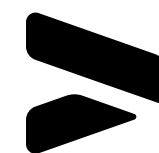




DAX Syntax & DAX Operators & Functions



DAX Syntax

Measure Name

Referenced Table Name

Order Quantity = SUM('Sales Data'[OrderQuantity])

Function Name

Referenced Column Name

The diagram illustrates the components of a DAX measure formula. It features a central example formula: `Order Quantity = SUM('Sales Data'[OrderQuantity])`. Four labels with arrows point to specific parts of this formula: 'Measure Name' points to 'Order Quantity', 'Function Name' points to 'SUM', 'Referenced Table Name' points to ''Sales Data'', and 'Referenced Column Name' points to '[OrderQuantity]'.

Operators

Arithmetic Operator	Meaning	Example
+	Addition	2 + 7
-	Subtraction	5 – 3
*	Multiplication	2 * 6
/	Division	4 / 2
^	Exponent	2 ^ 5

Comparison Operator	Meaning	Example
=	Equal to	[City]="Boston"
>	Greater than	[Quantity]>10
<	Less than	[Quantity]<10
>=	Greater than or equal to	[Unit Price]>=2.5
<=	Less than or equal to	[Unit Price]<=2.5
<>	Not equal to	[Country]<>"Mexico"

Text/Logical Operator	Meaning	Example
&	Concatenates two values to produce one text string	[City] & " " & [State]
&&	Create an AND condition between two logical expressions	([State]="MA") && ([Quantity]>10)
	Create an OR condition between two logical expressions	([State]="MA") ([State]="CT")
IN	Creates a logical OR condition based on a given list (using curly brackets)	'Store Lookup'[State] IN { "MA", "CT", "NY" }

Function Categories

MATH & STATS

Functions

*Functions used for **aggregation** or iterative, row-level calculations*

Common Examples:

- SUM
- AVERAGE
- MAX/MIN
- DIVIDE
- COUNT/COUNTA
- COUNTROWS
- DISTINCTCOUNT

Iterator Functions:

- SUMX
- AVERAGEX
- MAXX/MINX
- RANKX
- COUNTX

LOGICAL

Functions

*Functions that use **conditional expressions** (IF/THEN statements)*

Common Examples:

- IF
- IFERROR
- AND
- OR
- NOT
- SWITCH
- TRUE
- FALSE

TEXT

Functions

*Functions used to manipulate **text strings** or **value formats***

Common Examples:

- CONCATENATE
- COMBINEVALUES
- FORMAT
- LEFT/MID/RIGHT
- UPPER/LOWER
- LEN
- SEARCH/FIND
- REPLACE
- SUBSTITUTE
- TRIM

FILTER

Functions

*Functions used to **manipulate table** and **filter contexts***

Common Examples:

- CALCULATE
- FILTER
- ALL
- ALLEXCEPT
- ALLSELECTED
- KEEPFILTERS
- REMOVEFILTERS
- SELECTEDVALUE

TABLE

Functions

*Functions that **create** or **manipulate tables** and output tables vs. scalar values*

Common Examples:

- SUMMARIZE
- ADDCOLUMNS
- GENERATESERIES
- DISTINCT
- VALUES
- UNION
- INTERSECT
- TOPN

Function Categories

DATE & TIME Functions

*Functions used to
manipulate **date & time**
values or handle time
intelligence calculations*

Common Examples:

- DATE
- DATEDIFF
- YEARFRAC
- YEAR/MONTH
- DAY/HOUR
- TODAY/NOW
- WEEKDAY
- WEEKNUM
- NETWORKDAYS

Time Intelligence:

- DATESYTD
- DATESMTD
- DATEADD
- DATESBETWEEN

RELATIONSHIP Functions

*Functions used to
manage & modify
table relationships*

Common Examples:

- RELATED
- RELATEDTABLE
- CROSSFILTER
- USERELATIONSHIP

