

DAX FUNCTIONS

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Time Intelligence Functions			
Function	Description	Syntax	Link
TOTALYTD Function (DAX)	Evaluates the year-to-date value of the expression in the current context.	TOTALYTD(<expression>,<dates>[,<filter>][,<year_end_date>])	↗
TOTALQTD Function (DAX)	Evaluates the value of the expression for the dates in the quarter to date, in the current context.	TOTALQTD(<expression>,<dates>[,<filter>])	↗
TOTALMTD Function (DAX)	Evaluates the value of the expression for the month to date, in the current context.	TOTALMTD(<expression>,<dates>[,<filter>])	↗
STARTOFYEAR Function (DAX)	Returns the first date of the year in the current context for the specified column of dates.	STARTOFYEAR(<dates>)	↗
STARTOFQUARTER Function (DAX)	Returns the first date of the quarter in the current context for the specified column of dates.	STARTOFQUARTER(<dates>)	↗
STARTOFMONTH Function (DAX)	Returns the first date of the month in the current context for the specified column of dates.	STARTOFMONTH(<dates>)	↗
SAMEPERIODLASTYEAR Function (DAX)	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.	SAMEPERIODLASTYEAR(<dates>)	↗
PREVIOUSYEAR Function (DAX)	Returns a table that contains a column of all dates from the previous year, given the last date in the dates column, in the current context.	PREVIOUSYEAR(<dates>[,<year_end_date>])	↗
PREVIOUSQUARTER Function (DAX)	Returns a table that contains a column of all dates from the previous quarter, based on the first date in the dates column, in the current context.	PREVIOUSQUARTER(<dates>)	↗
PREVIOUSMONTH Function (DAX)	Returns a table that contains a column of all dates from the previous month, based on the first date in the dates column, in the current context.	PREVIOUSMONTH(<dates>)	↗
PREVIOUSDAY Function (DAX)	Returns a table that contains a column of all dates representing the day that is previous to the first date in the dates column, in the current context.	PREVIOUSDAY(<dates>)	↗
PARALLELPERIOD Function (DAX)	Returns a table that contains a column of dates that represents a period parallel to the dates in the specified dates column, in the current context, with the dates shifted a number of intervals either forward in time or back in time.	PARALLELPERIOD(<dates>,<number_of_intervals>,<interval>)	↗
OPENINGBALANCEYEAR Function (DAX)	Evaluates the expression at the first date of the year in the current context.	OPENINGBALANCEYEAR(<expression>,<dates>[,<filter>][,<year_end_date>])	↗
OPENINGBALANCEQUARTER Function (DAX)	Evaluates the expression at the first date of the quarter, in the current context.	OPENINGBALANCEQUARTER(<expression>,<dates>[,<filter>])	↗
OPENINGBALANCEMONTH Function (DAX)	Evaluates the expression at the first date of the month in the current context.	OPENINGBALANCEMONTH(<expression>,<dates>[,<filter>])	↗
NEXTYEAR Function (DAX)	Returns a table that contains a column of all dates in the next year, based on the first date in the dates column, in the current context.	NEXTYEAR(<dates>[,<year_end_date>])	↗
NEXTQUARTER Function (DAX)	Returns a table that contains a column of all dates in the next quarter, based on the first date specified in the dates column, in the current context.	NEXTQUARTER(<dates>)	↗
NEXTMONTH Function (DAX)	Returns a table that contains a column of all dates from the next month, based on the first date in the dates column in the current context.	NEXTMONTH(<dates>)	↗
NEXTDAY Function (DAX)	Returns a table that contains a column of all dates from the next day, based on the first date specified in the dates column in the current context.	NEXTDAY(<dates>)	↗
LASTNONBLANK Function (DAX)	Returns the last value in the column, column, filtered by the current context, where the expression is not blank.	LASTNONBLANK(<column>,<expression>)	↗
LASTDATE Function (DAX)	Returns the last date in the current context for the specified column of dates.	LASTDATE(<dates>)	↗
FIRSTNONBLANK Function (DAX)	Returns the first value in the column, column, filtered by the current context, where the expression is not blank.	FIRSTNONBLANK(<column>,<expression>)	↗
FIRSTDATE Function (DAX)	Returns the first date in the current context for the specified column of dates.	FIRSTDATE(<dates>)	↗
ENDOFYEAR Function (DAX)	Returns the last date of the year in the current context for the specified column of dates.	ENDOFYEAR(<dates> [,<year_end_date>])	↗
ENDOFQUARTER Function (DAX)	Returns the last date of the quarter in the current context for the specified column of dates.	ENDOFQUARTER(<dates>)	↗
ENDOFMONTH Function (DAX)	Returns the last date of the month in the current context for the specified column of dates.	ENDOFMONTH(<dates>)	↗
DATESYTD Function (DAX)	Returns a table that contains a column of the dates for the year to date, in the current context.	DATESYTD(<dates> [,<year_end_date>])	↗
DATESQTD Function (DAX)	Returns a table that contains a column of the dates for the quarter to date, in the current context.	DATESQTD(<dates>)	↗
DATESMTD Function (DAX)	Returns a table that contains a column of the dates for the month to date, in the current context.	DATESMTD(<dates>)	↗
DATESINPERIOD Function (DAX)	Returns a table that contains a column of dates that begins with the start_date and continues for the specified number_of_intervals.	DATESINPERIOD(<dates>,<start_date>,<number_of_intervals>,<interval>)	↗
DATESBETWEEN Function (DAX)	Returns a table that contains a column of dates that begins with the start_date and continues until the end_date.	DATESBETWEEN(<dates>,<start_date>,<end_date>)	↗
DATEADD Function (DAX)	Returns a table that contains a column of dates, shifted either forward or backward in time by the specified number of intervals from the dates in the current context.	DATEADD(<dates>,<number_of_intervals>,<interval>)	↗
CLOSINGBALANCEYEAR Function (DAX)	Evaluates the expression at the last date of the year in the current context.	CLOSINGBALANCEYEAR(<expression>,<dates>[,<filter>][,<year_end_date>])	↗
CLOSINGBALANCEQUARTER Function (DAX)	Evaluates the expression at the last date of the quarter in the current context.	CLOSINGBALANCEQUARTER(<expression>,<dates>[,<filter>])	↗
CLOSINGBALANCEMONTH Function (DAX)	Evaluates the expression at the last date of the month in the current context.	CLOSINGBALANCEMONTH(<expression>,<dates>[,<filter>])	↗

Filter Functions			
Function	Description	Syntax	Link
VALUES Function (DAX)	Returns a one-column table that contains the distinct values from the specified table or column. In other words, duplicate values are removed and only unique values are returned.	VALUES(<TableNameOrColumnName>)	↗
USERELATIONSHIP Function (DAX)	Specifies the relationship to be used in a specific calculation as the one that exists between columnName1 and columnName2.	USERELATIONSHIP(<columnName1>, <columnName2>)	↗
SUBSTITUTEWITHINDEX Function (DAX)	Returns a table which represents a left semijoin of the two tables supplied as arguments. The semi-join is performed by using common columns, determined by common column names and common data type . The columns being joined on are replaced with a single column in the returned table which is of type integer and contains an index. The index is a reference into the right join table given a specified sort order.	SUBSTITUTEWITHINDEX(<table>, <index-ColumnName>, <indexColumnsTable>, [<orderBy_expression>, [<order>]][, <orderBy_expression>, [<order>]]...)	↗
SELECTEDVALUE Function (DAX)	Returns the value when the context for column-Name has been filtered down to one distinct value only. Otherwise returns alternateResult.	SELECTEDVALUE(<columnName>[, <alternateResult>])	↗
RELATEDTABLE Function (DAX)	Evaluates a table expression in a context modified by the given filters.	RELATEDTABLE(<tableName>)	↗
RELATED Function (DAX)	Returns a related value from another table.	RELATED(<column>)	↗
KEEPFILTERS Function (DAX)	Modifies how filters are applied while evaluating a CALCULATE or CALCULATETABLE function.	KEEPFILTERS(<expression>)	↗
ISFILTERED Function (DAX)	Returns TRUE when columnName is being filtered directly. If there is no filter on the column or if the filtering happens because a different column in the same table or in a related table is being filtered then the function returns FALSE.	ISFILTERED(<columnName>)	↗
ISCROSSFILTERED Function (DAX)	Returns TRUE when columnName or another column in the same or related table is being filtered.	ISCROSSFILTERED(<columnName>)	↗
HASONEVALUE Function (DAX)	Returns TRUE when the context for columnName has been filtered down to one distinct value only. Otherwise is FALSE.	HASONEVALUE(<columnName>)	↗
HASONEFILTER Function (DAX)	Returns TRUE when the number of directly filtered values on columnName is one.		
FILTERS Function (DAX)	Returns the values that are directly applied as filters to columnName.	FILTERS(<columnName>)	↗
FILTER Function (DAX)	Returns a table that represents a subset of another table or expression.	FILTER(<table>,<filter>)	↗
EARLIEST Function (DAX)	Returns the current value of the specified column in an outer evaluation pass of the specified column.	EARLIEST(<column>)	↗
EARLIER Function (DAX)	Returns the current value of the specified column in an outer evaluation pass of the mentioned column.	EARLIER(<column>, <number>)	↗
DISTINCT Function (DAX)	Returns a one-column table that contains the distinct values from the specified column. In other words, duplicate values are removed and only unique values are returned.	DISTINCT(<column>)	↗
CROSSFILTER Function	Specifies the cross-filtering direction to be used in a calculation for a relationship that exists between two columns.	CROSSFILTER(<columnName1>, <columnName2>, <direction>)	↗
CALCULATETABLE Function (DAX)	Evaluates a table expression in a context modified by the given filters.	CALCULATETABLE(<expression>, <filter1>,<filter2>,...)	↗
CALCULATE Function (DAX)	Evaluates an expression in a context that is modified by the specified filters.	CALCULATE(<expression>,<filter1>, <filter2>...)	↗
ALLSELECTED Function (DAX)	Removes context filters from columns and rows in the current query, while retaining all other context filters or explicit filters.	ALLSELECTED([<tableName> <columnName>])	↗
ALLNOBLANKROW Function (DAX)	From the parent table of a relationship, returns all rows but the blank row, or all distinct values of a column but the blank row, and disregards any context filters that might exist.	ALLNOBLANKROW({<table> <column>[, <column>[, <column>[,...]]] })	↗
ALL Function (DAX)	Returns all the rows in a table, or all the values in a column, ignoring any filters that might have been applied. This function is useful for clearing filters and creating calculations on all the rows in a table.	ALL({<table> <column>[, <column>[, <column>[,...]]] })	↗
ALLEXCEPT Function (DAX)	Removes all context filters in the table except filters that have been applied to the specified columns.	ALLEXCEPT(<table>,<column>[,<column>[,...]])	↗
ADDMISSINGITEMS Function (DAX)	Adds combinations of items from multiple columns to a table if they do not already exist. The determination of which item combinations to add is based on referencing source columns which contain all the possible values for the columns.	ADDMISSINGITEMS(<showAllColumn>[, <showAllColumn>...[, <table>, <groupingColumn>[, <groupingColumn>]...[, filterTable]...)	↗

Date and Time Functions			
Function	Description	Syntax	Link
CALENDARAUTO Function (DAX)	Returns a table with a single column named “Date” that contains a contiguous set of dates. The range of dates is calculated automatically based on data in the model.	CALENDARAUTO([fiscal_year_end_month])	🔗
CALENDAR Function (DAX)	Returns a table with a single column named “Date” that contains a contiguous set of dates. The range of dates is from the specified start date to the specified end date, inclusive of those two dates.	CALENDAR(<start_date>, <end_date>)	🔗
DATEDIFF Function (DAX)	Returns the count of interval boundaries crossed between two dates.	DATEDIFF(<start_date>, <end_date>, <interval>)	🔗
DATE Function (DAX)	Returns the specified date in datetime format.	DATE(<year>, <month>, <day>)	🔗
DATEVALUE Function (DAX)	Converts a date in the form of text to a date in datetime format.	DATEVALUE(date_text)	🔗
DAY Function (DAX)	Returns the day of the month, a number from 1 to 31.	DAY(<date>)	🔗
EDATE Function (DAX)	Returns the date that is the indicated number of months before or after the start date. Use EDATE to calculate maturity dates or due dates that fall on the same day of the month as the date of issue.	EDATE(<start_date>, <months>)	🔗
EOMONTH Function (DAX)	Returns the date in datetime format of the last day of the month, before or after a specified number of months. Use EOMONTH to calculate maturity dates or due dates that fall on the last day of the month.	EOMONTH(<start_date>, <months>)	🔗
HOURL Function (DAX)	Returns the hour as a number from 0 (12:00 A.M.) to 23 (11:00 P.M.).	HOURL(<datetime>)	🔗
MINUTE Function (DAX)	Returns the minute as a number from 0 to 59, given a date and time value.	MINUTE(<datetime>)	🔗
MONTH Function (DAX)	Returns the month as a number from 1 (January) to 12 (December).	MONTH(<datetime>)	🔗
NOW Function (DAX)	Returns the current date and time in datetime format.	NOW()	🔗
SECOND Function (DAX)	Returns the seconds of a time value, as a number from 0 to 59.	SECOND(<time>)	🔗
TIME Function (DAX)	Converts hours, minutes, and seconds given as numbers to a time in datetime format.	TIME(hour, minute, second)	🔗
TIMEVALUE Function (DAX)	Converts a time in text format to a time in date-time format.	TIMEVALUE(time_text)	🔗
TODAY Function (DAX)	Returns the current date.	TODAY()	🔗
WEEKDAY Function (DAX)	Returns a number from 1 to 7 identifying the day of the week of a date. By default the day ranges from 1 (Sunday) to 7 (Saturday).	WEEKDAY(<date>, <return_type>)	🔗
WEEKNUM Function (DAX)	Returns the week number for the given date and year according to the return_type value. The week number indicates where the week falls numerically within a year.	WEEKNUM(<date>, <return_type>)	🔗
YEARFRAC Function (DAX)	Calculates the fraction of the year represented by the number of whole days between two dates. Use the YEARFRAC worksheet function to identify the proportion of a whole year's benefits or obligations to assign to a specific term.	YEARFRAC(<start_date>, <end_date>, <basis>)	🔗
YEAR Function (DAX)	Returns the year of a date as a four digit integer in the range 1900-9999.	YEAR(<date>)	🔗

Information Functions			
Function	Description	Syntax	Link
USERNAME Function (DAX)	Returns the domain name and username from the credentials given to the system at connection time	USERNAME()	Link
LOOKUPVALUE Function (DAX)	Returns the value in result_columnName for the row that meets all criteria specified by search_columnName and search_value.	LOOKUPVALUE(<result_columnName>, <search_columnName>, <search_value>)	Link
ISTEXT Function (DAX)	Checks if a value is text, and returns TRUE or FALSE.	ISTEXT(<value>)	Link
ISONORAFTER Function (DAX)	A boolean function that emulates the behavior of a ‘Start At’ clause and returns true for a row that meets all of the condition parameters.	ISONORAFTER(<scalar_expression>, <scalar_expression>[, sort_order [, <scalar_expression>, <scalar_expression>[, sort_order]]...])	Link
ISNUMBER Function (DAX)	Checks whether a value is a number, and returns TRUE or FALSE.	ISNUMBER(<value>)	Link
ISNONTEXT Function (DAX)	Checks if a value is not text (blank cells are not text), and returns TRUE or FALSE.	ISNONTEXT(<value>)	Link
ISLOGICAL Function (DAX)	Checks whether a value is a logical value, (TRUE or FALSE), and returns TRUE or FALSE.	ISLOGICAL(<value>)	Link
ISEVEN Function (DAX)	Returns TRUE if number is even, or FALSE if number is odd.	ISEVEN(number)	Link
ISERROR Function (DAX)	Checks whether a value is an error, and returns TRUE or FALSE.	ISERROR(<value>)	Link
ISBLANK Function (DAX)	Checks whether a value is blank, and returns TRUE or FALSE.	ISBLANK(<value>)	Link
CUSTOMDATA Function (DAX)	Returns the content of the CustomData property in the connection string.	CUSTOMDATA()	Link
CONTAINS Function (DAX)	Returns true if values for all referred columns exist, or are contained, in those columns.	CONTAINS(<table>, <columnName>, <value>[, <columnName>, <value>]...)	Link

LOGICAL FUNCTIONS			
Function	Description	Syntax	Link
TRUE Function (DAX)	Returns the logical value TRUE.	TRUE()	TRUE Function (DAX)
SWITCH Function (DAX)	Evaluates an expression against a list of values and returns one of multiple possible result expressions.	SWITCH(<expression>, <value>, <result>[, <value>, <result>]...[, <else>])	SWITCH Function (DAX)
OR Function (DAX)	Checks whether one of the arguments is TRUE to return TRUE. The function returns FALSE if both arguments are FALSE.	OR(<logical1>,<logical2>)	OR Function (DAX)
NOT Function (DAX)	Changes FALSE to TRUE, or TRUE to FALSE.	NOT(<logical>)	NOT Function (DAX)
IF Function (DAX)	Checks if a condition provided as the first argument is met. Returns one value if the condition is TRUE, and returns another value if the condition is FALSE.	IF(logical_test>,<value_if_true>, value_if_false)	IF Function (DAX)
IFERROR Function (DAX)	Evaluates an expression and returns a specified value if the expression returns an error		
FALSE Function (DAX)	Returns the logical value FALSE.	FALSE()	FALSE Function (DAX)
AND Function (DAX)	Checks whether both arguments are TRUE, and returns TRUE if both arguments are TRUE. Otherwise returns false.	AND(<logical1>,<logical2>)	AND Function (DAX)

Math and Trig Functions			
Function	Description	Syntax	Link
TRUNC Function (DAX)	Truncates a number to an integer by removing the decimal, or fractional, part of the number.	TRUNC(<number>,<num_digits>)	↗
SUMX Function (DAX)	Returns the sum of an expression evaluated for each row in a table.	SUMX(<table>,<expression>)	↗
SUM Function (DAX)	Adds all the numbers in a column.	SUM(<column>)	↗
SQRT Function (DAX)	Returns the square root of a number.	SQRT(<number>)	↗
SIGN Function (DAX)	Determines the sign of a number, the result of a calculation, or a value in a column. The function returns 1 if the number is positive, 0 (zero) if the number is zero, or -1 if the number is negative.	SIGN(<number>)*	↗
ROUNDUP Function (DAX)	Rounds a number up, away from 0 (zero).	ROUNDUP(<number>,<num_digits>)	↗
ROUND Function (DAX)	Rounds a number to the specified number of digits.	ROUND(<number>,<num_digits>)	↗
ROUNDDOWN Function (DAX)	Rounds a number down, toward zero.	ROUNDDOWN(<number>,<num_digits>)	↗
RAND Function (DAX)	Returns a random number greater than or equal to 0 and less than 1, evenly distributed. The number that is returned changes each time the cell containing this function is recalculated.	RAND()	↗
RANDBETWEEN Function (DAX)	Returns a random number in the range between two numbers you specify.	RANDBETWEEN(<bottom>,<top>)	↗
RADIANS Function (DAX)	Converts degrees to radians.	RADIANS(angle)	↗
QUOTIENT Function (DAX)	Performs division and returns only the integer portion of the division result. Use this function when you want to discard the remainder of division.	QUOTIENT(<numerator>,<denominator>)	↗
PRODUCTX Function (DAX)	Returns the product of an expression evaluated for each row in a table.	PRODUCTX(<table>,<expression>)	↗
PRODUCT Function (DAX)	Returns the product of the numbers in a column.	PRODUCT(<column>)	↗
POWER Function (DAX)	Returns the result of a number raised to a power.	POWER(<number>,<power>)	↗
PI Function (DAX)	Returns the value of Pi, 3.14159265358979, accurate to 15 digits.	PI()	↗
ODD Function (DAX)	Returns number rounded up to the nearest odd integer.	ODD(number)	↗
MROUND Function (DAX)	Returns a number rounded to the desired multiple.	MROUND(<number>,<multiple>)	↗
LOG Function (DAX)	Returns the logarithm of a number to the base you specify.	LOG(<number>,<base>)	↗
LOG10 Function (DAX)	Returns the base-10 logarithm of a number.	LOG10(<number>)	↗
LN Function (DAX)	Returns the natural logarithm of a number. Natural logarithms are based on the constant e (2.71828182845904).	LN(<number>)	↗
LCM Function (DAX)	Returns the least common multiple of integers. The least common multiple is the smallest positive integer that is a multiple of all integer arguments number1, number2, and so on. Use LCM to add fractions with different denominators.	LCM(number1, [number2], ...)	↗
ISO.CEILING Function (DAX)	Rounds a number up, to the nearest integer or to the nearest multiple of significance.	ISO.CEILING(<number>[,<significance>])	↗
INT Function (DAX)	Rounds a number down to the nearest integer.	INT(<number>)	↗
GCD Function (DAX)	Returns the greatest common divisor of two or more integers. The greatest common divisor is the largest integer that divides both number1 and number2 without a remainder.	GCD(number1, [number2], ...)	↗
FLOOR Function (DAX)	Rounds a number down, toward zero, to the nearest multiple of significance.	FLOOR(<number>,<significance>)	↗
FACT Function (DAX)	Returns the factorial of a number, equal to the series 1*2*3*...*, ending in the given number.	FACT(<number>)	↗
EXP Function (DAX)	Returns e raised to the power of a given number. The constant e equals 2.71828182845904, the base of the natural logarithm.	EXP(<number>)	↗
EVEN Function (DAX)	Returns number rounded up to the nearest even integer. You can use this function for processing items that come in twos. For example, a packing crate accepts rows of one or two items. The crate is full when the number of items, rounded up to the nearest two, matches the crate's capacity.	EVEN(number)	↗
DIVIDE Function (DAX)	Performs division and returns alternate result or BLANK() on division by 0.	DIVIDE(<numerator>,<denominator>[,<alternateresult>])	↗
DEGREES Function (DAX)	Converts radians into degrees.	DEGREES(angle)	↗
CURRENCY Function (DAX)	Evaluates the argument and returns the result as currency data type.	CURRENCY(<value>)	↗
COSH Function (DAX)	Returns the hyperbolic cosine of a number.	COSH(number)	↗
COS Function (DAX)	Returns the cosine of the given angle.	COS(number)	↗
COMBIN Function (DAX)	Returns the number of combinations for a given number of items. Use COMBIN to determine the total possible number of groups for a given number of items.	COMBIN(number,<number_chosen>)	↗
COMBINA Function (DAX)	Returns the number of combinations (with repetitions) for a given number of items.	COMBINA(number,<number_chosen>)	↗
CEILING Function (DAX)	Rounds a number up, to the nearest integer or to the nearest multiple of significance.	CEILING(<number>,<significance>)	↗
ATANH Function (DAX)	Returns the inverse hyperbolic tangent of a number. Number must be between -1 and 1 (excluding -1 and 1). The inverse hyperbolic tangent is the value whose hyperbolic tangent is number, so ATANH(TANH(number)) equals number.	ATANH(number)	↗
ATAN Function (DAX)	Returns the arctangent, or inverse tangent, of a number. The arctangent is the angle whose tangent is number. The returned angle is given in radians in the range -pi/2 to pi/2.	ATAN(number)	↗
ASINH Function (DAX)	Returns the inverse hyperbolic sine of a number. The inverse hyperbolic sine is the value whose hyperbolic sine is number, so ASINH(SINH(number)) equals number.	ASINH(number)	↗
ASIN Function (DAX)	Returns the arcsine, or inverse sine, of a number. The arcsine is the angle whose sine is number. The returned angle is given in radians in the range -pi/2 to pi/2.	ASIN(number)	↗
ACOSH Function (DAX)	Returns the inverse hyperbolic cosine of a number. The number must be greater than or equal to 1. The inverse hyperbolic cosine is the value whose hyperbolic cosine is number, so ACOSH(COSH(-number)) equals number.	ACOSH(number)	↗
ACOS Function (DAX)	Returns the arccosine, or inverse cosine, of a number. The arccosine is the angle whose cosine is number. The returned angle is given in radians in the range 0 (zero) to pi.	ACOS(number)	↗
ABS Function (DAX)	Returns the absolute value of a number.	ABS(<number>)	↗

PARENT AND CHILD FUNCTIONS

Function	Description	Syntax	Link
PATHLENGTH Function (DAX)	Returns the number of parents to the specified item in a given PATH result, including self.	<code>PATHLENGTH(<path>)</code>	🔗
PATHITEMREVERSE Function (DAX)	Returns the item at the specified position from a string resulting from evaluation of a PATH function. Positions are counted backwards from right to left.	<code>PATHITEMREVERSE(<path>, <position>[, <type>])</code>	🔗
PATHITEM Function (DAX)	Returns the item at the specified position from a string resulting from evaluation of a PATH function. Positions are counted from left to right.	<code>PATHITEM(<path>, <position>[, <type>])</code>	🔗
PATH Function (DAX)	Returns a delimited text string with the identifiers of all the parents of the current identifier, starting with the oldest and continuing until current.	<code>PATH(<ID_columnName>, <parent_columnName>)</code>	🔗
PATHCONTAINS Function (DAX)	Returns TRUE if the specified item exists within the specified path.	<code>PATHCONTAINS(<path>, <item>)</code>	🔗

Statistical Functions			
Function	Description	Syntax	Link
XNPV Function (DAX)	Returns the present value for a schedule of cash flows that is not necessarily periodic.	XNPV(<table>, <values>, <dates>, <rate>)	↗
XIRR Function (DAX)	Returns the internal rate of return for a schedule of cash flows that is not necessarily periodic.	XIRR(<table>, <values>, <dates>, [guess])	↗
VARX.S Function (DAX)	and n is the population size	VARX.S(InternetSales_USD, InternetSales_USD[UnitPrice_USD] - (InternetSales_USD[DiscountAmount_USD]/InternetSales_USD[OrderQuantity]))	↗
VARX.S Function (DAX)	Returns the variance of a sample population.	VARX.S(<table>, <expression>)	↗
VARX.P Function (DAX)	and n is the population size	VARX.P(InternetSales_USD, InternetSales_USD[UnitPrice_USD] - (InternetSales_USD[DiscountAmount_USD]/InternetSales_USD[OrderQuantity]))	↗
VARX.P Function (DAX)	Returns the variance of the entire population.	VARX.P(<table>, <expression>)	↗
VAR.S Function (DAX)	and n is the population size	VAR.S(InternetSales_USD[SalesAmount_USD])	↗
VAR.S Function (DAX)	Returns the variance of a sample population.	VAR.S(<columnName>)	↗
VAR.P Function (DAX)	and n is the population size	VAR.P(InternetSales_USD[SalesAmount_USD])	↗
VAR.P Function (DAX)	Returns the variance of the entire population.	VAR.P(<columnName>)	↗
TOPN Function (DAX)	Returns the top N rows of the specified table.	TOPN(<n_value>, <table>, <orderBy_expression>, [<order>], <orderBy_expression>, [<order>])...])	↗
T.INV Function (DAX)	Returns the left-tailed inverse of the Student's t-distribution.	T.INV(Probability,Deg_freedom)	↗
T.INV.2t Function (DAX)	Returns the two-tailed inverse of the Student's t-distribution.	T.INV.2T(Probability,Deg_freedom)	↗
T.DIST.RT Function (DAX)	Returns the right-tailed Student's t-distribution.	T.DIST.RT(X,Deg_freedom)	↗
T.DIST Function (DAX)	Returns the Student's left-tailed t-distribution.	T.DIST(X,Deg_freedom,Cumulative)	↗
T.DIST.2T Function (DAX)	Returns the two-tailed Student's t-distribution.	T.DIST.2T(X,Deg_freedom)	↗
TANH Function (DAX)	Returns the hyperbolic tangent of a number.	TANH(number)	↗
TAN Function (DAX)	Returns the tangent of the given angle.	TAN(number)	↗
SUMMARIZE Function (DAX)	Returns a summary table for the requested totals over a set of groups.	SUMMARIZE(<table>, <groupBy_columnName>[, <groupBy_columnName>]...[, <name>, <expression>]...)	↗
STDEVX.S Function (DAX)	and n is the population size	STDEVX.S(RELATEDTABLE(InternetSales_USD, InternetSales_USD[UnitPrice_USD] - (InternetSales_USD[DiscountAmount_USD]/InternetSales_USD[OrderQuantity]))	↗
STDEVX.S Function (DAX)	Returns the standard deviation of a sample population.	STDEVX.S(<table>, <expression>)	↗
STDEVX.P Function (DAX)	and n is the population size	STDEVX.P(RELATEDTABLE(InternetSales_USD, InternetSales_USD[UnitPrice_USD] - (InternetSales_USD[DiscountAmount_USD]/InternetSales_USD[OrderQuantity]))	↗
STDEVX.P Function (DAX)	Returns the standard deviation of the entire population.	STDEVX.P(<table>, <expression>)	↗
STDEV.S Function (DAX)	and n is the population size	STDEV.S(InternetSales_USD[SalesAmount_USD])	↗
STDEV.S Function (DAX)	Returns the standard deviation of a sample population.	STDEV.S(<ColumnName>)	↗
STDEV.P Function (DAX)	and n is the population size	STDEV.P(InternetSales_USD[SalesAmount_USD])	↗
STDEV.P Function (DAX)	Returns the standard deviation of the entire population.	STDEV.P(<ColumnName>)	↗
SQRTPI Function (DAX)	Returns the square root of (number * pi).	SQRTPI(number)	↗
SINH Function (DAX)	Returns the hyperbolic sine of a number.	SINH(number)	↗
SIN Function (DAX)	Returns the sine of the given angle.	SIN(number)	↗
SELECTCOLUMNS Function (DAX)	Adds calculated columns to the given table or table expression.	SELECTCOLUMNS(<table>, <name>, <scalar_expression> [, <name>, <scalar_expression>]...)	↗
SAMPLE Function (DAX)	Returns a sample of N rows from the specified table.	SAMPLE(<n_value>, <table>, <orderBy_expression>, [<order>], <orderBy_expression>, [<order>])...])	↗
ROW Function (DAX)	Returns a table with a single row containing values that result from the expressions given to each column.	ROW(<name>, <expression>[[, <name>, <expression>]...])	↗
RANKX Function (DAX)	Returns the ranking of a number in a list of numbers for each row in the table argument.	RANKX(<table>, <expression>[, <value>[, <order>], <ties>]])	↗
RANK.EQ Function (DAX)	Returns the ranking of a number in a list of numbers.	RANK.EQ(<value>, <columnName>[, <order>])	↗
POISSON.DIST Function (DAX)	Returns the Poisson distribution. A common application of the Poisson distribution is predicting the number of events over a specific time, such as the number of cars arriving at a toll plaza in 1 minute.	POISSON.DIST(x,mean,cumulative)	↗
PERCENTILEX.INC Function (DAX)	Returns the percentile number of an expression evaluated for each row in a table.	PERCENTILEX.INC(<table>, <expression>)	
PERCENTILEX.EXC Function (DAX)	Returns the percentile number of an expression evaluated for each row in a table.	PERCENTILEX.EXC(<table>, <expression>, k)	↗
PERCENTILE.INC Function (DAX)	Returns the k-th percentile of values in a range, where k is in the range 0..1, inclusive.	PERCENTILE.INC(<column>, <k>)	↗
PERCENTILE.EXC Function (DAX)	Returns the k-th percentile of values in a range, where k is in the range 0..1, exclusive.	PERCENTILE.EXC(<column>, <k>)	↗
NORM.S.INV (DAX)	Returns the inverse of the standard normal cumulative distribution. The distribution has a mean of zero and a standard deviation of one.	NORM.S.INV(Probability)	↗
NORM.S.DIST Function (DAX)	Returns the standard normal distribution (has a mean of zero and a standard deviation of one).	NORM.S.DIST(Z, Cumulative)	↗
NORM.INV Function (DAX)	The inverse of the normal cumulative distribution for the specified mean and standard deviation.	NORM.INV(Probability, Mean, Standard_dev)	↗
NORM.DIST Function (DAX)	Returns the normal distribution for the specified mean and standard deviation.	NORM.DIST(X, Mean, Standard_dev, Cumulative)	↗
MINX Function (DAX)	Returns the smallest numeric value that results from evaluating an expression for each row of a table.	MINX(<table>, < expression>)	↗
MIN Function (DAX)	Returns the smallest numeric value in a column, or between two scalar expressions. Ignores logical values and text.	MIN(<column>)	↗
MINA Function (DAX)	Returns the smallest value in a column, including any logical values and numbers represented as text.	MINA(<column>)	↗
MEDIANX Function (DAX)	Returns the median number of an expression evaluated for each row in a table.	MEDIANX(<table>, <expression>)	↗
MEDIAN Function (DAX)	Returns the median of numbers in a column.	MEDIAN(<column>)	↗
MAXX Function (DAX)	Evaluates an expression for each row of a table and returns the largest numeric value.	MAXX(<table>, <expression>)	↗
MAX Function (DAX)	Returns the largest numeric value in a column, or between two scalar expressions.	MAX(<columns>)	↗
MAXA Function (DAX)	Returns the largest value in a column. Logical values and blanks are counted.	MAXA(<column>)	↗
GEOMEANX Function (DAX)	Returns the geometric mean of an expression evaluated for each row in a table.	GEOMEANX(<table>, <expression>)	↗
GEOMEAN Function (DAX)	Returns the geometric mean of the numbers in a column.	GEOMEAN(<column>)	↗
GENERATE Function (DAX)	Returns a table with the Cartesian product between each row in table1 and the table that results from evaluating table2 in the context of the current row from table1.	GENERATE(<table1>, <table2>)	↗
GENERATEALL Function (DAX)	Returns a table with the Cartesian product between each row in table1 and the table that results from evaluating table2 in the context of the current row from table1.	GENERATEALL(<table1>, <table2>)	↗
EXPON.DIST Function (DAX)	Returns the exponential distribution. Use EXPON.DIST to model the time between events, such as how long an automated bank teller takes to deliver cash. For example, you can use EXPON.DIST to determine the probability that the process takes at most 1 minute.	EXPON.DIST(x,lambda,cumulative)	↗
DISTINCTCOUNT Function (DAX)	The DISTINCTCOUNT function counts the number of distinct values in a column.	DISTINCTCOUNT(<column>)	↗
DATATABLE Function	Provides a mechanism for declaring an inline set of data values.	DATATABLE (ColumnName1, DataType1, ColumnName2, DataType2..., {{Value1, Value2...}, {ValueN, ValueN+1...}})	↗
CROSSJOIN Function (DAX)	Returns a table that contains the Cartesian product of all rows from all tables in the arguments. The columns in the new table are all the columns in all the argument tables.	CROSSJOIN(<table>, <table>[, <table>]...)	↗
COUNTX Function (DAX)	Counts the number of rows that contain a number or an expression that evaluates to a number, when evaluating an expression over a table.	COUNTX(<table>,<expression>)	↗
COUNTROWS Function (DAX)	The COUNTROWS function counts the number of rows in the specified table, or in a table defined by an expression.	COUNTROWS(<table>)	↗
COUNT Function (DAX)	The COUNT function counts the number of cells in a column that contain numbers.	COUNT(<column>)	↗
COUNTBLANK Function (DAX)	Counts the number of blank cells in a column.	COUNTBLANK(<column>)	↗
COUNTAX Function (DAX)	The COUNTAX function counts nonblank results when evaluating the result of an expression over a table. That is, it works just like the COUNTA function, but is used to iterate through the rows in a table and count rows where the specified expressions results in a nonblank result.	COUNTAX(<table>,<expression>)	↗
COUNTA Function (DAX)	The COUNTA function counts the number of cells in a column that are not empty. It counts not just rows that contain numeric values, but also rows that contain nonblank values, including text, dates, and logical values.	COUNTA(<column>)	↗
CONFIDENCE.T Function (DAX)	Returns the confidence interval for a population mean, using a Student's t distribution.	CONFIDENCE.T(alpha,standard_dev,size)	↗
CONFIDENCE.NORM Function (DAX)	The confidence interval is a range of values. Your sample mean, x, is at the center of this range and the range is x ± CONFIDENCE.NORM. For example, if x is the sample mean of delivery times for products ordered through the mail, x ± CONFIDENCE.NORM is a range of population means. For any population mean, μ0, in this range, the probability of obtaining a sample mean further from μ0 than x is greater than alpha		
CHISQ.INV.RT Function (DAX)	Returns the inverse of the right-tailed probability of the chi-squared distribution.	CHISQ.INV.RT(probability,deg_freedom)	↗
CHISQ.INV Function (DAX)	Returns the inverse of the left-tailed probability of the chi-squared distribution.	CHISQ.INV(probability,deg_freedom)	↗
BETA.INV Function (DAX)	Returns the inverse of the beta cumulative probability density function (BETA.DIST).	BETA.INV(probability,alpha,beta,[A],[B])	↗
BETA.DIST Function (DAX)	Returns the beta distribution. The beta distribution is commonly used to study variation in the percentage of something across samples, such as the fraction of the day people spend watching television.	BETA.DIST(x,alpha,beta,cumulative,[A],[B])	↗
AVERAGEX Function (DAX)	Calculates the average (arithmetic mean) of a set of expressions evaluated over a table.	AVERAGEX(<table>,<expression>)	↗
AVERAGE Function (DAX)	Returns the average (arithmetic mean) of all the numbers in a column.	AVERAGE(<column>)	↗
AVERAGEA Function (DAX)	Returns the average (arithmetic mean) of the values in a column. Handles text and non-numeric values.	AVERAGEA(<column>)	↗
ADDCOLUMNS Function (DAX)	Adds calculated columns to the given table or table expression.	ADDCOLUMNS(<table>, <name>, <expression>[, <name>, <expression>]...)	↗

Text Functions			
Function	Description	Syntax	Link
VALUE Function (DAX)	Converts a text string that represents a number to a number.	VALUE(<text>)	Link
UPPER Function (DAX)	Converts a text string to all uppercase letters.	UPPER (<text>)	Link
UNICHAR Function (DAX)	Returns the Unicode character referenced by the numeric value.	UNICHAR(number)	Link
TRIM Function (DAX)	Removes all spaces from text except for single spaces between words.	TRIM(<text>)	Link
SUBSTITUTE Function (DAX)	Replaces existing text with new text in a text string.	SUBSTITUTE(<text>, <old_text>, <new_text>, <instance_num>)	Link
SEARCH Function (DAX)	Returns the number of the character at which a specific character or text string is first found, reading left to right. Search is case-insensitive and accent sensitive.	SEARCH(<find_text>, <within_text>[, [<start_num>][, <NotFoundValue>]])	Link
RIGHT Function (DAX)	RIGHT returns the last character or characters in a text string, based on the number of characters you specify.	RIGHT(<text>, <num_chars>)	Link
REPT Function (DAX)	Repeats text a given number of times. Use REPT to fill a cell with a number of instances of a text string.	REPT(<text>, <num_times>)	Link
REPLACE Function (DAX)	REPLACE replaces part of a text string, based on the number of characters you specify, with a different text string.	REPLACE(<old_text>, <start_num>, <num_chars>, <new_text>)	Link
MID Function (DAX)	Returns a string of characters from the middle of a text string, given a starting position and length.	MID(<text>, <start_num>, <num_chars>)	Link
LOWER Function (DAX)	Converts all letters in a text string to lowercase.	LOWER(<text>)	Link
LEN Function (DAX)	Returns the number of characters in a text string.	LEN(<text>)	Link
LEFT Function (DAX)	Returns the specified number of characters from the start of a text string.	LEFT(<text>, <num_chars>)	Link
FORMAT Function (DAX)	Converts a value to text according to the specified format.	FORMAT(<value>, <format_string>)	Link
FIXED Function (DAX)	Rounds a number to the specified number of decimals and returns the result as text. You can specify that the result be returned with or without commas.	FIXED(<number>, <decimals>, <no_commas>)	Link
FIND Function (DAX)	Returns the starting position of one text string within another text string. FIND is case-sensitive.	FIND(<find_text>, <within_text>[, [<start_num>][, <NotFoundValue>]])	Link
EXACT Function (DAX)	Compares two text strings and returns TRUE if they are exactly the same, FALSE otherwise. EXACT is case-sensitive but ignores formatting differences. You can use EXACT to test text being entered into a document.	EXACT(<text1>,<text2>)	Link
CONCATENATEX Function (DAX)	Concatenates the result of an expression evaluated for each row in a table.	CONCATENATEX(<table>, <expression>, [delimiter])	Link
CONCATENATE Function (DAX)	Joins two text strings into one text string.	CONCATENATE(<text1>, <text2>)	Link
CODE Function (DAX)	Returns a numeric code for the first character in a text string. The returned code corresponds to the character set used by your computer.	CODE(text)	Link
BLANK Function (DAX)	Returns a blank.	BLANK()	Link

Other Functions			
Function	Description	Syntax	Link
UNION Function (DAX)	Creates a union (join) table from a pair of tables.	UNION(<table_expression1>, <table_expression2> [,<table_expression>]...)	↗
TREATAS Function (DAX)	Applies the result of a table expression as filters to columns from an unrelated table.	TREATAS(table_expression, <column>[, <column>[, <column>[,...]]])	↗
SUMMARIZECOLUMNS Function (DAX)	Returns a summary table over a set of groups.	SUMMARIZECOLUMNS(<groupBy_columnName> [, <groupBy_columnName >]..., [<filterTable>]...[, <name>, <expression>]...)	↗
NATURALLEFTOUTERJOIN Function (DAX)	Performs an inner join of a table with another table. The tables are joined on common columns (by name) in the two tables. If the two tables have no common column names, an error is returned.	NATURALLEFTOUTERJOIN(<leftJoinTable>, <rightJoinTable>)	↗
NATURALINNERJOIN Function (DAX)	Performs an inner join of a table with another table. The tables are joined on common columns (by name) in the two tables. If the two tables have no common column names, an error is returned.	NATURALINNERJOIN(<leftJoinTable>, <rightJoinTable>)	↗
ISEMPTY Function (DAX)	Checks if a table is empty.	ISEMPTY(<table_expression>)	↗
INTERSECT Function (DAX)	Returns the row intersection of two tables, retaining duplicates.	INTERSECT(<table_expression1>, <table_expression2>)	↗
GROUPBY Function (DAX)	The GROUPBY function is similar to the SUMMARIZE function. However, GROUPBY does not do an implicit CALCULATE for any extension columns that it adds. GROUPBY permits a new function, CURRENTGROUP(), to be used inside aggregation functions in the extension columns that it adds. GROUPBY attempts to reuse the data that has been grouped		
GENERATESERIES Function (DAX)	Returns a single column table containing the values of an arithmetic series, that is, a sequence of values in which each differs from the preceding by a constant quantity. The name of the column returned is Value.	GENERATESERIES(<startValue>, <endValue>[, <incrementValue>])	↗
EXCEPT Function (DAX)	Returns the rows of one table which do not appear in another table.	EXCEPT(<table_expression1>, <table_expression2>)	↗
ERROR Function (DAX)	Raises an error with an error message.	ERROR(<text>)	↗
DATATABLE Function (DAX)	Provides a mechanism for declaring an inline set of data values.	DATATABLE (ColumnName1, DataType1, ColumnName2, DataType2..., {{Value1, Value2...}, {ValueN, ValueN+1...}}...)	↗