

# MAXDATEIF Function

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Returns the maximum Datetime value of rows in each group that meet a specific condition. Set of values must valid Datetime values.

**NOTE:** When added to a transformation, this function is applied to the current sample. If you change your sample or run the job, the computed values for this function are updated. Transformations that change the number of rows in subsequent recipe steps do not affect the values computed for this step.

To calculate the maximum Datetime value of rows without conditionals, use the `MAXDATE` function. See *MAXDATE Function*.

**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

```
maxdateif(incidentDate, serverFailure == 'true')
```

**Output:** Returns the maximum date from the `incidentDate` column when the value in the `serverFailure` column is `true`.

## Syntax and Arguments

```
maxdateif(col_ref, test_expression) [group:group_col_ref] [limit:limit_count]
```

Argument	Required?	Data Type	Description
<code>col_ref</code>	Y	string	Reference to the column you wish to evaluate. Values in the columns must be valid Date values.
<code>test_expression</code>	Y	string	Expression that is evaluated. Must resolve to <code>true</code> or <code>false</code>

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

For more information on the `group` and `limit` parameters, see *Pivot Transform*.

## col\_ref

Name of the column whose values you wish to use in the calculation. Inputs must be Datetime values.

### Usage Notes:

Required?	Data Type	Example Value
Yes	String that corresponds to the name of the column	myDates

## test\_expression

This parameter contains the expression to evaluate. This expression must resolve to a Boolean (`true` or `false`) value.

### Usage Notes:

Required?	Data Type	Example Value
Yes	String expression that evaluates to <code>true</code> or <code>false</code>	<code>(LastName == 'Mouse' &amp;&amp; FirstName == 'Mickey')</code>

## Examples

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

### Example - DATEIF Functions

This example illustrates how you can apply conditionals to calculate minimum, maximum, and most common date values:

- `MINDATEIF` - Minimum of a set of Datetime values by group that meet a specified condition. See *MINDATEIF Function*.
- `MAXDATEIF` - Maximum of a set of Datetime values by group that meet a specified condition. See *MAXDATEIF Function*.
- `MODEDATEIF` - Most common Datetime value by group that meet a specified condition. See *MODEDATEIF Function*.

### Source:

Here is some example transaction data:

Date	Product	Units	UnitCost	OrderValue
3/28/2020	ProductA	4	10.00	40.00
3/8/2020	ProductB	4	20.00	80.00
3/12/2020	ProductC	2	30.00	60.00
3/23/2020	ProductA	1	10.00	10.00
3/20/2020	ProductB	2	20.00	40.00

3/12/2020	ProductC	9	30.00	270.00
3/28/2020	ProductA	5	10.00	50.00
3/23/2020	ProductB	8	20.00	160.00
3/16/2020	ProductC	9	30.00	270.00
3/8/2020	ProductA	5	10.00	50.00
3/10/2020	ProductB	3	20.00	60.00
3/13/2020	ProductC	1	30.00	30.00
3/12/2020	ProductA	7	10.00	70.00
3/10/2020	ProductB	7	20.00	140.00
3/24/2020	ProductC	9	30.00	270.00
3/15/2020	ProductA	8	10.00	80.00
3/10/2020	ProductB	5	20.00	100.00
3/10/2020	ProductC	4	30.00	120.00

**Transformation and Results:**

These functions are useful for asking questions about your data. In the following, you can review specific questions and see the results immediately.

**Question 1:** What is the earliest date when a \$100.00 transaction occurred?

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	mindateif(Date, OrderValue > 100)
<b>Parameter: New column name</b>	'Answers'

**Results:** Value in Answers column: 3/10/2020

**Question 2:** What is the latest date when a \$200.00 transaction occurred?

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	maxdateif(Date, OrderValue > 200)
<b>Parameter: New column name</b>	'Answer'

**Results:** Value in Answers column: 3/24/2020

**Question 3:** On what date did the most transactions occur this month?

<b>Transformation Name</b>	New formula
<b>Parameter: Formula type</b>	Single row formula
<b>Parameter: Formula</b>	modedateif(Date, OrderValue > 0)

<b>Parameter: New column name</b>	'Answer '
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**Results:** Value in Answers column: 3/10/2020