. Equivalent to the * operator.

- Each argument can be a literal Integer or Decimal number, a function returning a number, or a reference to a column containing numeric values.

NOTE: Within an expression, you might choose to use the corresponding operator, instead of this function. For more information, see *Numeric Operators*.

Wrangle vs. SQL: This function is part of Wrangle , a proprietary data transformation language. Wrangle is not SQL. For more information, see *Wrangle Language*.

Basic Usage

```
multiply(10,4)
```

Output: Returns the multiplication of 10 and 4, which is 40.

Syntax and Arguments

```
multiply(value1, value2)
```

| Argument | Required? | Data Type | Description |
|----------|-----------|-----------|---|
| value1 | Y | string | The first value must be an Integer or Decimal literal, column reference, or expression that evaluates to one of those two numeric types. |
| value2 | Y | string | The second value must be an Integer or Decimal literal, column reference, or expression that evaluates to one of those two numeric types. |

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

value1, value2

Integer or Decimal expressions, column references or literals to multiply together.

- Missing or mismatched values generate missing string results.

Usage Notes:

| Required? | Data Type | Example Value |
|-----------|--|---------------|
| Yes | Literal, function, or column reference returning an Integer or Decimal value | 15 |

Examples

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

Example - Numeric Functions

This example demonstrates how to use numeric functions to perform computations in your recipe steps.

Functions:

| Item | Description |
|-------------------|---|
| ADD Function | Returns the value of summing the first argument and the second argument. Equivalent to the + operator. |
| MOD Function | Returns the modulo value, which is the remainder of dividing the first argument by the second argument. Equivalent to the % operator. |
| NEGATE Function | Returns the opposite of the value that is the first argument. Equivalent to the – operator placed in front of the argument. |
| SUBTRACT Function | Returns the value of subtracting the second argument from the first argument. Equivalent to the – operator. |
| MULTIPLY Function | Returns the value of multiplying the first argument by the second argument. Equivalent to the * operator. |
| DIVIDE Function | Returns the value of dividing the first argument by the second argument. Equivalent to the / operator. |
| LCM Function | Returns the least common multiple shared by the first and second arguments. |

Source:

| ValueA | ValueB |
|--------|--------|
| 8 | 2 |
| 10 | 4 |
| 15 | 10 |
| 5 | 6 |

Transformation:

Execute the following transformation steps:

| | |
|-----------------------------------|---------------------|
| Transformation Name | New formula |
| Parameter: Formula type | Single row formula |
| Parameter: Formula | ADD(ValueA, ValueB) |
| Parameter: New column name | 'add' |

| | |
|--------------------------------|--------------------------|
| Transformation Name | New formula |
| Parameter: Formula type | Single row formula |
| Parameter: Formula | SUBTRACT(ValueA, ValueB) |

| | |
|-----------------------------------|------------|
| Parameter: New column name | 'subtract' |
|-----------------------------------|------------|

| | |
|-----------------------------------|--------------------------|
| Transformation Name | New formula |
| Parameter: Formula type | Single row formula |
| Parameter: Formula | MULTIPLY(ValueA, ValueB) |
| Parameter: New column name | 'multiply' |

| | |
|-----------------------------------|------------------------|
| Transformation Name | New formula |
| Parameter: Formula type | Single row formula |
| Parameter: Formula | DIVIDE(ValueA, ValueB) |
| Parameter: New column name | 'divide' |

| | |
|-----------------------------------|---------------------|
| Transformation Name | New formula |
| Parameter: Formula type | Single row formula |
| Parameter: Formula | MOD(ValueA, ValueB) |
| Parameter: New column name | 'mod' |

| | |
|-----------------------------------|--------------------|
| Transformation Name | New formula |
| Parameter: Formula type | Single row formula |
| Parameter: Formula | NEGATE(ValueA) |
| Parameter: New column name | 'negativeA' |

| | |
|-----------------------------------|---------------------|
| Transformation Name | New formula |
| Parameter: Formula type | Single row formula |
| Parameter: Formula | LCM(ValueA, ValueB) |
| Parameter: New column name | 'lcm' |

Results:

With a bit of cleanup, your dataset results might look like the following:

| ValueA | ValueB | lcm | negativeA | mod | divide | multiply | subtract | add |
|--------|--------|-----|-----------|-----|--------------|----------|----------|-----|
| 8 | 2 | 8 | -8 | 0 | 4 | 16 | 6 | 10 |
| 10 | 4 | 20 | -10 | 2 | 2.5 | 40 | 6 | 14 |
| 15 | 10 | 30 | -15 | 5 | 1.5 | 150 | 5 | 25 |
| 5 | 6 | 30 | -5 | 5 | 0.8333333333 | 30 | -1 | 11 |

