

The following listed functions are available and supported in our table element, **whether you type them using the editor or import a spreadsheet file.**

A

ABS

This function calculates the absolute value of the specified value.

ACCRINT

This function calculates the accrued interest for a security that pays periodic interest

ACCRINTM

This function calculates the accrued interest at maturity for a security that pays periodic interest.

ACOS

This function calculates the arccosine, that is, the angle whose cosine is the specified value.

ACOT

This function calculates the arccotangent (inverse cotangent) of a given number, and returns an angle, in radians.

ACOTH

This function calculates the hyperbolic arccotangent (inverse cotangent) of a supplied value.

ACOSH

This function calculates the inverse hyperbolic cosine of the specified value.

ADDRESS

This function uses the row and column numbers to create a cell address in text.

ASIN

This function calculates the arcsine, that is, the angle whose sine is the specified value.

ASINH

This function calculates the inverse hyperbolic sine of a number.

ATAN

This function calculates the arctangent, that is, the angle whose tangent is the specified value.

ATAN2

This function calculates the arctangent of the specified x- and y-coordinates.

ATANH

This function calculates the inverse hyperbolic tangent of a number.

AVEDEV

This function calculates the average of the absolute deviations of the specified values from their mean.

AVERAGE

This function calculates the average of the specified numeric values.

AVERAGEA

This function calculates the average of the specified values, including text or logical values as well as numeric values.

AMORDEGRC

This function returns the depreciation for an accounting period, taking into consideration prorated depreciation, and applies a depreciation coefficient in the calculation based on the life of the assets.

AMORLINC

This function calculates the depreciation for an accounting period, taking into account prorated depreciation.

AND

This function calculates logical AND.

AVERAGEIF

This function calculates the average of the specified numeric values provided that they meet the specified criteria.

AVERAGEIFS

This function calculates the average of all cells that meet multiple specified criteria.

B

BAHTTEXT

This function converts a number to Thai text and adds a suffix of "Baht"

BASE

This function converts a number into a text representation with the given base.

BESSELI

This function calculates the modified Bessel function of the first kind evaluated for purely imaginary arguments.

BESSELJ

This function calculates the Bessel function of the first kind.

BESSELK

This function calculates the modified Bessel function of the second kind evaluated for purely imaginary arguments.

BIN2OCT

This function converts a binary number to an octal number.

BINOMDIST

This function calculates the individual term binomial distribution probability.

BINOM.DIST

This function calculates the individual term binomial distribution probability.

BINOM.DIST.RANGE

This function returns the Binomial Distribution probability for the number of successes within a specified range from a specified number of trials.

BINOM.INV

This function returns the criterion binomial, the smallest value for which the cumulative binomial distribution is greater than or equal to a criterion value.

BESSELY

This function calculates the Bessel function of the second kind.

BETADIST

This function calculates the cumulative beta distribution function.

BETA.DIST

This function calculates the cumulative beta distribution function.

BETAINV

This function calculates the inverse of the cumulative beta distribution function.

BETA.INV

This function calculates the inverse of the cumulative beta density function.

BIN2DEC

This function converts a binary number to a decimal number.

BIN2HEX

This function converts a binary number to a hexadecimal number.

BITAND

This function returns a 'Bitwise And' of two numbers.

BITLSHIFT

This function returns a bitwise "OR" of two numbers.

BITOR

This function returns a 'Bitwise And' of two numbers.

BITRSHIFT

This function returns a bitwise "OR" of two numbers.

BITxOR

This function returns a 'Bitwise And' of two numbers.

BOXPLOTSPARKLINE

This function returns a data set used for representing a boxplot sparkline.

BULLETPARKLINE

This function returns a data set used for representing a bullet sparkline.

C

CASCADESPARKLINE

This function returns a data set used for representing a cascade sparkline.

CEILING

This function rounds a number up to the nearest multiple of a specified value.

CONFIDENCE.T

This function returns the confidence interval for a population mean.

CONVERT

This function converts a number from one measurement system to its equivalent in another

measurement system.

CEILING.MATH

This function rounds a number up to the nearest integer or to the nearest multiple of significance.

CEILING.PRECISE

This function rounds a number up to the nearest multiple of a specified value or the nearest integer.

CHAR

This function returns the character specified by a number.

CHIDIST

This function calculates the one-tailed probability of the chi-squared distribution.

CHIINV

This function calculates the inverse of the one-tailed probability of the chi-squared distribution.

CHISQ.DIST

This function calculates the chi-squared distribution.

CHISQ.DIST.RT

This function calculates the one-tailed probability of the chi-squared distribution.

CHISQ.INV

This function calculates the inverse of the left-tailed probability of the chi-squared distribution.

CHISQ.INV.RT

This function calculates the inverse of the one-tailed probability of the chi-squared distribution.

CHISQ.TEST

This function calculates the test for independence from the chi-squared distribution.

CORREL

This function returns the correlation coefficient of the two sets of data.

COS

This function returns the cosine of the specified angle.

COSH

This function returns the hyperbolic cosine of the specified value.

COT

This function returns the cotangent of the specified angle.

COth

This function returns the hyperbolic cotangent of the specified number.

COUNT

This function returns the number of cells that contain numbers.

COUNTA

This function returns the number of number of cells that contain numbers, text, or logical values.

COUNTBLANK

This function returns the number of empty (or blank) cells in a range of cells on a sheet.

COUNTIF

This function returns the number of cells that meet a certain condition.

COUNTIFS

This function returns the number of cells that meet multiple conditions.

CHITEST

This function calculates the test for independence from the chi-squared distribution.

CHOOSE

This function returns a value from a list of values.

CLEAN

This function removes all non-printable characters from text.

CODE

This function returns a numeric code to represent the first character in a text string. The returned code corresponds to the Windows character set (ANSI).

COLUMN

This function returns the column number of a reference.

COLUMNS

This function returns the number of columns in an array.

COLUMNSPARKLINE

This function returns a data set used for representing a column sparkline.

COMBIN

This function calculates the number of possible combinations for a specified number of items.

COMBINA

This function calculates the number of combinations with repetitions for a specified number of items.

COUPDAYBS

This function calculates the number of days from the beginning of the coupon period to the settlement date.

COUPDAYS

This function returns the number of days in the coupon period that contains the settlement date.

COUPDAYSNC

This function calculates the number of days from the settlement date to the next coupon date.

COUPNCD

This function returns a date number of the next coupon date after the settlement date.

COUPNUM

This function returns the number of coupons due between the settlement date and maturity date.

COUPPCD

This function returns a date number of the previous coupon date before the settlement date.

COVAR

This function returns the covariance, which is the average of the products of deviations for each data point pair in two sets of numbers.

COVARIANCE.P

This function returns the population covariance, which is the average of the products of deviations for each data point pair in two sets of numbers.

COVARIANCE.S

This function returns the sample covariance, which is the average of the products of deviations for each data point pair in two sets of numbers.

COMPLEX

This function converts real and imaginary coefficients into a complex number.

CRITBINOM

This function returns the criterion binomial, the smallest value for which the cumulative binomial distribution is greater than or equal to a criterion value.

CONCAT

This function combines multiple text strings or numbers into one text string.

CSC

This function returns the cosecant of the specified number.

CONCATENATE

This function combines multiple text strings or numbers into one text string.

CSCH

This function returns the hyperbolic cosecant of the specified number.

CONFIDENCE

This function returns confidence interval for a population mean.

CUMIPMT

This function returns the cumulative interest paid on a loan between the starting and ending periods.

CONFIDENCE.NORM

This function returns confidence interval for a population mean.

CUMPRINC

This function returns the cumulative principal paid on a loan between the start and end periods.

D**DATE**

This function returns the DateTime object for a particular date, specified by the year, month, and day.

DEVSQ

This function calculates the sum of the squares of deviations of data points (or of an array of data points) from their sample mean.

DATEDIF**DGET**

This function returns the number of days, months, or years between two dates.

DATEVALUE

This function returns a DateTime object of the specified date.

DAVERAGE

This function calculates the average of values in a column of a list or database that match the specified conditions.

DAY

This function returns the day number of the month (integer 1 to 31) that corresponds to the specified date.

DAYS360

This function returns the number of days between two dates based on a 360-day year.

DB

This function calculates the depreciation of an asset for a specified period using the fixed-declining balance method.

DCOUNT

This function counts the cells that contain numbers in a column of a list or database that match the specified conditions.

DCOUNTA

This function counts the non-blank cells in a column of a list or database that match the specified conditions.

DDB

This function extracts a single value from a column of a list or database that matches the specified conditions.

DISC

This function calculates the discount rate for a security.

DMAX

This function returns the largest number in a column of a list or database that matches the specified conditions.

DMIN

This function returns the smallest number in a column of a list or database that matches the specified conditions.

DOLLAR

This function converts a number to text using currency format, with the decimals rounded to the specified place.

DOLLARDE

This function converts a fraction dollar price to a decimal dollar price.

DOLLARFR

This function converts a decimal number dollar price to a fraction dollar price.

DPRODUCT

This function multiplies the values in a column of a list or database that match the specified conditions.

DSTDEV

This function calculates the depreciation of an asset for a specified period using the double-declining balance method or another method you specify.

DEC2BIN

This function converts a decimal number to a binary number.

DEC2HEX

This function converts a decimal number to a hexadecimal number.

DEC2OCT

This function converts a decimal number to an octal number.

DECIMAL

This function converts a text representation of a number in a given base into a decimal number.

DEGREES

This function converts the specified value from radians to degrees.

DELTA

This function identifies whether two values are equal. Returns 1 if they are equal; returns 0 otherwise.

EDATE

This function estimates the standard deviation of a population based on a sample by using the numbers in a column of a list or database that match the specified conditions.

DSTDEVP

This function calculates the standard deviation of a population based on the entire population using the numbers in a column of a list or database that match the specified conditions.

DSUM

This function adds the numbers in a column of a list or database that match the specified conditions.

DURATION

This function returns the Macauley duration for an assumed par value of \$100.

DVAR

This function estimates the variance of a population based on a sample by using the numbers in a column of a list or database that match the specified conditions.

DVARP

This function calculates the variance of a population based on the entire population by using the numbers in a column of a list or database that match the specified conditions.

E

ERROR.TYPE

This function calculates the date that is the indicated number of months before or after a specified date.

EFFECT

This function calculates the effective annual interest rate for a given nominal annual interest rate and the number of compounding periods per year.

ENCODEURL

This function returns a URL-encoded string.

EOMONTH

This function calculates the date for the last day of the month (end of month) that is the indicated number of months before or after the starting date.

ERF

This function calculates the error function integrated between a lower and an upper limit.

ERF.PRECISE

This function calculates the error function.

ERFC

This function calculates the complementary error function integrated between a lower limit and infinity.

ERFC.PRECISE

This function calculates the complementary ERF function integrated between a lower limit and infinity.

This function returns a number corresponding to one of the error values.

EURO

This function returns the equivalent of one Euro based on the ISO currency code.

EUROCONVERT

This function converts currency from a Euro member currency (including Euros) to another Euro member currency (including Euros).

EVEN

This function rounds the specified value up to the nearest even integer.

EXACT

This function returns true if two strings are the same; otherwise, false.

EXP

This function returns e raised to the power of the specified value.

EXPONDIST

This function returns the exponential distribution or the probability density.

EXPON.DIST

This function returns the exponential distribution or the probability density.

F

FACT

This function calculates the factorial of the specified number.

FACTDOUBLE

This function calculates the double factorial of the specified number.

FALSE

This function returns the value for logical FALSE.

FDIST

This function calculates the F probability distribution, to see degrees of diversity between two sets of data.

F.DIST

This function calculates the F probability distribution, to see degrees of diversity between two sets of data.

F.DIST.RT

This function calculates the F probability distribution, to see degrees of diversity between two sets of data.

FIND

This function finds one text value within another and returns the text value's position in the text you searched.

FINDB

This function finds one text value within another and returns the text value's position in the text you searched.

FISHERINV

This function returns the inverse of the Fisher transformation for a specified value.

FIXED

This function rounds a number to the specified number of decimal places, formats the number in decimal format using a period and commas (if so specified), and returns the result as text.

FLOOR

This function rounds a number down to the nearest multiple of a specified value.

FLOOR:MATH

This function rounds a number down to the nearest integer or to the nearest multiple of significance.

FLOOR.PRECISE

This function rounds a number down to the nearest multiple of a specified value or to the nearest integer.

FORECAST

This function calculates a future value using existing values.

FORMULATEXT

This function returns a formula as a string.

FREQUENCY

This function calculates how often values occur within a range of values. This function returns a vertical array of numbers.

FINV

This function returns the inverse of the F probability distribution.

FTEST

This function returns the result of an F-test, which returns the one-tailed probability that the variances in two arrays are not significantly different.

F.INV

This function returns the inverse of the F probability distribution.

F.TEST

This function returns the result of an F-test, which returns the two-tailed probability that the variances in two arrays are not significantly different.

F.INV.RT

This function returns the inverse of the F probability distribution.

FV

This function returns the future value of an investment based on a present value, periodic payments, and a specified interest rate.

FISHER

This function returns the Fisher transformation for a specified value.

FVSCHEDULE

This function returns the future value of an initial principal after applying a series of compound interest rates. Calculate future value of an investment with a variable or adjustable rate.

G

GAMMA

This function returns the gamma function value.

GAMMALN.PRECISE

This function returns the natural logarithm of the Gamma function, $G(x)$.

GAMMADIST

This function returns the gamma distribution.

GAUS

This function returns the probability that a member of a standard normal population will fall between the mean and a specified number of standard deviations from the mean.

GAMMA.DIST**GCD**

This function returns the gamma distribution.

GAMMAINV

This function returns the inverse of the gamma cumulative distribution.

GAMMA.INV

This function returns the inverse of the gamma cumulative distribution.

GAMMALN

This function returns the natural logarithm of the Gamma function, $\Gamma(x)$.

This function returns the greatest common divisor of two numbers.

GEOMEAN

This function returns the geometric mean of a set of positive data.

GESTEP

This function, greater than or equal to step, returns an indication of whether a number is equal to a threshold.

GROWTH

This function calculates predicted exponential growth. This function returns the y values for a series of new x values that are specified by using existing x and y values.

H

HARMEAN

This function returns the harmonic mean of a data set.

HBARSPARKLINE

This function returns a data set for representing a Hbar sparkline.

HEX2BIN

HLOOKUP

This function searches for a value in the top row and then returns a value in the same column from a specified row.

HOUR

This function returns the hour that corresponds to a specified time.

HYPERLINK

This function converts a hexadecimal number to a binary number.

HEX2DEC

This function converts a hexadecimal number to a decimal number.

HEX2OCT

This function converts a hexadecimal number to an octal number.

This function creates a shortcut or jump that opens a document stored on a network server, an intranet, or the internet.

HYPGEOMDIST

This function returns the hypergeometric distribution.

HYPGEOM.DIST

This function returns the hypergeometric distribution.



IF

This function performs a comparison and returns one of two provided values based on that comparison.

IFNA

This function returns the value you specify if the formula returns the #N/A error value, otherwise returns the result of the formula.

IFS

This function checks whether one or more conditions are met and returns a value that corresponds to the first TRUE condition.

IFERROR

This function evaluates a formula and returns a value you provide if there is an error or the formula result.

IMABS

IMSUB

This function returns the difference of two complex numbers in the $x+yi$ or $x+yj$ text format.

IMSUM

This function returns the sum of two or more complex numbers in the $x+yi$ or $x+yj$ text format.

IMTAN

This function returns the tangent of a complex number in $x+yi$ or $x+yj$ text format.

INDEX

This function returns a value or the reference to a value from within an array or range.

INDIRECT

This function returns the absolute value or modulus of a complex number.

IMAGINARY

This function returns the imaginary coefficient of a complex number.

IMARGUMENT

This function returns the argument theta, which is an angle expressed in radians.

IMCONJUGATE

This function returns the complex conjugate of a complex number.

IMCOS

This function returns the cosine of a complex number.

IMCOSH

This function returns the hyperbolic cosine of a complex number in $x+yi$ or $x+yj$ text format.

IMCOT

This function returns the cotangent of a complex number in $x+yi$ or $x+yj$ text format.

IMCSC

This function returns the cosecant of a complex number in $x+yi$ or $x+yj$ text format.

IMCSCH

This function returns the reference specified by a text string.

INT

This function rounds a specified number down to the nearest integer.

INTERCEPT

This function returns the coordinates of a point at which a line intersects the y-axis, by using existing x values and y values.

INTRATE

This function calculates the interest rate for a fully invested security.

IPMT

This function calculates the payment of interest on a loan.

IRR

This function returns the internal rate of return for a series of cash flows represented by the numbers in an array.

ISBLANK

This function tests whether a value, an expression, or contents of a referenced cell is empty.

ISERR

This function, Is Error Other Than Not Available, tests whether a value, an expression, or contents of a referenced cell has an error other than not available ($\#N/A$).

ISERROR

This function returns the hyperbolic cosecant of a complex number in $x+yi$ or $x+yj$ text format.

IMDIV

This function returns the quotient of two complex numbers.

IMEXP

This function returns the exponential of a complex number.

IMLN

This function returns the natural logarithm of a complex number.

IMLOG2

This function returns the base-2 logarithm of a complex number.

IMLOG10

This function returns the common logarithm of a complex number.

IMPOWER

This function returns a complex number raised to a power.

IMPRODUCT

This function returns the product of up to 29 complex numbers in the " $x+yi$ " or " $x+yj$ " text format.

IMREAL

This function, Is Error of Any Kind, tests whether a value, an expression, or contents of a referenced cell has an error of any kind.

ISEVEN

This function, Is Number Even, tests whether a value, an expression, or contents of a referenced cell is even.

ISFORMULA

This formula tests whether a cell contains a formula of a reference call.

ISLOGICAL

This function tests whether a value, an expression, or contents of a referenced cell is a logical (Boolean) value.

ISNA

This function, Is Not Available, tests whether a value, an expression, or contents of a referenced cell has the not available ($\#N/A$) error value.

ISNONTEXT

This function tests whether a value, an expression, or contents of a referenced cell has any data type other than text.

ISNUMBER

This function tests whether a value, an expression, or contents of a referenced cell has numeric data.

ISO.CEILING

This function rounds a number up to the nearest integer or multiple of a specified value.

ISODD

This function returns the real coefficient of a complex number in the $x+yi$ or $x+yj$ text format.

IMSEC

This function returns the secant of a complex number in $x+yi$ or $x+yj$ text format.

IMSECH

This function returns the hyperbolic secant of a complex number in $x+yi$ or $x+yj$ text format.

IMSIN

This function returns the sine of a complex number in the $x+yi$ or $x+yj$ text format.

IMSINH

This function returns the hyperbolic sine of a complex number in $x+yi$ or $x+yj$ text format.

IMSQRT

This function returns the square root of a complex number in the $x+yi$ or $x+yj$ text format.

KURT

This function returns the kurtosis of a data set.

LARGE

This function returns the n th largest value in a data set, where n is specified.

This function, Is Number Odd, tests whether a value, an expression, or contents of a referenced cell has numeric data.

ISOWEEKNUM

This function returns the number of the ISO week number of the year for a given date.

ISPMT

This function calculates the interest paid during a specific period of an investment.

ISREF

This function, Is Reference, tests whether a value, an expression, or contents of a referenced cell is a reference to another cell.

ISTEXT

This function tests whether a value, an expression, or contents of a referenced cell has text data.

K

L

LOG

This function returns the logarithm base Y of a number X .

LCM

This function returns the least common multiple of two numbers.

LEFT

This function returns the specified leftmost characters from a text value.

LEFTB

This function returns the specified leftmost characters from a text value, and based on the number of bytes you specify.

LEN

This function returns the length of, the number of characters in, a text string.

LENB

This function returns the length of the number of bytes in a text string.

LINEST

This function calculates the statistics for a line.

LINESPARKLINE

This function returns a data set used for representing a line sparkline.

LOG10

This function returns the logarithm base 10 of the number given.

LOGEST

This function calculates an exponential curve that fits the data and returns an array of values that describes the curve.

LOGINV

This function returns the inverse of the lognormal cumulative distribution function of x , where $LN(x)$ is normally distributed with the specified mean and standard deviation.

LOGNORMDIST

This function returns the cumulative natural log normal distribution of x , where $LN(x)$ is normally distributed with the specified mean and standard deviation. Analyze data that has been logarithmically transformed with this function.

LOGNORM.DIST

This function returns the cumulative natural log normal distribution of x , where $LN(x)$ is normally distributed with the specified mean and standard deviation. Analyze data that has been logarithmically transformed with this function.

LOGNORM.INV

This function returns the inverse of the lognormal cumulative distribution function of x , where $LN(x)$ is normally distributed with the specified mean and standard deviation.

LOOKUP

This function searches for a value and returns a value from the same location in a second area.

LN

This function returns the natural logarithm of the specified number.

LOWER

This function converts text to lower case letters.

M

MATCH

This function returns the relative position of a specified item in a range.

MAX

This function returns the maximum value, the greatest value, of all the values in the arguments.

MAXA

This function returns the largest value in a list of arguments, including text and logical values.

MAXIFS

This function returns the maximum value among cells specified by a given set of conditions or criteria.

MDETERM

This function returns the matrix determinant of an array.

MDURATION

This function calculates the modified Macauley duration of a security with an assumed par value of \$100.

MEDIAN**MINUTE**

This function returns the minute corresponding to a specified time.

MINVERSE

This function returns the inverse matrix for the matrix stored in an array.

MIRR

This function returns the modified internal rate of return for a series of periodic cash flows.

MMULT

This function returns the matrix product for two arrays.

MOD

This function returns the remainder of a division operation.

MODE

This function returns the most frequently occurring value in a set of data.

MODE.MULT

This function returns the median, the number in the middle of the provided set of numbers; that is, half the numbers have values that are greater than the median, and half have values that are less than the median.

MID

This function returns the requested number of characters from a text string starting at the position you specify.

MIDB

This function returns the requested number of characters from a text string starting at the position you specify, and based on the number of bytes you specify.

MIN

This function returns the minimum value, the least value, of all the values in the arguments.

MINA

This function returns the minimum value in a list of arguments, including text and logical values.

MINIFS

This function returns the minimum value among cells specified by a given set of conditions or criteria.

This function returns a vertical array of the most frequently occurring value in a set of data.

MODE.SNGL

This function returns the most frequently occurring value in a set of data.

MONTH

This function returns the month corresponding to the specified date value.

MONTHSPARKLINE

This function returns a data set used for representing a month sparkline.

MROUND

This function returns a number rounded to the desired multiple.

MULTINOMIAL

This function calculates the ratio of the factorial of a sum of values to the product of factorials.

N

N

NORM.INV

This function returns a value converted to a number. This function returns the inverse of the normal cumulative distribution for the given mean and standard deviation.

NA

This function returns the error value #N/A that means "not available."

NEGBINOMDIST

This function returns the negative binomial distribution.

NEGBINOM.DIST

This function returns the negative binomial distribution.

NETWORKDAYS

This function returns the total number of complete working days between the start and end dates.

NETWORKDAYS.INTL

This function returns the total number of complete working days between the start and end dates.

NOMINAL

This function returns the nominal annual interest rate for a given effective rate and number of compounding periods per year.

NORMDIST

This function returns the normal cumulative distribution for the specified mean and standard deviation.

NORM.DIST

NORMSDIST

This function returns the standard normal cumulative distribution function.

NORM.S.DIST

This function returns the standard normal cumulative distribution function.

NORMSINV

This function 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

This function returns the inverse of the standard normal cumulative distribution. The distribution has a mean of zero and a standard deviation of one.

NOT

This function reverses the logical value of its argument.

NOW

This function returns the current date and time.

NPER

This function returns the number of periods for an investment based on a present value, future value, periodic payments, and a specified interest rate.

NPV

This function returns the normal distribution for the specified mean and standard deviation.

This function calculates the net present value of an investment by using a discount rate and a series of future payments and income.

NORMINV

This function returns the inverse of the normal cumulative distribution for the given mean and standard deviation.

O

OCT2BIN

This function converts an octal number to a binary number.

ODDFYIELD

This function calculates the yield of a security with an odd first period.

OCT2DEC

This function converts an octal number to a decimal number.

ODDLPRICE

This function calculates the price per \$100 face value of a security with an odd last coupon period.

OCT2HEX

This function converts an octal number to a hexadecimal number.

ODDLYIELD

This function calculates the yield of a security with an odd last period.

ODD

This function rounds the specified value up to the nearest odd integer.

OFFSET

This function returns a reference to a range. The range is a specified number of rows and columns from a cell or range of cells. The function returns a single cell or a range of cells.

ODDFPRICE

This function calculates the price per \$100 face value of a security with an odd first period.

OR

This function calculates logical OR. It returns TRUE if any of its arguments are true; otherwise, returns FALSE if all arguments are false.

P

PARETOSPARKLINE

This function returns a data set used for representing a pareto sparkline.

PDURATION

This function returns the number of periods required by an investment to reach a specified value.

PEARSON

This function returns the Pearson product moment correlation coefficient, a dimensionless index between -1.0 to 1.0 inclusive indicative of the linear relationship of two data sets.

PERCENTILE

This function returns the nth percentile of values in a range.

PERCENTILE.EXC

This function returns the kth percentile of values in a range where k is between 0..1, exclusive.

PERCENTILE.INC

This function returns the kth percentile of values in a range where k is between 0..1, inclusive.

PERCENTRANK

This function returns the rank of a value in a data set as a percentage of the data set.

PERCENTRANK.EXC

This function returns the rank of a value in a data set as a percentage (0..1, exclusive) of the data set.

PERCENTRANK.INC

This function returns the rank of a value in a data set as a percentage of the data set.

PIESPARKLINE

This function returns a data set used for representing a pie sparkline.

PMT

This function returns the payment amount for a loan given the present value, specified interest rate, and number of terms.

POISSON

This function returns the Poisson distribution.

POISSON.DIST

This function returns the Poisson distribution.

POWER

This function raises the specified number to the specified power.

PPMT

This function returns the amount of payment of principal for a loan given the present value, specified interest rate, and number of terms.

PRICE

This function calculates the price per \$100 face value of a periodic interest security.

PRICEDISC

This function returns the price per \$100 face value of a discounted security.

PRICEMAT

This function returns the price at maturity per \$100 face value of a security that pays interest.

PERMUT

This function returns the number of possible permutations for a specified number of items.

PERMUTATIONA

This function returns the number of permutations for a given number of objects that can be selected from the total objects.

PHI

This function returns the value of the density function for a standard normal distribution.

PI

This function returns PI as 3.1415926536.

PROB

This function returns the probability that values in a range are between two limits.

PRODUCT

This function multiplies all the arguments and returns the product.

PROPER

This function capitalizes the first letter in each word of a text string.

PV

This function returns the present value of an investment based on the interest rate, number and amount of periodic payments, and future value. The present value is the total amount that a series of future payments is worth now.

Q

QUARTILE

This function returns which quartile (which quarter or 25 percent) of a data set a value is.

QUARTILE.INC

This function returns the quartile (which quarter or 25 percent) of a data set based on percentile values from 0..1, inclusive.

QUARTILE.EXC

This function returns the quartile (which quarter or 25 percent) of a data set based on percentile values from 0..1, exclusive.

QUOTIENT

This function returns the integer portion of a division. Use this to ignore the remainder of a division.

R

RADIANS

This function converts the specified number from degrees to radians.

RAND

This function returns an evenly distributed random number between 0 and 1.

RANDBETWEEN

This function returns a random number between the numbers you specify.

RANK

This function returns the rank of a number in a set of numbers. If you were to sort the set, the rank of the number would be its position in the list.

RANK.AVG

This function returns the rank of a number in a set of numbers.

RANK.EQ

This function returns the rank of a number in a set of numbers.

RATE

This function returns the interest rate per period of an annuity.

RECEIVED

This function returns the amount received at maturity for a fully invested security.

REPT

This function repeats text a specified number of times.

RIGHT

This function returns the specified rightmost characters from a text value.

RIGHTB

This function returns the specified rightmost characters from text value, and based on the number of bytes you specify.

ROMAN

This function converts an arabic numeral to a roman numeral text equivalent.

ROUND

This function rounds the specified value to the nearest number, using the specified number of decimal places.

ROUNDDOWN

This function rounds the specified number down to the nearest number, using the specified number of decimal places.

ROUNDUP

This function rounds the specified number up to the nearest number, using the specified number of decimal places.

ROW

This function returns the number of a row from a reference.

REFRESH

This function decides how to recalculate a formula.

REPLACE

This function replaces part of a text string with a different text string.

REPLACEB

This function replaces part of a text string with a different text string based on the number of bytes you specify.

ROWS

This function returns the number of rows in an array.

RRI

This function returns an equivalent interest rate for the growth of an investment.

RSQ

This function returns the square of the Pearson product moment correlation coefficient (R-squared) through data points in known y's and known x's.

S

SEARCH

This function finds one text string in another text string and returns the index of the starting position of the found text.

SEARCHB

This function finds one text string in another text string and returns the index of the starting position of the found text, and counts each double-byte character as 2.

SEC

This function returns the secant of the specified angle.

SECH

This function returns the hyperbolic secant of the specified angle.

SECOND**STDEVA**

This function returns the standard deviation for a set of numbers, text, or logical values.

STDEVP

This function returns the standard deviation for an entire specified population (of numeric values).

STDEV.P

This function returns the standard deviation for an entire specified population (of numeric values).

STDEV.S

This function returns the standard deviation based on a sample (of numeric values).

STDEVPA

This function returns the seconds (0 to 59) value for a specified time.

SERIESSUM

This function returns the sum of a power series.

SIGN

This function returns the sign of a number or expression.

SIN

This function returns the sine of the specified angle.

SINH

This function returns the hyperbolic sine of the specified number.

SKEW

This function returns the skewness of a distribution.

SKEW.P

This function returns the skewness of a distribution base on a population: a characterization of the degree of asymmetry of a distribution around it's mean.

SLN

This function returns the straight-line depreciation of an asset for one period.

SLOPE

This function calculates the slope of a linear regression.

SMALL

This function returns the standard deviation for an entire specified population, including text or logical values as well as numeric values.

STEYX

This function returns the standard error of the predicted y value for each x. The standard error is a measure of the amount of error in the prediction of y for a value of x.

SUBSTITUTE

This function substitutes a new string for specified characters in an existing string.

SUBTOTAL

This function calculates a subtotal of a list of numbers using a specified built-in function.

SUM

This function returns the sum of cells or range of cells.

SUMIF

This function adds the cells using a given criteria.

SUMIFS

This function adds the cells in a range using multiple criteria.

SUMPRODUCT

This function returns the sum of products of cells. Multiplies corresponding components in the given arrays, and returns the sum of those products.

SUMSQ

This function returns the sum of the squares of the arguments.

SUMX2MY2

This function returns the nth smallest value in a data set, where n is specified.

SPREADSPARKLINE

This function returns a data set used for representing a spread sparkline.

SQRT

This function returns the positive square root of the specified number.

SQRTPI

This function returns the positive square root of a multiple of pi (p).

STANDARDIZE

This function returns a normalized value from a distribution characterized by mean and standard deviation.

STDEV

This function returns the standard deviation for a set of numbers.

This function returns the sum of the difference of the squares of corresponding values in two arrays.

SUMX2PY2

This function returns the sum of the sum of squares of corresponding values in two arrays.

SUMXMY2

This function returns the sum of the square of the differences of corresponding values in two arrays.

SWITCH

This function evaluates one value for a list of values, and returns the result corresponding to the first matching value, otherwise it returns the default value.

SYD

This function returns the sum-of-years' digits depreciation of an asset for a specified period.

T

T

This function returns the text in a specified cell.

TINV

This function returns the t-value of the student's t-distribution as a function of the probability and the degrees of freedom.

TAN

T.INV

This function returns the tangent of the specified angle.

TANH

This function returns the hyperbolic tangent of the specified number.

TBILLEQ

This function returns the equivalent yield for a Treasury bill (or T-bill).

TBILLPRICE

This function returns the price per \$100 face value for a Treasury bill (or T-bill).

TBILLYIELD

This function returns the yield for a Treasury bill (or T-bill).

TDIST

This function returns the probability for the t-distribution.

T.DIST

This function returns the probability for the t-distribution.

T.DIST.2T

This function returns the t-distribution.

T.DIST.RT

This function returns the t-distribution.

This function returns the t-value of the student's t-distribution as a function of the probability and the degrees of freedom.

T.INV.2T

This function returns the t-value of the student's t-distribution as a function of the probability and the degrees of freedom.

TODAY

This function returns the date and time of the current date.

TRANSPOSE

This function returns a vertical range of cells as a horizontal range or a horizontal range of cells as a vertical range.

TREND

This function returns values along a linear trend. This function fits a straight line to the arrays known x and y values. Trend returns the y values along that line for the array of specified new x values.

TRIM

This function removes extra spaces from a string and leaves single spaces between words.

TRIMMEAN

This function returns the mean of a subset of data excluding the top and bottom data.

TRUE

This function returns the value for logical TRUE.

TRUNC

This function removes the specified fractional part of the specified number.

TEXT

This function formats a number and converts it to text.

TEXTJOIN

This function combines multiple ranges and/or strings into one text, and the text includes a delimiter you specify between each text value.

TIME

This function returns the TimeSpan object for a specified time.

TIMEVALUE

This function returns the TimeSpan object of the time represented by a text string.

TTEST

This function returns the probability associated with a t-test.

T.TEST

This function returns the probability associated with a t-test.

TYPE

This function returns the type of value.

U**UNICHAR**

This function returns the Unicode character of a given numeric reference.

UPPER

This function converts text to uppercase letters.

UNICODE

This function returns the number corresponding to the first character of the text.

V**VALUE****VARPA**

This function converts a text string that is a number to a numeric value.

This function returns variance based on the entire population, which includes numeric, logical, or text values.

VAR

This function returns the variance based on a sample of a population, which uses only numeric values.

VAR.S

This function returns variance based on a sample, which uses only numeric values.

VARA

This function returns the variance based on a sample of a population, which includes numeric, logical, or text values.

VBARSPARKLINE

This function returns a data set used for representing a Vbar sparkline.

VARISPARKLINE

This function returns a data set used for representing a variance sparkline.

VDB

This function returns the depreciation of an asset for any period you specify using the variable declining balance method.

VARP

This function returns variance based on the entire population, which uses only numeric values.

VLOOKUP

This function searches for a value in the leftmost column and returns a value in the same row from a column you specify.

VAR.P

This function returns variance based on the entire population, which uses only numeric values.

W

WEEKDAY

This function returns the number corresponding to the day of the week for a specified date.

WINLOSSSPARKLINE

This function returns a data set used for representing a win/loss sparkline.

WEEKNUM

WORKDAY

This function returns a number that indicates the week of the year numerically.

WEIBULL

This function returns the two-parameter Weibull distribution, often used in reliability analysis.

WEIBULL.DIST

This function returns the two-parameter Weibull distribution, often used in reliability analysis.

This function returns the number of working days before or after the starting date.

WORKDAY.INTL

This function returns the serial number of the date before or after a specified number of workdays with custom weekend parameters.

X

XIRR

This function calculates the internal rate of return for a schedule of cash flows that may not be periodic.

XOR

This function returns a logical exclusive or of all arguments.

XNPV

This function calculates the net present value for a schedule of cash flows that may not be periodic.

Y

YEAR

This function returns the year as an integer for a specified date.

YIELD

This function calculates the yield on a security that pays periodic interest.

YEARFRAC

YIELDDISC

This function returns the fraction of the year represented by the number of whole days between the start and end dates.

YEARSARKLINE

This function returns a data set used for representing a year sparkline.

This function calculates the annual yield for a discounted security.

YIELDMAT

This function calculates the annual yield of a security that pays interest at maturity.

Z

ZTEST

This function returns the significance value of a z-test. The z-test generates a standard score for x with respect to the set of data and returns the two-tailed probability for the normal distribution.

Z.TEST

This function returns the significance value of a z-test. The z-test generates a standard score for x with respect to the set of data and returns the two-tailed probability for the normal distribution.