- abs(Number) Returns the absolute value of value, The "absolute value" of a number is its distance from zero as a positive number.
- acos(Number) Returns the inverse cosine of value
- add_days(Number, Date) Adds number days to date
- add hours(Number, Date) Adds number hours to date
- add minutes(Number, Date) Adds number minutes to date
- add_months(Number, Date) Adds number months to date
- add_seconds (Number, Date) Adds number seconds to date
- add_years(Number, Date) Adds number years to date asin(Number) Returns the inverse sine of value
- atan(Number) Returns the inverse tangent of value
- beta_dist(Number, Number, YesNo) Returns the position of value on the beta distribution with parameters alpha and beta. If cumulative = yes, returns the cumulative probability
- beta_inv(Number, Number) Returns the position of probability on the inverse cumulative beta distribution with parameters alpha and beta
- binom_dist(Number, Number, YesNo) Returns the probability of getting num_successes successes in num_tests tests with the given probability of success. If cumulative = yes, returns the cumulative probability
- binom_inv(Number, Number, Number) Returns the smallest number k such that binom(k, num_tests, test_probability, yes) >= target_probability
- case(Any, Any,...) Returns value_if_yes for the first when case whose yesno_arg value is yes. Returns else_value if all when cases are no.
- ceiling(Number) Returns the smallest integer greater than or equal to value
- chisq_dist(Number, Number, YesNo) Returns the position of value on the gamma distribution with dof degrees of freedom. If cumulative = yes, returns the cumulative probability
- chisq_inv(Number, Number) Returns the position of probability on the inverse cumulative gamma distribution with dof degrees of freedom
- chisq_test(Number or Number List, Number or Number List chisq_test(actual, expected)

- Returns the probability for the chi-squared test for independence between actual and expected data. actual can be a column or a column of lists, and expected must be the same type.
 coalesce(Any, Any,...) Returns the first non-null value in value 1, value 2, ...,
- combin(Number, Number) Returns the number of ways of choosing selection_size elements from a set of size set_size
- concat(Any, Any,...) Returns value_1, value_2, ..., value_n joined as one string
- confidence_norm(Number, Number, Number) Returns half the width of the normal confidence interval at significance level alpha, standard deviation stdev, and sample size
- confidence_t(Number, Number, Number) Returns half the width of the Student's t confidence interval at significance level alpha, standard deviation stdev, and sample size
- contains(String, String) Returns yes if string contains search_string, and No otherwise
- correl (Number, Number) Returns the correlation coefficient of column_1 and column_2
- cos (Number) Returns the cosine of value

value n if found and null otherwise

- count (Any) Returns the count of non-null values in the column defined by expression,
 unless expression defines a column of Lists, in which case returns the count in each List
- count_distinct(Any) Returns the count of distinct non-null values in the column defined by expression, unless expression defines a column of Lists, in which case returns the count in each List
- covar-pop(Number, Number) Returns the population covariance of column_1 and column_2

| • | covar_samp(Number, Number) Returns the sample covariance of column_1 and column_2 |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | date(Number, Number, Number) Returns "year-month-day" date or null if the date would be invalid date_time(Number, Number, Number, Number, Number, Number) Returns "year-month-day hours:minutes:seconds" date or null if the date would be invalid |
| • | degrees(Number) Converts value from radians to degrees |
| • | diff_days(Date, Date) Returns the number of days between start_date and end_date |
| • | diff_hours(Date, Date) Returns the number of hours between start_date and end_date |
| • | diff_minutes(Date, Date) Returns the number of minutes between start_date and end_date |
| • | diff_months(Date, Date) Returns the number of months between start_date and end_date |
| • | diff_seconds(Date,Date) Returns the number of seconds between start_date and end_date |
| | |

| • | diff_years(Date,Date) Returns the number of years between start_date and end_date |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | exp(Number) Returns e to the power of value |
| • | Expon_dist(Number,Number,YesNo) Returns the position of value on the exponential distribution with parameter lambda. If cumulative = yes, returns the cumulative probability |
| • | Extract_days(Date) Extracts the days from date |
| • | Extract_hours(Date) Extracts the hours from date |
| • | Extract_minutes(Date) Extracts the minutes from date |
| • | Extract_months(Date) Extracts the months from date |
| • | Extract_seconds(Date) Extracts the seconds from date |
| | |

| • | Extract_years(Date) Extracts the years from date |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | f_dist(Number, Number, YesNo) Returns the position of value on the F distribution with parameters dof_1 and dof_2. If cumulative = yes, returns the cumulative probability |
| • | f_inv(Number, Number, Number) Returns the position of probability on the inverse cumulative F distribution with parameters dof_1 and dof_2 |
| • | fact (Number) Returns the factorial of value |
| • | floor(Number) Returns the largest integer less than or equal to value |
| • | gamma_dist(Number, Number, YesNo) Returns the position of value on the gamma distribution with parameters alpha and beta. If cumulative = yes, returns the cumulative probability |
| • | gamma_inv(Number, Number, Number) Returns the position of probability on the inverse cumulative gamma distribution with parameters alpha and beta |
| • | geomean(Number or Number List) Returns the geometric mean of the column created by expression unless expression defines a column of Lists, in which case returns the geometric mean of each List |

| • | hypgeom_dist(Number, Number, Number, YesNo) Returns the probability of getting sample_successes from the given sample_size, number of population_successes, and population_size. If cumulative = yes, returns the cumulative probability |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | <pre>if(YesNo, Any, Any) If yesno_expression evaluates to yes, returns the value_if_yes value. Otherwise, returns the value_if_no value</pre> |
| • | index(Any, Number) Returns the value of the nth element of the column created by expression, unless expression defines a column of Lists, in which case returns the nth element of each list |
| • | intercept(Number, Number) Returns the intercept of the linear regression line through the points determined by y_column and x_column |
| • | is_null(Any) Returns yes if value is null, and No otherwise |
| • | kurtosis(Number or Number List) Returns the sample excess kurtosis of the column created by expression unless expression defines a column of Lists, in which case returns the sample excess kurtosis of each List |
| • | Large(Number or Number List, Number) Returns the kth largest value of the column created by expression unless expression defines a column of Lists, in which case returns the kth largest value of each List |

| • | Length(String) Returns the number of characters in string |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | list(Any) Creates a List out of the given values |
| • | Ln(Number) Returns the natural logarithm of value |
| • | Log(Number) Returns the base 10 logarithm of value |
| • | Lookup(Any, Any, Any) Returns the value in result_column that is in the same row as value is in lookup_column |
| • | Lower (String) Returns string with all characters converted to lower case |
| • | match(Any, Any) Returns the row number of the first occurence of value in the column created by expression unless expression defines a column of Lists, in which case returns the position of value in each List |
| • | max(Number or Number List) Returns the max of the column created by expression unless expression defines a column of Lists, in which case returns the max of each List |
| • | mean(Number or Number List) Returns the mean of the column created by expression unless expression defines a column of Lists, in which case returns the mean of each List |

| • | median(Number or Number List) Returns the median of the column created by expression unless expression defines a column of Lists, in which case returns the median of each List |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | min(Number or Number List) Returns the min of the column created by expression unless expression defines a column of Lists, in which case returns the min of each List |
| • | mod(Number, Number) Returns the remainder of dividing value by divisor |
| • | mode(Number or Number List) Returns the mode of the column created by expression unless expression defines a column of Lists, in which case returns the mode of each List |
| • | multinomial(Number,) Returns the factorial of the sum of the arguments divided by the product of each of their factorials |
| • | negbinom_dist(Number. Number, YesNo) Returns the probability of getting num_failures failures before getting num_successes successes, with the given probability of success. If cumulative = yes, returns the cumulative probability |
| • | norm_dist(Number, Number, YesNo) Returns the position of value on the normal distribution with the given mean and stdev. If cumulative = yes, then returns the cumulative probability |
| | |

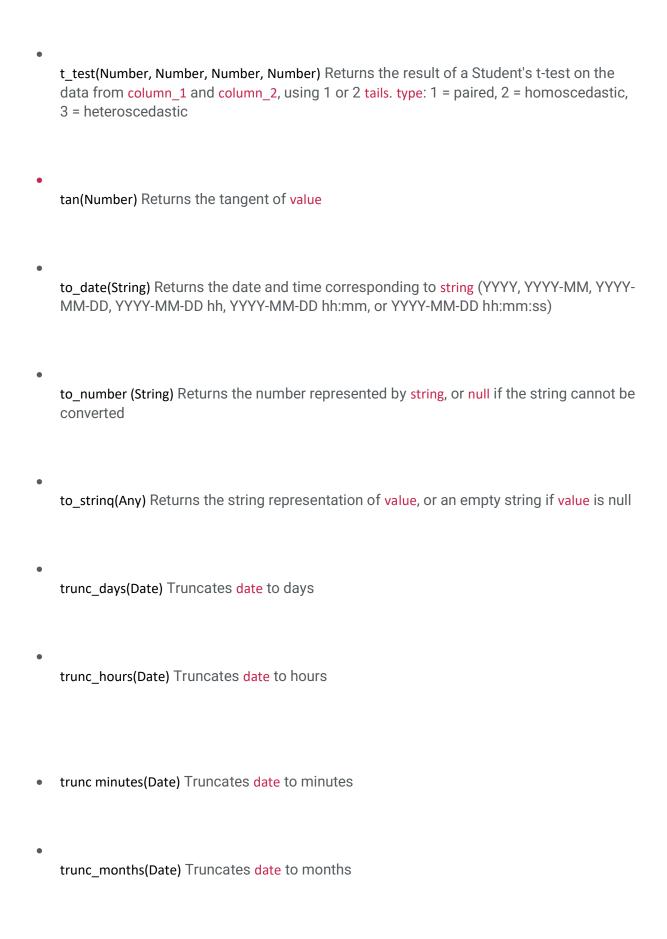
| • | norm_inv(Number, Number, Number) Returns the position of probability on the inverse normal cumulative distribution |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | norm_s_dist(Number, YesNo) norm_s_inv(Number) Returns the position of value on the standard normal distribution. If cumulative = yes, returns the cumulative probability |
| • | NOT Returns yes if value is No, and yes otherwise |
| • | now()Returns the current date and time |
| • | offset(Any, Number) Returns the value of row (n + row_offset) in column, where n is the current row number |
| • | offset_list(Any, Number, Number) Returns a List of the num_values values starting at row (n + row_offset) in column, where n is the current row number |
| • | percent_rank(Number or Number List, Number) Returns the rank of value in column as a percentage from 0 to 1 inclusive |
| • | percentile(Number or Number List, Number) Returns the value from the column created by expression corresponding to the given percentile_value, unless expression defines a column of Lists, in which case returns the percentile value for each List. percentile_value must be between 0 and 1, else this returns null |

| • | pivot_column()Returns the index of the current pivot column |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | pivot_index(Any, Number) Evaluates expression in the context of the pivot column at position pivot_index (1 for first pivot, 2 second pivot, etc.). Returns null for unpivoted results |
| • | pivot_offset(Any, Number) Returns the value of the pivot_expression in position (n + column_offset), where n is the current pivot column position. Returns null for unpivoted results |
| • | pivot_offset_list(Any, Number, Number) Returns a List of the num_values values in pivot_expression starting at position (n + column_offset), where n is the current pivot index. Returns null for unpivoted results |
| • | <pre>pivot_row(Any) Returns the pivoted values of expression as a List. Returns null for unpivoted results.</pre> |
| • | pivot_where(YesNo, Any) Returns the value of expression for the pivot column which uniquely satisfies select_expression or null if such a column does not exist or is not unique. |

| • | poissondist(Number, Number, YesNo) Returns the position of value on the poisson distribution with parameter lambda. If cumulative = yes, returns the cumulative probability |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | position(String, String) Returns the start index of search_string in string if it exists, and 0 otherwise |
| • | power(Number, Number) Returns base raised to the power of exponent |
| • | product(Number or Number List) Returns the product of the column created by expression unless expression defines a column of Lists, in which case returns the product of each List |
| • | radians(Number) Converts value from degrees to radians |
| • | rand()Returns a random number between 0 and 1 |
| • | rank(Number,Number or Number List) Returns the rank of value in the column created by expression unless expression defines a column of Lists, in which case returns the rank of value in each List |
| • | rankavg(Number,Number or Number List) Returns the average rank of value in the column created by expression unless expression defines a column of Lists, in which case returns the average rank of value in each List |

| • | replace(String, String, String) Returns string with all occurrences of old_string replaced with new_string |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | round(Number, Number) Returns value rounded to num_decimals decimal places |
| • | running_product(Number) Returns a running product of the values in value_column |
| • | running_total (Number) Returns a running total of the values in value_column |
| • | sin(Number) Returns the sine of value |
| • | skew(Number or Number List) Returns the sample skewness of the column created by expression unless expression defines a column of Lists, in which case returns the sample skewness of each List |
| • | slope(Number, Number) Returns the slope of the linear regression line through points determined by y_column and x_column |
| • | small(Number or Number List, Number) Returns the kth smallest value of the column created by expression unless expression defines a column of Lists, in which case returns the kth smallest value of each List |
| • | split(String, String) Returns a List of strings in string broken up by delimiter |

| • | sqrt(Number) Returns the square root of value |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | stddev_pop(Number or Number List) Returns the standard deviation (population) of the column created by expression unless expression defines a column of Lists, in which case returns the standard deviation (population) of each List |
| • | stddev. samp(Number or Number List) Returns the standard deviation (sample) of the column created by expression unless expression defines a column of Lists, in which case returns the standard deviation (sample) of each List |
| • | substring(String, Number, Number) Returns the substring of string beginning at start_position consisting of length characters |
| • | sum(Number or Number List) Returns the sum of the column created by expression unless expression defines a column of Lists, in which case returns the sum of each List |
| • | t_dist(Number, Number,YesNo) Returns the position of value on the student's t-distribution with dof degrees of freedeom. If cumulative = yes, returns the cumulative probability |
| • | t_inv(Number, Number) Returns the position of probability on the inverse normal cumulative distribution with dof degrees of freedom |



| • | trunc_years(Date) Truncates date to years |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | upper(String) Returns string with all characters converted to upper case |
| • | var_pop(Number or Number List) Returns the variance (population) of the column created by expression unless expression defines a column of Lists, in which case returns the variance (population) of each List |
| • | var_samp(Number or Number List) Returns the variance (sample) of the column created by expression unless expression defines a column of Lists, in which case returns the variance (sample) of each List |
| • | weibull_dist(Number, Number, YesNo) Returns the position of value on the Weibull distribution with parameters shape and scale. If cumulative = yes, returns the cumulative probability |
| • | when(YesNo, Any) Returns value_if_yes if yesno_expression evaluates to yes. Otherwise returns null |
| • | Z_test(Number, Number, Number) Returns the one-tailed p-value of the z-test using the existing data and stdev on the hypothesized mean value. |