

DAX CHEAT SHEET SUMMARY



FREQUENTLY USED AGGREGATION FUNCTIONS

FUNCTION NAME	SYNTAX	DESCRIPTION
SUM	SUM(<COLUMN>)	ADDS ALL THE NUMBERS IN A COLUMN
AVERAGE	AVERAGE(<COLUMN>)	CALCULATES THE AVERAGE (ARITHMETIC MEAN) OF A SET OF EXPRESSIONS EVALUATED OVER A TABLE
COUNT	COUNT(<COLUMN>)	RETURNS THE NUMBER OF CELLS IN A COLUMN THAT CONTAINS NON-BLANK VALUES
DISTINCTCOUNT	DISTINCTCOUNT(<COLUMN>)	COUNTS THE NUMBER OF DISTINCT VALUES IN A COLUMN
MIN	MIN(<COLUMN>)	RETURNS A MINIMUM VALUE OF A COLUMN
MAX	MAX(<COLUMN>)	RETURNS A MAXIMUM VALUE OF A COLUMN
RANKX	RANKX(<TABLE>, <EXPRESSION>[, <VALUE>[, <ORDER>[, <TIES>]]])	RETURNS THE RANKING OF A NUMBER IN A LIST OF NUMBERS FOR EACH ROW IN THE TABLE ARGUMENT
COUNTROWS	COUNTROWS[(<TABLE>)]	COUNTS THE NUMBER OF ROWS IN A TABLE
SUMX AVERAGEX COUNTX MAXX MINX	SUMX(<TABLE>, <EXPRESSION>) AVERAGEX(<TABLE>, <EXPRESSION>) COUNTX(<TABLE>, <EXPRESSION>) MAXX(<TABLE>, <EXPRESSION>) MINX(<TABLE>, <EXPRESSION>)	“X” DAX AGGREGATION FUNCTIONS ITERATE A TABLE FOR EACH ROW IN A TABLE RETURNING THE CORRESPONDING RESULTS

FREQUENTLY USED FILTER FUNCTIONS

FUNCTION NAME	SYNTAX	DESCRIPTION
CALCULATE	<code>CALCULATE(<EXPRESSION>[, <FILTER1> [, <FILTER2> [, ...]]])</code>	EVALUATES AN EXPRESSION IN A DEFINED FILTER CONTEXT
FILTER	<code>FILTER(<TABLE>, <FILTER>)</code>	RETURNS A TABLE THAT IS A SUBSET OF ANOTHER TABLE OR EXPRESSION
HASONEVALUE	<code>HASONEVALUE(<COLUMNNAME>)</code>	RETURNS A TRUE STATEMENT WHEN THE CONTEXT FOR A COLUMN NAME HAS BEEN FILTERED TO ONE DISTINCT VALUE
ALL	<code>ALL([<TABLE> <COLUMN>[, <COLUMN>[, <COLUMN>[,...]]]])</code>	RETURNS ALL THE ROWS IN A TABLE, OR ALL THE VALUES IN A COLUMN, IGNORING ANY FILTERS THAT MIGHT HAVE BEEN APPLIED ON YOUR REPORT.
ALLEXCEPT	<code>ALLEXCEPT(<TABLE>, <COLUMN>[, <COLUMN>[,..]])</code>	RETURNS ALL THE ROWS IN A TABLE EXCEPT FOR THOSE ROWS THAT ARE AFFECTED BY THE SPECIFIED COLUMN FILTERS
REMOVEFILTERS	<code>REMOVEFILTERS([<TABLE> <COLUMN>][, <COLUMN>[, <COLUMN>[,...]]])</code>	CLEAR ALL FILTERS FROM DESIGNATED TABLES OR COLUMNS.

FREQUENTLY USED DATE & TIME FUNCTIONS

FUNCTION NAME	SYNTAX	DESCRIPTION
CALENDAR	CALENDAR(<START_DATE>, <END_DATE>)	RETURNS A TABLE WITH A SINGLE COLUMN NAMED "DATE" THAT CONTAINS A SET OF DATES
CALENDARAUTO	CALENDARAUTO(<FISCALYEARENDMONTH>)	RETURNS A TABLE WITH ONE COLUMN OF DATES CALCULATED FROM YOUR MODEL AUTOMATICALLY.
DATE	DATE(<YEAR>, <MONTH>, <DAY>)	RETURNS THE SPECIFIED DATE IN DATETIME FORMAT
DATEIFF	DATEDIFF(<DATE_1>, <DATE_2>, <INTERVAL>)	RETURNS THE NUMBER OF UNITS BETWEEN TWO DATES AS DEFINED IN
NETWORKDAYS	NETWORKDAYS (<START_DATE>, <END_DATE> [, <WEEKEND>] [, <HOLIDAYS>])	RETURNS THE NUMBER OF WHOLE WORKDAYS BETWEEN TWO DATES (INCLUSIVE). PARAMETERS SPECIFY WHICH AND HOW MANY DAYS ARE WEEKEND DAYS. WEEKEND DAYS AND DAYS SPECIFIED AS HOLIDAYS ARE NOT CONSIDERED AS WORKDAYS.
EOMONTH	EOMONTH(<STARTDATE>,<MONTHS>)	RETURNS THE DATE OF THE LAST DAY OF THE MONTH BEFORE OR AFTER A SPECIFIED NUMBER OF MONTHS.
NOW	NOW()	RETURNS THE CURRENT DATE.

FREQUENTLY USED LOGIC FUNCTIONS

FUNCTION NAME	SYNTAX	DESCRIPTION
IF	IF(<LOGICAL_TEST>, <VALUE_IF_TRUE>[, <VALUE_IF_FALSE>])	CHECKS A CONDITION, AND RETURNS A CERTAIN VALUE DEPENDING ON WHETHER IT IS TRUE OR FALSE
SWITCH	SWITCH(<EXPRESSION>, <VALUE>, <RESULT>[, <VALUE>, <RESULT>]...[, <ELSE>])	EVALUATES AN EXPRESSION AGAINST A LIST OF VALUES AND RETURNS ONE OF THE POSSIBLE RESULTS
IFERROR	IFERROR(<VALUE>, <VALUE_IF_ERROR>)	RETURNS VALUE IF THE FIRST EXPRESSION IS AN ERROR AND THE VALUE OF THE EXPRESSION ITSELF OTHERWISE.

FREQUENTLY TIME INTELLIGENCE FUNCTIONS

FUNCTION NAME	SYNTAX	DESCRIPTION
DATEADD	DATEADD(<DATES>, <NUMBER_OF_INTERVALS>, <INTERVAL>)	MOVES A DATE BY A SPECIFIC INTERVAL
DATESBETWEEN	DATESBETWEEN(<DATES>, <DATE_1>, <DATE_2>)	RETURNS THE DATES BETWEEN SPECIFIED DATES
TOTALYTD	TOTALYTD(<EXPRESSION>, <DATES>[, <FILTER>][, <YEAR_END_DATE>])	EVALUATES THE YEAR-TO-DATE VALUE OF THE EXPRESSION IN THE CURRENT CONTEXT. THE EQUIVALENT FUNCTION FOR MTD AND QTD CAN ALSO BE EMPLOYED
SAMEPERIODLASTYEAR	SAMEPERIODLASTYEAR(<DATES>)	RETURNS A TABLE THAT CONTAINS A COLUMN OF DATES SHIFTED ONE YEAR BACK IN TIME FROM THE DATES IN THE SPECIFIED DATES COLUMN, IN THE CURRENT CONTEXT.
PARALLELPERIOD	PARALLELPERIOD (<DATES>, <NUMBEROFINTERVALS>, <INTERVAL>)	RETURNS A PARALLEL PERIOD OF DATES BY THE GIVEN SET OF DATES AND A SPECIFIED INTERVAL.

FREQUENTLY USED RELATIONSHIP FUNCTIONS

FUNCTION NAME	SYNTAX	DESCRIPTION
CROSSFILTER	CROSSFILTER(<LEFT_COLUMN>, <RIGHT_COLUMN>)	SPECIFIES THE CROSS-FILTERING DIRECTION TO BE USED IN A CALCULATION
RELATED	RELATED(<COLUMN>)	RETURNS A RELATED VALUE FROM ANOTHER TABLE
USERRELATIONSHIP	USERRELATIONSHIP (<COLUMNNAME1>, <COLUMNNAME2>)	SPECIFIES AN EXISTING RELATIONSHIP TO BE USED IN THE EVALUATION OF A DAX EXPRESSION.

FREQUENTLY USED TABLE MANIPULATION FUNCTIONS

FUNCTION NAME	SYNTAX	DESCRIPTION
SUMMARIZE	SUMMARIZE(<TABLE>, <GROUPBY_COLUMNNAME>[, <GROUPBY_COLUMNNAME>]...[, <NAME>, <EXPRESSION>]...)	RETURNS A SUMMARY TABLE FOR THE REQUESTED TOTALS OVER A SET OF GROUPS
DISTINCT	DISTINCT(<TABLE>)	RETURNS A TABLE BY REMOVING DUPLICATE ROW FROM ANOTHER TABLE OR EXPRESSION
ADDCOLUMNS	ADDCOLUMNS(<TABLE>, <NAME>, <EXPRESSION>[, <NAME>, <EXPRESSION>]...)	ADDS CALCULATED COLUMNS TO THE GIVEN TABLE OR TABLE EXPRESSION
GROUPBY	GROUPBY(<TABLE> [, <GROUPBY_COLUMNNAME>[, <COLUMN_NAME>] [<EXPRESSION>]]...)	CREATE A SUMMARY OF THE INPUT TABLE GROUPED BY SPECIFIC COLUMNS
TOPN	TOPN (<N_VALUE>, <TABLE> [, <ORDERBY_EXPRESSION> [, [<ORDER>] [, <ORDERBY_EXPRESSION> [, <ORDER>] [, ...]]]])	RETURNS A GIVEN NUMBER OF TOP ROWS ACCORDING TO A SPECIFIED EXPRESSION.
UNION	UNION (<TABLE>, <TABLE> [, <TABLE> [, ...]])	COMBINE TABLES WHOSE COLUMNS MATCH

DAX OPERATORS

COMPARISON OPERATORS	MEANING	DESCRIPTION
=	EQUAL TO	
==	STRICT EQUAL TO	
>	GREATER THAN	
<	SMALLER THAN	
> =	GREATER THAN OR EQUAL TO	
= <	SMALLER THAN OR EQUAL TO	
<>	NOT EQUAL TO	
&	CONCATENATES TEXT VALUES	[CITY]&"&[STATE] – PHOENIX, ARIZONA
& &	AND CONDITION	([CITY] = "BRU") && ([RETURN] ="YES"))
	OR CONDITION	([CITY] = "BRU") ([RETURN] ="YES"))
IN {}	OR CONDITION FOR EACH ROW	PRODUCT[COLOR] IN {"RED", "BLUE", "GOLD"}

For more exhaustive DAX functions, please refer to the below additional resource

<https://dax.guide/>
<https://learn.microsoft.com/en-us/dax>