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LightLink Data Analysis Functions and Operators Solution Guide

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Solution Guide

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Function	Explanation	Usage
AVEDEV	Returns the average deviation of data points from their mean*	AVEDEV(Num1, Num2, Num3, … as double; Num as Integer) as double
AVERAGE	Returns the average of a series of numbers*	AVERAGE(Num1, Num2, Num3, … as double; Num as Integer) as double
BITSLEFT	Treats an integer as a series of 32 bits and shifts them to the left	BITSLEFT(Bits, Shift as Integer) as Integer
BITSOFF	Treats an integer as a series of bits, and turns a specific bit off	BITSOFF(Bits, Position as Integer) as Integer
BITSON	Treats an integer as a series of bits, and turns a specific bit on	BITSON(Bits, Position as Integer) as Integer
BITSRIGHT	Treats an integer as a series of 32 bits and shifts them to the right	BITSRIGHT(Bits, Shift as Integer) as Integer
CAND	Returns the boolean result of all the bodean input expression when logically ANDed together	CAND (bool1, bool2, bool3,… as Boolean) as boolean
CLEAN	Removes all non-printable characters from text (ASCII 1-31 and 128-159)	CLEAN(S as String) as String
CMFEET	Translates CM to feet	CMFEET(R as Double)as Double
CMINCH	Translates CM to Inches	CMINCH(R as Double)as double
CNOT	Returns the Boolean result of logically negating the Boolean input	CNOT (Boolean) as Boolean
COMBIN	Returns the number of combinations of groups you can form; differs from Permut in that the order does not matter	COMBIN(ItemsTotal, ItemsInGroup as Integer) as double
COR	Returns the Boolean result of all the Boolean expression inputs when logically ORed together	COR (bool1, bool2, bool3,…as Boolean) as boolean
CTOF	Translates centigrade to fahrenheit	CTOF(R as double) as double
CTOK	Translates centigrade to kelvin	CTOK(R as double) as double
7-6 DAY	Returns the day given a date value	DAY (date) as integer
EVEN	Rounds to the next highest absolute value even number	EVEN(Value as Double) as Double
FACT	Returns N factorial (N!)	FACT(N: Integer): double
FEETCM	Translates Feet to CM	FEETCM(R as Double) as Double
FEETM	Translates Feet to Meters	FEETM(R as Double) as Double
FTOC	Translates Fahrenheit to Centigrade	FTOC(R as Double) as Double

Function	Explanation	Usage
GALLTR	Translates gallons to liters	GALLTR(R as Double) as Double
HOURS	Returns the hours given a time value	HOURS (time) as integer
INCM	Translates inches to centimeters	INCM(R as Double) as Double
KGPOUND	Translates kilograms into pounds	KGPOUND(R as Double) as Double
KMMILE	Translates kilometers into miles	KMMILE(R as Double) as Double
KURT	Returns the Kurtosis of a series of numbers*	KURT(Num1, Num2, Num3, … as double; Num as Integer) as double
LTRGAL	Translates liters into gallons	LTRGAL(R as Double) as Double
MAX	Returns the maximum value from a series of numbers*	MAX(Num1, Num2, Num3, … as double; Num as Integer) as double
MEDIAN	Returns the median value from a series of numbers*	MEDIAN(Num1, Num2, Num3, … as double; Num as Integer) as double
MFEET	Translates meters into feet	MFEET(R as Double) as Double
7-8 MILEKM	Translates miles into kilometers	MILEKM(R as Double) as Double
MIN	Returns the minimum value from a series of numbers*	MIN(Num1, Num2, Num3, … as double; Num as Integer) as double
MINUTES	Returns the minutes given a time value	MINUTES (time) as integer
MLOZ	Translates milliliters to ounces	MLOZ(R as Double) as Double
MODE	Returns the mode (most frequently appearing) value from a series of numbers*	MODE(Num1, Num2, Num3, … as double; Num as Integer) as double
MONTH	Returns the month given a date value	MONTH (date) as integer
NUMBERTOWORDS	Takes a number ranging from 0 to 9,999,999,99999 and converts it to words *Example:* ccNumberToWords(121) = "One Hundred Twenty One"	NUMBERTOWORDS(R as double) as String
ODD	Rounds to the next highest absolute value odd number	ODD(Value: Double): Double
OZML	Translates ounces to milliliters	OZML(R as Double) as Double
PERMUT	Returns the number of permutations of objects you can form; differs from Combin in that the order matters	PERMUT(ItemsTotal, ItemsInGroup as Integer) as double

Function	Explanation	Usage
POUNDKG	Translates pounds to kilograms	POUNDKG(R as Double) as Double
PROPER	Takes a string and changes the capitalization so that the first letter of each word is capitalized and the rest are lowercase	PROPER(S as String) as String
ROMAN	Converts a number to roman numerals, as a string X is an integer from 0 to 3999; RomanType can be 0,1,2,3, or 4 and determines how concise the final number is made	ROMAN(X, RomanType as Integer) as String
SECONDS	Returns the seconds a time value	SECONDS (time) as integer
SQFEETSQM	Translates square feet to square meters	SQFEETSQM(R as Double) as Double
7-10 SQMSQFEET	Translates square meters to square feet	SQMSQFEET(R as Double) as Double
STDEV	Returns the standard deviation of a series of numbers based on a sample of data*	STDEV(Num1, Num2, Num3, … as double; Num as Integer) as double
STDEVP	Returns the standard deviation of a series of numbers based on entire population*	STDEVP(Num1, Num2, Num3, … as double; Num as Integer) as double
SUBSTITUTE	Replaces an OldPart of a string with a NewPart where it occurs in a string, S; it will replace only the Instance specified, or all instances if Instance is zero	SUBSTITUTE(S, OldPart, NewPart as String, Instance as Integer) as String
TIMEOP	Returns the given number of seconds as time	TIMEOP (integer) as time
TOTAL SECONDS	Returns the given time in total seconds	TOTAL SECONDS (time) as integer
TRIM	Trims all spaces except single spaces from between words	Trim(S as String) as String
VAR	Returns the variance in a set of numbers based on a sample of data*	VAR(Num1, Num2, Num3, … as double; Num as Integer) as double
VARP	Returns the variance in a set of numbers based on a complete population of data*	VARP(Num1, Num2, Num3, … as double; Num as Integer) as double
YEAR	Returns the year given a date value	YEAR (date) as integer

* Num is the number of numbers in the call, and must be from 0 to 1024