Category	Function	Syntax	Description
Date and Time Functions	DATE Function	DATE(<year>, <month>, <day>)</day></month></year>	Returns the specified date in datetime format.
Date and Time Functions	DATEVALUE Function	DATEVALUE(date_text)	Converts a date in the form of text to a date in datetime
Date and Time Functions	DAY Function	DAY(<date>) <<datetime or="" text="">></datetime></date>	format. Returns the day of the month, a number from 1 to 31.
		(,	Returns the date that is the indicated number of months
Date and Time Functions	EDATE Function	EDATE(<start_date>, <months>)</months></start_date>	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.
Date and Time Functions	EOMONTH Function	EOMONTH(<start_date>, <months>)</months></start_date>	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.
Date and Time Functions	HOUR Function	HOUR(<datetime>)</datetime>	Returns the hour as a number from 0 (12:00 A.M.) to 23 (11:00 P.M.).
Date and Time Functions	MINUTE Function	MINUTE(<datetime>)</datetime>	Returns the minute as a number from 0 to 59, given a date and time value.
Date and Time Functions	MONTH Function	MONTH(<datetime>)</datetime>	Returns the month as a number from 1 (January) to 12 (December).
Date and Time Functions	NOW Function	NOW()	The NOW function is useful when you need to display the current date and time on a worksheet or calculate a value based on the current date and time, and have that value updated each time you open the worksheet.
Date and Time Functions	SECOND Function	SECOND(<time>)</time>	Returns the seconds of a time value, as a number from 0 to 59.
Date and Time Functions	TIME Function	TIME(hour, minute, second)	Converts hours, minutes, and seconds given as numbers to a time in datetime format.
Date and Time Functions	TIMEVALUE Function	TIMEVALUE(time_text)	Converts a time in text format to a time in datetime
Date and Time Functions	TODAY Function	TODAY()	format. Returns the current date.
Date and Time Functions	WEEKDAY Function	WEEKDAY(<date>, <return_type>)</return_type></date>	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).
Date and Time Functions	WEEKNUM Function	WEEKNUM(<date>, <return_type>)</return_type></date>	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.
Date and Time Functions	YEAR Function	YEAR(<date>)</date>	Returns the year of a date as a four digit integer in the range 1900-9999.
Date and Time Functions	YEARFRAC Function	YEARFRAC(<start_date>, <end_date>, <basis>)</basis></end_date></start_date>	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.
Time Intelligence Functions	CLOSINGBALANCEMONTH Function	<pre>CLOSINGBALANCEMONTH(<expression>,<dat es="">[,<filter>])</filter></dat></expression></pre>	Evaluates the expression at the last date of the month in the current context.
Time Intelligence Functions	CLOSINGBALANCEQUARTER Function		
Time Intelligence Functions	CLOSINGBALANCEYEAR Function		
Time Intelligence Functions	DATEADD Function	DATEADD(<dates>,<number_of_intervals>,<interval>)</interval></number_of_intervals></dates>	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.
Time Intelligence Functions	DATESBETWEEN Function	DATESBETWEEN(<dates>,<start_date>,<en d_date="">)</en></start_date></dates>	Returns a table that contains a column of dates that begins with the start_date and continues until the end date .
Time Intelligence Functions	DATESINPERIOD Function	DATESINPERIOD(<dates>,<start_date>,<n umber_of_intervals>,<interval>)</interval></n </start_date></dates>	Returns a table that contains a column of dates that begins with the start_date and continues for the specified number_of intervals .
Time Intelligence Functions	DATESMTD Function	DATESMTD(<dates>)</dates>	Returns a table that contains a column of the dates for the month to date, in the current context.
Time Intelligence Functions	DATESQTD Function		
Time Intelligence Functions Time Intelligence Functions	DATESYTD Function ENDOFMONTH Function	ENDOFMONTH(<dates>)</dates>	Returns the last date of the month in the current context
Time Intelligence Functions	ENDOFQUARTER Function	,	for the specified column of dates.
Time Intelligence Functions	ENDOFYEAR Function		
Time Intelligence Functions	FIRSTDATE Function	FIRSTDATE(<dates>)</dates>	Returns the first date in the current context for the specified column of dates.
Time Intelligence Functions	FIRSTNONBLANK Function	FIRSTNONBLANK(<column>,<expression>)</expression></column>	Returns the first value in the column, column , filtered by the current context, where the expression is not blank.
Time Intelligence Functions	LASTDATE Function	LASTDATE(<dates>)</dates>	Returns the last date in the current context for the specified column of dates.
Time Intelligence Functions	LASTNONBLANK Function	LASTNONBLANK(<column>,<expression>)</expression></column>	Returns the last value in the column, column , filtered by the current context, where the expression is not blank.

Catagony	Function	Suntav	Description
Category		Syntax NEXTDAY(<dates>)</dates>	Returns a table that contains a column of all dates from
Time Intelligence Functions	NEXTDAY Function	NEXTDAY(<dates>)</dates>	the next day, based on the first date specified in the dates column in the current context.
Time Intelligence Functions	NEXTMONTH Function		
Time Intelligence Functions Time Intelligence Functions	NEXTQUARTER Function NEXTYEAR Function		
	OPENINGBALANCEMONTH	OPENINGBALANCEMONTH(<expression>,<dat< td=""><td>Evaluates the expression at the first date of the month in</td></dat<></expression>	Evaluates the expression at the first date of the month in
Time Intelligence Functions	Function	es>[, <filter>])</filter>	the current context.
Time Intelligence Functions	OPENINGBALANCEQUARTER Function		
Time Intelligence Functions	OPENINGBALANCEYEAR Function		
Time Intelligence Functions	PARALLELPERIOD Function	PARALLELPERIOD(<dates>,<number_of_int ervals="">,<interval>)</interval></number_of_int></dates>	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.
Time Intelligence Functions	PREVIOUSDAY Function	PREVIOUSDAY(<dates>)</dates>	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.
Time Intelligence Functions	PREVIOUSMONTH Function		the dates committy in the current context.
Time Intelligence Functions	PREVIOUSQUARTER Function		
Time Intelligence Functions	PREVIOUSYEAR Function		
Time Intelligence Functions	SAMEPERIODLASTYEAR Function	SAMEPERIODLASTYEAR(<dates>)</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.
Time Intelligence Functions	STARTOFMONTH Function	STARTOFMONTH(<dates>)</dates>	Returns the first date of the month in the current context for the specified column of dates.
Time Intelligence Functions	STARTOFQUARTER Function		
Time Intelligence Functions	STARTOFYEAR Function		
Time Intelligence Functions	TOTALMTD Function		Evaluates the value of the expression for the month to
Time Intelligence Functions	TOTALQTD Function	r>])	date, in the current context.
Time Intelligence Functions	TOTALYTD Function		
Filter Functions	ADDMISSINGITEMS Function	ADDMISSINGITEMS(<showallcolumn>[, <showallcolumn>],, , <groupingcolumn>[,, <groupingcolumn>],[, filterTable],) ADDMISSINGITEMS(<showallcolumn>[, <showallcolumn>],, , [ROLLUPISSUBTOTAL(]<groupingcolumn>[, <issubtotal_columnname>][, <groupingcolumn>][, <iissubtotal_columnname>],[)], [, filterTable],]</iissubtotal_columnname></groupingcolumn></issubtotal_columnname></groupingcolumn></showallcolumn></showallcolumn></groupingcolumn></groupingcolumn></showallcolumn></showallcolumn>	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.
Filter Functions	ALL Function	ALL({ <column>[, <column>[, <column>[, <column>[,]]]})</column></column></column></column>	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.
Filter Functions	ALLEXCEPT Function	<pre>ALLEXCEPT(,<column>[,<column>[,]])</column></column></pre>	Removes all context filters in the table except filters that have been applied to the specified columns.
Filter Functions	ALLNOBLANKROW Function	ALLNOBLANKROW(<column>)</column>	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.
Filter Functions	ALLSELECTED Function	ALLSELECTED([<tablename> <columnname>])</columnname></tablename>	Removes context filters from columns and rows in the current query, while retaining all other context filters or explicit filters.
Filter Functions	CALCULATE Function	<pre>CALCULATE(<expression>,<filter1>,<fil ter2="">)</fil></filter1></expression></pre>	Evaluates an expression in a context that is modified by the specified filters.
Filter Functions	CALCULATETABLE Function	CALCULATETABLE(<expression>,<filter1>,<filter2>,)</filter2></filter1></expression>	Evaluates a table expression in a context modified by the given filters.
Filter Functions	CROSSFILTER Function	CROSSFILTER(<columnname1>, <columnname2>, <direction>)</direction></columnname2></columnname1>	Specifies the cross-filtering direction to be used in a calculation for a relationship that exists between two columns.
Filter Functions	DISTINCT Function	DISTINCT(<column>)</column>	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.
Filter Functions	EARLIER Function	EARLIER(<column>, <number>)</number></column>	Returns the current value of the specified column in an outer evaluation pass of the mentioned column.
Filter Functions	EARLIEST Function	EARLIEST(<column>)</column>	Returns the current value of the specified column in an outer evaluation pass of the specified column.
Filter Functions	FILTER Function	FILTER(, <filter>)</filter>	Returns a table that represents a subset of another table or expression.
Filter Functions	FILTERS Function	FILTERS(<columnname>)</columnname>	Returns the values that are directly applied as filters
	<u> </u>	1	to columnName .

Category	Function	Syntax	Description
Filter Functions	HASONEFILTER Function	HASONEFILTER(<columnname>)</columnname>	Returns TRUE when the number of directly filtered values on <i>columnName</i> is one; otherwise returns FALSE .
Filter Functions	HASONEVALUE Function	HASONEVALUE(<columnname>)</columnname>	Returns TRUE when the context for <i>columnName</i> has been filtered down to one distinct value only. Otherwise is FALSE .
Filter Functions	ISCROSSFILTERED Function	ISCROSSFILTERED(<columnname>)</columnname>	Returns TRUE when <i>columnName</i> or another column in the same or related table is being filtered.
Filter Functions	ISFILTERED Function	ISFILTERED(<columnname>)</columnname>	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.
Filter Functions	KEEPFILTERS Function	KEEPFILTERS(<expression>)</expression>	Modifies how filters are applied while evaluating a CALCULATE or CALCULATETABLE function.
Filter Functions	RELATED Function	RELATED(<column>)</column>	Returns a related value from another table.
Filter Functions	RELATEDTABLE Function	RELATEDTABLE(<tablename>)</tablename>	Evaluates a table expression in a context modified by the given filters.
Filter Functions	SUBSTITUTEWITHINDEX Function	SUBSTITUTEWITHINDEX(, <indexcolumnname>, <indexcolumnstable>, [<orderby_expression>, [<order>][, <orderby_expression>, [<order>]]])</order></orderby_expression></order></orderby_expression></indexcolumnstable></indexcolumnname>	Returns a table which represents a left semijoin of the two tables supplied as arguments.
Filter Functions	USERELATIONSHIP Function	USERELATIONSHIP(<columnname1>,<columnname2>)</columnname2></columnname1>	Specifies the relationship to be used in a specific calculation as the one that exists between columnName1 and columnName2.
Filter Functions	VALUES Function	VALUES(<tablenameorcolumnname>)</tablenameorcolumnname>	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.
Information Functions	CONTAINS Function	CONTAINS(, <columnname>, <value>[, <columnname>, <value>])</value></columnname></value></columnname>	Returns true if values for all referred columns exist, or are contained, in those columns; otherwise, the function returns false.
Information Functions	CUSTOMDATA Function	CUSTOMDATA()	Returns the content of the CustomData property in the connection string.
Information Functions	ISBLANK Function	ISBLANK(<value>)</value>	Checks whether a value is blank, and returns TRUE or FALSE.
Information Functions	ISERROR Function	ISERROR(<value>)</value>	Checks whether a value is an error, and returns TRUE or
Information Functions	ISEVEN Function	ISEVEN(number)	FALSE. Returns TRUE if number is even, or FALSE if number is
Information Functions	ISLOGICAL Function	ISLOGICAL(<value>)</value>	odd. Checks whether a value is a logical value, (TRUE or FALSE),
Information Functions	ISNONTEXT Function	ISNONTEXT(<value>)</value>	and returns TRUE or FALSE. Checks if a value is not text (blank cells are not text), and
Information Functions	ISNUMBER Function	ISNUMBER(<value>)</value>	returns TRUE or FALSE. Checks whether a value is a number, and returns TRUE or
Information Functions	ISONORAFTER Function	<pre>ISONORAFTER((scalar_expression),</pre>	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. New for 2016.
Information Functions	ISTEXT Function	ISTEXT(<value>)</value>	Checks if a value is text, and returns TRUE or FALSE.
Information Functions	LOOKUPVALUE Function	LOOKUPVALUE(<result_columnname>, <search_columnname>, <search_value>[, <search_columnname>, <search_value>])</search_value></search_columnname></search_value></search_columnname></result_columnname>	Returns the value in result_columnName for the row that meets all criteria specified by search_columnName and search_value.
Information Functions	USERNAME Function	USERNAME()	Returns the domain name and username from the credentials given to the system at connection time
Logical Functions	AND Function	AND(<logical1>,<logical2>)</logical2></logical1>	Checks whether both arguments are TRUE, and returns TRUE if both arguments are TRUE. Otherwise returns false.
Logical Functions	FALSE Function	FALSE()	Returns the logical value FALSE.
Logical Functions	IF Function	<pre>IF(logical_test>,<value_if_true>, value_if_false)</value_if_true></pre>	Checks if a condition provided as the first argument is met. Returns one value if the condition is TRUE, and
Logical Functions	IFERROR Function	<pre>IFERROR(value, value_if_error)</pre>	returns another value if the condition is FALSE. Evaluates an expression and returns a specified value if the expression returns an error; otherwise returns the
Logical Functions	NOT Function	NOT(<logical>)</logical>	value of the expression itself. Changes FALSE to TRUE, or TRUE to FALSE.
Logical Functions	OR Function	OR(<logical1>,<logical2>)</logical2></logical1>	Checks whether one of the arguments is TRUE to return TRUE. The function returns FALSE if both arguments are FALSE.
Logical Functions	SWITCH Function	<pre>SWITCH(<expression>, <value>,</value></expression></pre>	Evaluates an expression against a list of values and returns one of multiple possible result expressions.

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Category	Function	Syntax	Description The Description
			Returns the arccosine, or inverse cosine, of a number. The
Math and Trig Functions	ACOS Eunstion	ACOS (numbon)	arccosine is the angle whose cosine is <i>number</i> . The
Math and Trig Functions	ACOS Function	ACOS(number)	returned angle is given in radians in the range 0 (zero) to
			pi.
Math and Trig Functions	ACOSH Function		DI.
_			
Math and Trig Functions	ASIN Function		
Math and Trig Functions	ASINH Function		
Math and Trig Functions	ATAN Function		
Math and Trig Functions	ATANH Function		
			Rounds a number up, to the nearest integer or to the
Math and Trig Functions	CEILING Function	<pre>CEILING(<number>, <significance>)</significance></number></pre>	nearest multiple of significance.
			Returns the number of combinations for a given number
Math and Trig Functions	COMBIN Function	COMBIN(number, number_chosen)	of items. Use COMBIN to determine the total possible
			number of groups for a given number of items.
Math and Trig Functions	COMBINA Function	COMBINA(number, number_chosen)	Returns the number of combinations (with repetitions) for
aaag.raee	COMBINATION	constitutions y number _enoseny	a given number of items.
Math and Trig Functions	COS Function		
Math and Trig Functions	COSH Function		
9			Evaluates the argument and returns the result as currency
Math and Trig Functions	CURRENCY Function	CURRENCY(<value>)</value>	data type.
Math and Trig Functions	DECREES Function	DECREES (angle)	
Math and Trig Functions	DEGREES Function	DEGREES(angle)	Converts radians into degrees.
Math and Trig Functions	DIVIDE Function	<pre>DIVIDE(<numerator>, <denominator></denominator></numerator></pre>	Performs division and returns alternate result or BLANK()
		[, <alternateresult>])</alternateresult>	on division by 0.
			Returns number rounded up to the nearest even integer.
			You can use this function for processing items that come
		L	in twos. For example, a packing crate accepts rows of one
Math and Trig Functions	EVEN Function	EVEN(number)	or two items. The crate is full when the number of items,
			rounded up to the nearest two, matches the crate's
			capacity.
			Returns e raised to the power of a given number. The
Math and Trig Functions	EXP Function	<pre>EXP(<number>)</number></pre>	constant e equals 2.71828182845904, the base of the
	·		natural logarithm.
			Returns the factorial of a number, equal to the series
Math and Trig Functions	FACT Function	FACT(<number>)</number>	1*2*3** , ending in the given number.
			Rounds a number down, toward zero, to the nearest
Math and Trig Functions	FLOOR Function	FLOOR(<number>, <significance>)</significance></number>	
			multiple of significance.
			Returns the greatest common divisor of two or more
Math and Trig Functions	GCD Function	GCD(number1, [number2],)	integers. The greatest common divisor is the largest
Matir and Trig i unctions	<u>GCD i diletion</u>	deb(number 1, [number 2],)	integer that divides both number1 and number2 without
			a remainder.
Math and Trig Functions	INT Function	<pre>INT(<number>)</number></pre>	Rounds a number down to the nearest integer.
9		ISO.CEILING(<number>[,</number>	Rounds a number up, to the nearest integer or to the
Math and Trig Functions	ISO.CEILING Function	<pre><significance>])</significance></pre>	
		(Significance/]/	nearest multiple of significance. Returns the least common multiple of integers. The least
			·
			common multiple is the smallest positive integer that is a
Math and Trig Functions	LCM Function	LCM(number1, [number2],)	multiple of all integer arguments number1, number2, and
			so on. Use LCM to add fractions with different
			denominators.
			Returns the natural logarithm of a number. Natural
Math and Tria Functions	I NI Franchisa	LN/ coumbons >	_
Math and Trig Functions	LN Function	LN(<number>)</number>	logarithms are based on the constant e
			(2.71828182845904).
Math and Trig Functions	LOG Function	LOG(<number>,<base/>)</number>	Returns the logarithm of a number to the base you
	<u> 200 i uncuon</u>	255(\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	specify.
Math and Trig Functions	LOG10 Function	LOG10(<number>)</number>	Returns the base-10 logarithm of a number.
Math and Trig Functions	MOD Function	MOD(<number>, <divisor>)</divisor></number>	Returns the remainder after a number is divided by a
		, , , , , , , , , , , , , , , , , , , ,	divisor. The result always has the same sign as the divisor.
Math and Trig Functions	MROUND Function	MROUND(<number>, <multiple>)</multiple></number>	Returns a number rounded to the desired multiple.
iviatii aliu 111g FullCti0115	MINOGIND FUIICHOU	rinound(virumbers, vinutciples)	neturns a number rounded to the desired multiple.
Math and Trig Functions	ODD Function	ODD(number)	Returns number rounded up to the nearest odd integer.
<u> </u>		, ,	i 3
Math and Trig Functions	PI Function	PI()	Returns the value of Pi, 3.14159265358979, accurate to 15
madi and trig runctions	r i uncuon	· -(/	digits.
Math and Trig Functions	POWER Function	POWER(<number>, <power>)</power></number>	Returns the result of a number raised to a power.
Math and Trig Functions	PRODUCT Function	PRODUCT(<column>)</column>	Returns the product of the numbers in a column.
THE PROPERTY OF THE PROPERTY O	- AODOCT Turiction	1 NODOCT (COTUMNITY)	
Math and Trig Functions	PRODUCTX Function	PRODUCTX(, <expression>)</expression>	Returns the product of an expression evaluated for each
		. , , , ,	row in a table.
			Performs division and returns only the integer portion of
Math and Trig Functions	QUOTIENT Function	QUOTIENT(<numerator>, <denominator>)</denominator></numerator>	the division result. Use this function when you want to
-		, i	discard the remainder of division.
Math and Trig Functions	RADIANS Function	RADIANS(angle)	Converts degrees to radians.
	20 10 11 11 10 1 GHOCIOII		Returns a random number greater than or equal to 0 and
			-
Math and Trig Functions	RAND Function	RAND()	less than 1, evenly distributed. The number that is
		``	returned changes each time the cell containing this
			function is recalculated.
			Returns a random number in the range between two
Math and Trig Functions	RANDBETWEEN Function	RANDBETWEEN(<bottom>,<top>)</top></bottom>	numbers you specify
			numbers you specify.
Math and Trig Functions	ROUND Function	ROUND(<number>, <num_digits>)</num_digits></number>	Rounds a number to the specified number of digits.
Math and Trig Functions Math and Trig Functions Math and Trig Functions			

Category	Function	Syntax	Description
,		,	Determines the sign of a number, the result of a
Math and Trig Functions	SIGN Function	SIGN(<number>)</number>	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.
Math and Trig Functions	SQRT Function	SQRT(<number>)</number>	Returns the square root of a number.
Math and Trig Functions	SUM Function	SUM(<column>)</column>	Adds all the numbers in a column.
Math and Trig Functions	SUMX Function	SUMX(, <expression>)</expression>	Returns the sum of an expression evaluated for each row
	<u> </u>		in a table.
Math and Trig Functions	TRUNC Function	TRUNC(<number>,<num_digits>)</num_digits></number>	Truncates a number to an integer by removing the decimal, or fractional, part of the number.
Other functions	EXCEPT Function	EXCEPT(<table_expression1>,</table_expression1>	Returns the rows of one table which do not appear in
Other functions	<u>EXCELLIT UNCCON</u>	<table_expression2></table_expression2>	another table.
			The GROUPBY function is similar to the SUMMARIZE
		CDOUDDY (table)	function. However, GROUPBY does not do an implicit CALCULATE for any extension columns that it adds.
Other functions	GROUPBY Function	GROUPBY (, [<groupby_columnname1>], [<name>,</name></groupby_columnname1>	GROUPBY permits a new function, CURRENTGROUP(), to
		<expression>])</expression>	be used inside aggregation functions in the extension
			columns that it adds. GROUPBY attempts to reuse the
			data that has been grouped making it highly performant.
Other functions	INTERSECT Function	<pre>INTERSECT(<table_expression1>,</table_expression1></pre>	Returns the row intersection of two tables, retaining
		<table_expression2>) ISEMPTY()</table_expression2>	duplicates.
Other functions	ISEMPTY Function		Checks if a table is empty. Performs an inner join of a table with another table. The
Out f ti	NATURALININEDIOIN Evertice	NATURALINNERJOIN(<leftjointable>,</leftjointable>	tables are joined on common columns (by name) in the
Other functions	NATURALINNERJOIN Function	<rightjointable>)</rightjointable>	two tables. If the two tables have no common column
			names, an error is returned. Performs a left outer join of a table with another table.
	NATURALLEFTOUTERJOIN	NATURALLEFTOUTERJOIN(<leftjointable>,</leftjointable>	The tables are joined on common columns (by name) in
Other functions	Function	<pre><rightjointable>)</rightjointable></pre>	the two tables. If the two tables have no common column
			names, an error is returned.
		SUMMARIZECOLUMNS(
Other functions	SUMMARIZECOLUMNS	<pre><groupby_columnname> [, < groupBy_columnName >],</groupby_columnname></pre>	Returns a summary table over a set of groups.
	<u>Function</u>	[<filtertable>][, <name>,</name></filtertable>	
		<pre><expression>]) UNION(<table_expression1>,</table_expression1></expression></pre>	
Other functions	UNION Function	<table_expression2></table_expression2>	Creates a union (join) table from a pair of tables.
		[, <table_expression>])</table_expression>	Stores the result of an expression as a named variable,
			which can then be passed as an argument to other
Other functions	VAR	WAR (name) - (eynnessien)	measure expressions. Once resultant values have been
Other functions	VAR	VAR <name> = <expression></expression></name>	calculated for a variable expression, those values do not
			change, even if the variable is referenced in another
			expression. Returns a delimited text string with the identifiers of all
Parent and Child Functions	PATH Function	PATH(<id_columnname>, <parent_columnname>)</parent_columnname></id_columnname>	the parents of the current identifier, starting with the
		cparent_corumnvame/)	oldest and continuing until current.
Parent and Child Functions	PATHCONTAINS Function	PATHCONTAINS(<path>, <item>)</item></path>	Returns TRUE if the specified <i>item</i> exists within the
			specified <i>path</i> . Returns the item at the specified <i>position</i> from a string
Parent and Child Functions	PATHITEM Function	PATHITEM(<path>, <position>[, <type>])</type></position></path>	resulting from evaluation of a PATH function. Positions
		(cype>1)	are counted from left to right.
Parent and Child Functions	DATIJITEMADEV/EDCE Eurotion	PATHITEMREVERSE(<path>, <position>[,</position></path>	Returns the item at the specified <i>position</i> from a string resulting from evaluation of a PATH function. Positions
Parent and Child Functions	PATHITEMREVERSE Function	<type>])</type>	are counted backwards from right to left.
Parent and Child Functions	PATHLENGTH Function	PATHLENGTH(<path>)</path>	Returns the number of parents to the specified item in a
Turche and child runctions	TATTLENGTITT UTCUOT		given PATH result, including self.
Statistical Functions	ADDCOLUMNS Function	ADDCOLUMNS(, <name>, <expression>[, <name>,</name></expression></name>	Adds calculated columns to the given table or table
		<expression>])</expression>	expression.
Statistical Functions	AVERAGE Function	AVERAGE(<column>)</column>	Returns the average (arithmetic mean) of all the numbers in a column.
Caratisais of Francations	AVEDACEA E:	AVEDACEA (]	Returns the average (arithmetic mean) of the values in a
Statistical Functions	AVERAGEA Function	AVERAGEA(<column>)</column>	column. Handles text and non-numeric values.
Statistical Functions	AVERAGEX Function	AVERAGEX(, <expression>)</expression>	Calculates the average (arithmetic mean) of a set of
			expressions evaluated over a table. Returns the beta distribution. The beta distribution is
Chatistical Foundations	DETA DICT Franchisco	BETA.DIST(x,alpha,beta,cumulative,[A]	commonly used to study variation in the percentage of
Statistical Functions	BETA.DIST Function	,[B])	something across samples, such as the fraction of the day
			people spend watching television.
Statistical Functions	BETA.INV Function	<pre>BETA.INV(probability,alpha,beta,[A],[B])</pre>	Returns the inverse of the beta cumulative probability
er ar de la	CIUCO INN'S		density function (BETA.DIST). Returns the inverse of the left-tailed probability of the chi-
Statistical Functions	CHISQ.INV Function	CHISQ.INV(probability,deg_freedom)	squared distribution.
Statistical Functions	CHISQ.INV.RT Function	CHISQ.INV.RT(probability,deg_freedom)	Returns the inverse of the right-tailed probability of the
		2 (, 2),2-8 2289)	chi-squared distribution. The confidence interval is a range of values. Your sample
Statistical Functions	CONFIDENCE.NORM Function	CONFIDENCE.NORM(alpha,standard_dev,si	mean, x, is at the center of this range and the range is x ±
		ze)	CONFIDENCE.NORM.
Statistical Functions	CONFIDENCE.T Function	CONFIDENCE.T(alpha,standard_dev,size)	Returns the confidence interval for a population mean,
			using a Student's t distribution.

Category	Function	Syntax	Description
Statistical Functions	COUNT Function	COUNT(<column>)</column>	The COUNT function counts the number of cells in a column that contain numbers.
Statistical Functions	COUNTA Function	COUNTA(<column>)</column>	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.
Statistical Functions	COUNTAX Function	COUNTAX(, <expression>)</expression>	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.
Statistical Functions	COUNTBLANK Function	COUNTBLANK(<column>)</column>	Counts the number of blank cells in a column.
Statistical Functions	COUNTROWS Function	COUNTROWS()	The COUNTROWS function counts the number of rows in the specified table, or in a table defined by an expression.
Statistical Functions	COUNTX Function	COUNTX(, <expression>)</expression>	Counts the number of rows that contain a number or an expression that evaluates to a number, when evaluating an expression over a table.
Statistical Functions	CROSSJOIN Function	CROSSJOIN(, [,])	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.
Statistical Functions	DATATABLE Function	DATATABLE (ColumnName1, DataType1, ColumnName2, DataType2, {{Value1, Value2}, {ValueN, ValueN+1}})	Provides a mechanism for declaring an inline set of data values.
Statistical Functions	DISTINCTCOUNT Function	DISTINCTCOUNT(<column>)</column>	The DISTINCTCOUNT function counts the number of different cells in a column of numbers.
Statistical Functions	EXPON.DIST Function	EXPON.DIST(x,lambda,cumulative)	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. Returns a table with the Cartesian product between each
Statistical Functions	GENERATE Function	GENERATE(<table1>, <table2>)</table2></table1>	row in table1 and the table that results from evaluating table2 in the context of the current row from table1.
Statistical Functions	GENERATEALL Function	GENERATEALL(<table1>, <table2>)</table2></table1>	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.
Statistical Functions	GEOMEAN Function	GEOMEAN(<column>)</column>	Returns the geometric mean of the numbers in a column.
Statistical Functions	GEOMEANX Function	GEOMEANX(, <expression>)</expression>	Returns the geometric mean of an expression evaluated for each row in a table.
Statistical Functions	MAX Function	MAX(<column>)</column>	Returns the largest numeric value in a column.
Statistical Functions	MAXA Function	MAXA(<column>)</column>	Returns the largest value in a column. Logical values and blanks are counted.
Statistical Functions	MAXX Function	MAXX(, <expression>)</expression>	Evaluates an expression for each row of a table and
Statistical Functions	MEDIAN Function	MEDIAN(<column>)</column>	returns the largest numeric value. Returns the median of numbers in a column.
Statistical Functions	MEDIANX Function	MEDIANX(, <expression>)</expression>	Returns the median number of an expression evaluated for each row in a table.
Statistical Functions	MIN Function	MIN(<column>)</column>	Returns the smallest numeric value in a column. Ignores logical values and text.
Statistical Functions	MINA Function	MINA(<column>)</column>	Returns the smallest value in a column, including any logical values and numbers represented as text.
Statistical Functions	MINX Function	MINX(, < expression>)	Returns the smallest numeric value that results from
Statistical Functions	PERCENTILE.EXC Function	PERCENTILE.EXC(<column>, <k>)</k></column>	evaluating an expression for each row of a table. Returns the k-th percentile of values in a range, where k is
Statistical Functions	PERCENTILE.INC Function	PERCENTILE.INC(<column>, <k>)</k></column>	in the range 01, exclusive. Returns the k-th percentile of values in a range, where k is
Statistical Functions	PERCENTILEX.EXC Function	PERCENTILEX.EXC(,	in the range 01, inclusive. Returns the percentile number of an expression evaluated
Statistical Functions	PERCENTILEX.INC Function	<pre><expression>, k) PERCENTILEX.INC(,</expression></pre>	for each row in a table. Returns the percentile number of an expression evaluated
Statistical Functions	POISSON.DIST Function	<pre>cexpression>;, k) POISSON.DIST(x,mean,cumulative)</pre>	for each row in a table. 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.
Statistical Functions	RANK.EQ Function	<pre>RANK.EQ(<value>, <columnname>[, <order>])</order></columnname></value></pre>	Returns the ranking of a number in a list of numbers.
Statistical Functions	RANKX Function	RANKX(, <expression>[, <value>[, <order>[, <ties>]]])</ties></order></value></expression>	Returns the ranking of a number in a list of numbers for each row in the <i>table</i> argument.
Statistical Functions	ROW Function	<pre>ROW(<name>, <expression>[[,<name>, <expression>]])</expression></name></expression></name></pre>	Returns a table with a single row containing values that result from the expressions given to each column.

Catagory	Function	Syntax	Description
Category	Function	SAMPLE(<n value="">, ,</n>	Description
Statistical Functions	SAMPLE Function	<pre><orderby_expression>, [<order>[, <orderby_expression>, [<order>]]])</order></orderby_expression></order></orderby_expression></pre>	Returns a sample of N rows from the specified table.
Statistical Functions	SELECTCOLUMNS Function	SELECTCOLUMNS(, <name>, <scalar_expression> [, <name>, <scalar_expression>])</scalar_expression></name></scalar_expression></name>	Adds calculated columns to the given table or table expression.
Statistical Functions	SIN Function	SIN(number)	Returns the sine of the given angle.
Statistical Functions	SINH Function	SINH(number)	Returns the hyperbolic sine of a number.
Statistical Falletions	<u>SHALL GUECOU</u>	SINT(TUMBET)	Retains the hyperbolic sine of a number.
Statistical Functions	STDEV.P Function	STDEV.P(<columnname>)</columnname>	Returns the standard deviation of the entire population.
Statistical Functions	STDEV.S Function	STDEV.S(<columnname>)</columnname>	Returns the standard deviation of a sample population.
Statistical Functions	STDEVX.P Function	STDEVX.P(, <expression>)</expression>	Returns the standard deviation of the entire population.
Statistical Functions	STDEVX.S Function	STDEVX.S(, <expression>)</expression>	Returns the standard deviation of a sample population.
Statistical Functions	SQRTPI Function	SQRTPI(number)	Returns the square root of (number * pi).
Statistical Functions	SUMMARIZE Function	<pre>SUMMARIZE(,</pre>	Returns a summary table for the requested totals over a set of groups.
Statistical Functions	TAN Function	TAN(number)	Returns the tangent of the given angle.
Statistical Functions	TANH Function	TANH(number)	Returns the hyperbolic tangent of a number.
Statistical Functions	TOPN Function	TOPN(<n_value>, , <order>yesion>, [<order>[,</order></order></n_value>	Returns the top N rows of the specified table.
		<pre><orderby_expression>, [<order>]]])</order></orderby_expression></pre>	
Statistical Functions	VAR.P Function	VAR.P(<columnname>)</columnname>	Returns the variance of the entire population.
Statistical Functions	VAR.S Function	VAR.S(<columnname>)</columnname>	Returns the variance of a sample population.
Statistical Functions	VARX.P Function	VARX.P(, <expression>)</expression>	Returns the variance of the entire population.
Statistical Functions	VARX.S Function	VARX.S(, <expression>)</expression>	Returns the variance of the critic population.
Statistical Fullctions	VARA.3 FUIICIIOII		Returns the internal rate of return for a schedule of cash
Statistical Functions	XIRR Function	XIRR(, <values>, <dates>, [guess])</dates></values>	flows that is not necessarily periodic.
Statistical Functions	XNPV Function	<pre>XNPV(, <values>, <dates>, <rate>)</rate></dates></values></pre>	Returns the present value for a schedule of cash flows that is not necessarily periodic.
Text functions	BLANK Function	BLANK()	Returns a blank. Returns the number (code point) corresponding to the
Text functions	<u>UNICODE Function</u>	UNICODE(text)	first character of the text.
Text functions	CONCATENATE Function	CONCATENATE(<text1>, <text2>)</text2></text1>	Joins two text strings into one text string.
Text functions	CONCATENATEX Function	<pre>CONCATENATEX(, <expression>, [delimiter])</expression></pre>	Concatenates the result of an expression evaluated for each row in a table.
Text functions	EXACT Function	EXACT(<text1>,<text2>)</text2></text1>	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.
Text functions	FIND Function	FIND(<find_text>, <within_text>[, [<start_num>][, <notfoundvalue>]])</notfoundvalue></start_num></within_text></find_text>	Returns the starting position of one text string within another text string, FIND is case-sensitive.
Text functions	FIXED Function	FIXED(<number>, <decimals>, <no_commas>)</no_commas></decimals></number>	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.
Text functions	FORMAT Function	FORMAT(<value>, <format_string>)</format_string></value>	Converts a value to text according to the specified format.
Text functions	Pre-Defined Numeric Formats for the FORMAT Function		
Text functions	Custom Numeric Formats for the FORMAT Function		
Text functions	Pre-defined Date and Time formats for the FORMAT Function		
Text functions	Custom Date and Time formats for the FORMAT Function		
Text functions	LEFT Function	LEFT(<text>, <num_chars>)</num_chars></text>	Returns the specified number of characters from the start of a text string.
Text functions	LEN Function	LEN(<text>)</text>	Returns the number of characters in a text string.
Text functions	LOWER Function	LOWER(<text>)</text>	Converts all letters in a text string to lowercase.
Text functions	MID Function	MID(<text>, <start_num>, <num_chars>)</num_chars></start_num></text>	Returns a string of characters from the middle of a text string, given a starting position and length.
Text functions	REPLACE Function	REPLACE(<old_text>, <start_num>, <num_chars>, <new_text>)</new_text></num_chars></start_num></old_text>	REPLACE replaces part of a text string, based on the number of characters you specify, with a different text string.
Text functions	REPT Function	REPT(<text>, <num_times>)</num_times></text>	Repeats text a given number of times. Use REPT to fill a cell with a number of instances of a text string.
Text functions	RIGHT Function	RIGHT(<text>, <num_chars>)</num_chars></text>	RIGHT returns the last character or characters in a text string, based on the number of characters you specify.

Category	Function	Syntax	Description
Text functions	SEARCH Function	SEARCH(<find_text>, <within_text>[, [<start_num>][, <notfoundvalue>]])</notfoundvalue></start_num></within_text></find_text>	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.
Text functions	SUBSTITUTE Function	<pre>SUBSTITUTE(<text>, <old_text>, <new_text>, <instance_num>)</instance_num></new_text></old_text></text></pre>	Replaces existing text with new text in a text string.
Text functions	TRIM Function	TRIM(<text>)</text>	Removes all spaces from text except for single spaces between words.
Text functions	UPPER Function	UPPER (<text>)</text>	Converts a text string to all uppercase letters
Text functions	VALUE Function	VALUE(<text>)</text>	Converts a text string that represents a number to a number.