Functions	Syntax	Description
DATE	=DATE(year,month,day)	Returns the serial number of a particular date
DATEVALUE	=DATEVALUE(date_text)	Converts a date in the form of text to a serial number
DAY	=DAY(serial_number)	Converts a serial number to a day of the month
HOUR	=HOUR(serial_number)	Converts a serial number to an hour
MINUTE	=MINUTE(serial_number)	Converts a serial number to a minute
MONTH	=MONTH(serial_number)	Converts a serial number to a month
NOW	=NOW()	Returns the serial number of the current date and time
SECOND	=SECOND(serial_number)	Converts a serial number to a second
TIME	=TIME(hour,minute,second)	Returns the serial number of a particular time
TIMEVALUE	=TIMEVALUE(time_text)	Converts a time in the form of text to a serial number
TODAY	=TODAY()	Returns the serial number of today's date



Functions	Syntax	Description
YEAR	=YEAR(serial_number)	Converts a serial number to a year
CELL	=CELL(info_type, [reference])	Returns information about the formatting, location, or contents of a cell
ISBLANK	=ISBLANK(value)	Returns TRUE if the value is blank
ISERROR	=ISERROR(value)	Returns TRUE if the value is any error value
ISNONTEXT	=ISNONTEXT(value)	Returns TRUE if the value is not text
ISNUMBER	=ISNUMBER(value)	Returns TRUE if the value is a number
ISTEXT	=ISTEXT(value)	Returns TRUE if the value is text
AND	=AND(logical1,logical2,)	Returns TRUE if all of its arguments are TRUE
FALSE	=FALSE	Returns the logical value FALSE
IF	=IF(logical_test, [value_if_true], [value_if_false])	Specifies a logical test to perform
IFERROR	=IFERROR(value, value_if_error)	Returns a value you specify if a formula evaluates to an error; otherwise, returns the result of the formula



Functions	Syntax	Description
NOT	=NOT(logical)	Reverses the logic of its argument
OR	=OR(logical1,logical2,)	Returns TRUE if any argument is TRUE
TRUE	=TRUE	Returns the logical value TRUE
ADDRESS	=ADDRESS(row_num, column_num, [abs_num], [a1], [sheet_text])	Returns a reference as text to a single cell in a worksheet
COLUMN	=COLUMN([reference])	Returns the column number of a reference
COLUMNS	=COLUMNS(array)	Returns the number of columns in a reference
HLOOKUP	=HLOOKUP(lookup_value,tab le_array,row_index_num,[ran ge_lookup])	Looks in the top row of an array and returns the value of the indicated cell
INDEX	=INDEX(array,row_num,[column_num]) - 2 types	Uses an index to choose a value from a reference or array
INDIRECT	=INDIRECT(ref_text,a1)	Returns a reference indicated by a text value
LOOKUP	=LOOKUP(lookup_value, array) – 2 types	Looks up values in a vector or array
MATCH	=MATCH(lookup_value,looku p_array,match_type)	Looks up values in a reference or array



Functions	Syntax	Description
OFFSET	=OFFSET(reference,rows,cols, height,width)	Returns a reference offset from a given reference
ROW	=ROW([reference])	Returns the row number of a reference
ROWS	=ROWS(array)	Returns the number of rows in a reference
VLOOKUP	=VLOOKUP(lookup_value,tab le_array,col_index_num,[rang e_lookup])	Looks in the first column of an array and moves across the row to return the value of a cell
ABS	=ABS(number)	Returns the absolute value of a number
PRODUCT	=PRODUCT(number1,number 2,)	Multiplies its arguments
RAND	=RAND()	Returns a random number between 0 and 1
RANDBETWEEN	=RANDBETWEEN(bottom,to p)	Returns a random number between the numbers you specify
ROUND	=ROUND(number,num_digits	Rounds a number to a specified number of digits
ROUNDDOWN	=ROUNDDOWN(number,nu m_digits)	Rounds a number down, toward zero
ROUNDUP	=ROUNDUP(number,num_di gits)	Rounds a number up, away from zero



Functions	Syntax	Description
SUBTOTAL	=SUBTOTAL(function_num,r ef1,)	Returns a subtotal in a list or database
SUM	=SUM(number1,number2,)	Adds its arguments
SUMIF	=SUMIF(range,criteria,[sum_range])	Adds the cells specified by a given criteria
SUMIFS	=SUMIFS(sum_range,criteria _range,criteria,)	Adds the cells in a range that meet multiple criteria
SUMPRODUCT	=SUMPRODUCT(array1,array 2,[array3],)	Returns the sum of the products of corresponding array components
AVERAGE	=AVERAGE(number1,number 2,)	Returns the average of its arguments
AVERAGEIF	=AVERAGEIF(range,criteria,[average_range])	Returns the average (arithmetic mean) of all the cells in a range that meet a given criteria
COUNT	=COUNT(value1,value2,)	Counts how many numbers are in the list of arguments
COUNTA	=COUNTA(value1,value2,)	Counts how many values are in the list of arguments
COUNTBLANK	=COUNTBLANK(range)	Counts the number of blank cells within a range
COUNTIF	=COUNTIF(range,criteria)	Counts the number of cells within a range that meet the given criteria



Functions	Syntax	Description
COUNTIFS	=COUNTIFS(criteria_range,cr iteria,)	Counts the number of cells within a range that meet multiple criteria
MAX	=MAX(number1,number2,)	Returns the maximum value in a list of arguments
MEDIAN	=MEDIAN(number1,number2,)	Returns the median of the given numbers
MIN	=MIN(number1,number2,)	Returns the minimum value in a list of arguments
CONCATENATE	=CONCATENATE(text1,text2,)	Joins several text items into one text item. Easier to use '&' instead of the function usually.
EXACT	=EXACT(text1,text2)	Checks to see if two text values are identical
FIND	=FIND(find_text,within_text, start_num)	Finds one text value within another (case-sensitive)
LEFT	=LEFT(text,num_chars)	Returns the leftmost characters from a text value
LEN	=LEN(text)	Returns the number of characters in a text string
LOWER	=LOWER(text)	Converts text to lowercase
MID	=MID(text,start_num,num_ch ars)	Returns a specific number of characters from a text string starting at the position you specify



Functions	Syntax	Description
PROPER	=PROPER(text)	Capitalizes the first letter in each word of a text value
REPLACE	=REPLACE(old_text,start_nu m,num_chars,new_text)	Replaces characters within text
RIGHT	=RIGHT(text,num_chars)	Returns the rightmost characters from a text value
SEARCH	=SEARCH(find_text,within_te xt,start_num)	Finds one text value within another (not case-sensitive)
TEXT	=TEXT(value,format_text)	Formats a number and converts it to text
TRIM	=TRIM(text)	Removes spaces from text
UPPER	=UPPER(text)	Converts text to uppercase
DGET	=DGET(database,field,criteria)	Extracts from a database a single record that matches the specified criteria
DSUM	=DSUM(database,field,criteria	Adds the numbers in the field column of records in the database that match the criteria
DAYS360	=DAYS360(start_date,end_da te,method)	Calculates the number of days between two dates based on a 360- day year
EDATE	=EDATE(start_date,months)	Returns the serial number of the date that is the indicated number



Functions	Syntax	Description
		of months before or after the start date
EOMONTH	=EOMONTH(start_date,mont hs)	Returns the serial number of the last day of the month before or after a specified number of months
NETWORKDAYS	=NETWORKDAYS(start_date, end_date,[holidays])	Returns the number of whole workdays between two dates
NETWORKDAYS.IN TL	=NETWORKDAYS.INTL(start _date,end_date,[weekend],[ho lidays])	Returns the number of whole workdays between two dates using parameters to indicate which and how many days are weekend days
WEEKDAY	=WEEKDAY(serial_number,[r eturn_type])	Converts a serial number to a day of the week
WEEKNUM	=WEEKNUM(serial_number,[return_type])	Converts a serial number to a number representing where the week falls numerically with a year
WORKDAY	=WORKDAY(start_date, days, [holidays])	Returns the serial number of the date before or after a specified number of workdays
WORKDAY.INTL	=WORKDAY.INTL(start_date, days,weekend,holidays)	Returns the serial number of the date before or after a specified number of workdays using parameters to indicate which and how many days are weekend days
YEARFRAC	=YEARFRAC(start_date,end_ date,basis)	Returns the year fraction representing the number of whole days between start_date and end_date



Functions	Syntax	Description
CONVERT	=CONVERT(number,from_un it,to_unit)	Converts a number from one measurement system to another
DELTA	=DELTA(number1,number2)	Tests whether two values are equal
ERF	=ERF(lower_limit,upper_limit)	Returns the error function
ERFC	=ERFC(x)	Returns the complementary error function
GESTEP	=GESTEP(number,step)	Tests whether a number is greater than a threshold value
AMORDEGRC	=AMORDEGRC(cost,date_pur chased,first_period,salvage,pe riod,rate,basis)	Returns the depreciation for each accounting period by using a depreciation coefficient
AMORLINC	=AMORLINC(cost,date_purch ased,first_period,salvage,perio d,rate,basis)	Returns the depreciation for each accounting period
DOLLARDE	=DOLLARDE(fractional_dolla r,fraction)	Converts a dollar price, expressed as a fraction, into a dollar price, expressed as a decimal number
DOLLARFR	=DOLLARFR(decimal_dollar,f raction)	Converts a dollar price, expressed as a decimal number, into a dollar price, expressed as a fraction
SLN	=SLN(cost,salvage,life)	Returns the straight-line depreciation of an asset for one period



Functions	Syntax	Description
SYD	=SYD(cost,salvage,life,per)	Returns the sum-of-years' digits depreciation of an asset for a specified period
ERROR.TYPE	=ERROR.TYPE(error_val)	Returns a number corresponding to an error type
INFO	=INFO(type_text)	Returns information about the current operating environment
ISERR	=ISERR(value)	Returns TRUE if the value is any error value except #N/A
ISEVEN	=ISEVEN(number)	Returns TRUE if the number is even
ISLOGICAL	=ISLOGICAL(value)	Returns TRUE if the value is a logical value
ISNA	=ISNA(value)	Returns TRUE if the value is the #N/A error value
ISODD	=ISODD(number)	Returns TRUE if the number is odd
ISREF	=ISREF(value)	Returns TRUE if the value is a reference
N	=N(value)	Returns a value converted to a number
NA	=NA()	Returns the error value #N/A



Functions	Syntax	Description
ТҮРЕ	=TYPE(value)	Returns a number indicating the data type of a value
CHOOSE	=CHOOSE(index_num,value1, value2,)	Chooses a value from a list of values
GETPIVOTDATA	=GETPIVOTDATA(data_field, pivot_table,field,item,)	Returns data stored in a PivotTable report
HYPERLINK	=HYPERLINK(link_location,f riendly_name)	Creates a shortcut or jump that opens a document stored on a network server, an intranet, or the Internet
TRANSPOSE	=TRANSPOSE(array)	Returns the transpose of an array
CEILING	=CEILING(number,significanc e)	Rounds a number to the nearest integer or to the nearest multiple of significance
CEILING.PRECISE	=CEILING.PRECISE(number, significance)	Rounds a number the nearest integer or to the nearest multiple of significance. Regardless of the sign of the number, the number is rounded up.
EVEN	=EVEN(number)	Rounds a number up to the nearest even integer
EXP	=EXP(number)	Returns e raised to the power of a given number
FACT	=FACT(number)	Returns the factorial of a number



Functions	Syntax	Description
FLOOR	=FLOOR(number,significance	Rounds a number down, toward zero
FLOOR.PRECISE	=FLOOR.PRECISE(number,si gnificance)	Rounds a number the nearest integer or to the nearest multiple of significance. Regardless of the sign of the number, the number is rounded up.
GCD	=GCD(number1,number2,)	Returns the greatest common divisor
INT	=INT(number)	Rounds a number down to the nearest integer
ISO.CEILING	=ISO.CEILING(number,significance)	Returns a number that is rounded up to the nearest integer or to the nearest multiple of significance
LCM	=LCM(number1,number2,)	Returns the least common multiple
MOD	=MOD(number,divisor)	Returns the remainder from division
MROUND	=MROUND(number,multiple)	Returns a number rounded to the desired multiple
ODD	=ODD(number)	Rounds a number up to the nearest odd integer
PI	=PI()	Returns the value of pi



Functions	Syntax	Description
POWER	=POWER(number,power)	Returns the result of a number raised to a power
QUOTIENT	=QUOTIENT(numerator,deno minator)	Returns the integer portion of a division
SERIESSUM	=SERIESSUM(x,n,m,coefficie nts)	Returns the sum of a power series based on the formula
SIGN	=SIGN(number)	Returns the sign of a number
SQRT	=SQRT(number)	Returns a positive square root
SUMSQ	=SUMSQ(number1,number2,)	Returns the sum of the squares of the arguments
TRUNC	=TRUNC(number,num_digits	Truncates a number to an integer
AVERAGEA	=AVERAGEA(value1,value2,)	Returns the average of its arguments, including numbers, text, and logical values
AVERAGEIFS	=AVERAGEIFS(average_rang e,criteria_range,criteria,)	Returns the average (arithmetic mean) of all cells that meet multiple criteria.
GEOMEAN	=GEOMEAN(number1,numbe r2,)	Returns the geometric mean
INTERCEPT	=INTERCEPT(known_y's,kno wn_x's)	Returns the intercept of the linear regression line



Functions	Syntax	Description
LARGE	=LARGE(array,k)	Returns the k-th largest value in a data set
LINEST	=LINEST(known_y's,known_ x's,const,stats)	Returns the parameters of a linear trend
LOGEST	=LOGEST(known_y's,known_ x's,const,stats)	Returns the parameters of an exponential trend
MAXA	=MAXA(value1,value2,)	Returns the maximum value in a list of arguments, including numbers, text, and logical values
MINA	=MINA(value1,value2,)	Returns the smallest value in a list of arguments, including numbers, text, and logical values
MODE.MULT		Returns a vertical array of the most frequently occurring, or repetitive values in an array or range of data
MODE.SNGL	=MODE.SNGL(number1,num ber2,)	Returns the most common value in a data set
PROB		Returns the probability that values in a range are between two limits
RANK.AVG	=RANK.AVG(number,ref,orde r)	Returns the rank of a number in a list of numbers
RANK.EQ	=RANK.EQ(number,ref,order)	Returns the rank of a number in a list of numbers



Functions	Syntax	Description
SKEW	=SKEW(number1,number2,)	Returns the skewness of a distribution
SLOPE	=SLOPE(known_y's,known_x' s)	Returns the slope of the linear regression line
SMALL	=SMALL(array,k)	Returns the k-th smallest value in a data set
STANDARDIZE	=STANDARDIZE(x,mean,stan dard_dev)	Returns a normalized value
TREND	=TREND(known_y's,known_x 's,new_x's,const)	Returns values along a linear trend
CHAR	=CHAR(number)	Returns the character specified by the code number
CLEAN	=CLEAN(text)	Removes all nonprintable characters from text
CODE	=CODE(text)	Returns a numeric code for the first character in a text string
DOLLAR	=DOLLAR(number,decimals)	Converts a number to text, using the \$ (dollar) currency format
FIXED	=FIXED(number,decimals,no _commas)	Formats a number as text with a fixed number of decimals
PHONETIC	=PHONETIC(reference)	Extracts the phonetic (furigana) characters from a text string



Functions	Syntax	Description
REPT	=REPT(text,number_times)	Repeats text a given number of times
SUBSTITUTE	=SUBSTITUTE(text,old_text,n ew_text,instance_num)	Substitutes new text for old text in a text string
Т	=T(value)	Converts its arguments to text
VALUE	=VALUE(text)	Converts a text argument to a number
BINOMDIST	=BINOMDIST(number_s,trial s,probability_s,cumulative)	Returns the individual term binomial distribution probability
CHIDIST	=CHIDIST(x,deg_freedom)	Returns the one-tailed probability of the chi-squared distribution
CHIINV	=CHIINV(probability,deg_free dom)	Returns the inverse of the one- tailed probability of the chi- squared distribution
CHITEST	=CHITEST(actual_range,expe cted_range)	Returns the test for independence
CONFIDENCE	=CONFIDENCE(alpha,standar d_dev,size)	Returns the confidence interval for a population mean
FTEST	=FTEST(array1,array2)	
LOGINV	=LOGINV(probability,mean,st andard_dev)	Returns the inverse of the lognormal cumulative distribution



Functions	Syntax	Description
LOGNORMDIST	=LOGNORMDIST(x,mean,sta ndard_dev)	Returns the cumulative lognormal distribution
MODE	=MODE(number1,number2,)	Returns the most common value in a data set
NORMDIST	=NORMDIST(x,mean,standar d_dev,cumulative)	Returns the normal cumulative distribution
NORMINV	=NORMINV(probability,mean ,standard_dev)	Returns the inverse of the normal cumulative distribution
NORMSDIST	=NORMSDIST(z)	Returns the standard normal cumulative distribution
NORMSINV	=NORMSINV(probability)	Returns the inverse of the standard normal cumulative distribution
PERCENTILE	=PERCENTILE(array,k)	Returns the k-th percentile of values in a range
PERCENTRANK	=PERCENTRANK(array,x,sign ificance)	Returns the percentage rank of a value in a data set
POISSON	=POISSON(x,mean,cumulativ e)	Returns the Poisson distribution
QUARTILE	=QUARTILE(array,quart)	Returns the quartile of a data set
RANK	=RANK(number,ref,order)	Returns the rank of a number in a list of numbers



Functions	Syntax	Description
STDEV	=STDEV(number1,number2,)	Estimates standard deviation based on a sample
STDEVP	=STDEVP(number1,number2,)	Calculates standard deviation based on the entire population
TDIST	=TDIST(x,deg_freedom,tails)	Returns the Student's t- distribution
TINV	=TINV(probability,deg_freedo m)	Returns the inverse of the Student's t-distribution
VAR	=VAR(number1,number2,)	Estimates variance based on a sample
VARP	=VARP(number1,number2,)	Calculates variance based on the entire population
DAVERAGE	=DAVERAGE(database,field,c riteria)	Returns the average of selected database entries
DCOUNT	=DCOUNT(database,field,crite ria)	Counts the cells that contain numbers in a database
DCOUNTA	=DCOUNTA(database,field,cri teria)	Counts nonblank cells in a database
DMAX	=DMAX(database,field,criteria	Returns the maximum value from selected database entries
DMIN	=DMIN(database,field,criteria	Returns the minimum value from selected database entries



Functions	Syntax	Description
DPRODUCT	=DPRODUCT(database,field,c riteria)	Multiplies the values in a particular field of records that match the criteria in a database
DSTDEV	=DSTDEV(database,field,crite ria)	Estimates the standard deviation based on a sample of selected database entries
DSTDEVP	=DSTDEVP(database,field,crit eria)	Calculates the standard deviation based on the entire population of selected database entries
DVAR	=DVAR(database,field,criteria	Estimates variance based on a sample from selected database entries
DVARP	=DVARP(database,field,criteri a)	Calculates variance based on the entire population of selected database entries
ERF.PRECISE	=ERF.PRECISE(X)	Returns the error function
ERFC.PRECISE	=ERFC.PRECISE(X)	Returns the complementary ERF function integrated between x and infinity
DB	=DB(cost,salvage,life,period,m onth)	Returns the depreciation of an asset for a specified period by using the fixed-declining balance method
DDB		Returns the depreciation of an asset for a specified period by using the double-declining balance method or some other method that you specify



Functions	Syntax	Description
EFFECT	=EFFECT(nominal_rate,npery)	Returns the effective annual interest rate
FV	=FV(rate,nper,pmt,pv,type)	Returns the future value of an investment
IPMT	=IPMT(rate,per,nper,pv,fv,typ e)	Returns the interest payment for an investment for a given period
IRR	=IRR(values,guess)	Returns the internal rate of return for a series of cash flows
MIRR	=MIRR(values,finance_rate,re invest_rate)	Returns the internal rate of return where positive and negative cash flows are financed at different rates
NOMINAL	=NOMINAL(effect_rate,npery)	Returns the annual nominal interest rate
NPER	=NPER(rate,pmt,pv,fv,type)	Returns the number of periods for an investment
NPV	=NPV(rate,value1,value2,)	Returns the net present value of an investment based on a series of periodic cash flows and a discount rate
PV	=PV(rate,nper,pmt,fv,type)	Returns the present value of an investment
RATE	=RATE(nper,pmt,pv,fv,type,gu ess)	Returns the interest rate per period of an annuity



Functions	Syntax	Description
YIELD	=YIELD(settlement,maturity,r ate,pr,redemption,frequency,b asis)	Returns the yield on a security that pays periodic interest
AREAS	=AREAS(reference)	Returns the number of areas in a reference
RTD	=RTD(progID,server,topic1,to pic2,)	Retrieves real-time data from a program that supports COM automation (Automation: A way to work with an application's objects from another application or development tool. Formerly called OLE Automation, Automation is an industry standard and a feature of the Component Object Model (COM).)
AGGREGATE	=AGGREGATE(function_num ,options,array,k)	Returns an aggregate in a list or database
COMBIN	=COMBIN(number,number_c hosen)	Returns the number of combinations for a given number of objects
COS	=COS(number)	Returns the cosine of a number
COSH	=COSH(number)	Returns the hyperbolic cosine of a number
FACTDOUBLE	=FACTDOUBLE(number)	Returns the double factorial of a number
LN	=LN(number)	Returns the natural logarithm of a number



Functions	Syntax	Description
LOG	=LOG(number,base)	Returns the logarithm of a number to a specified base
LOG10	=LOG10(number)	Returns the base-10 logarithm of a number
MULTINOMIAL	=MULTINOMIAL(number1,n umber2,)	Returns the multinomial of a set of numbers
SIN	=SIN(number)	Returns the sine of the given angle
SINH	=SINH(number)	Returns the hyperbolic sine of a number
SUMX2MY2	=SUMX2MY2(array_x,array_ y)	Returns the sum of the difference of squares of corresponding values in two arrays
SUMX2PY2	=SUMX2PY2(array_x,array_y)	Returns the sum of the sum of squares of corresponding values in two arrays
SUMXMY2	=SUMXMY2(array_x,array_y)	Returns the sum of squares of differences of corresponding values in two arrays
TAN	=TAN(number)	Returns the tangent of a number
TANH	=TANH(number)	Returns the hyperbolic tangent of a number
NORM.S.INV	=NORM.S.INV(probability)	Returns the inverse of the standard normal cumulative distribution



Functions	Syntax	Description
AVEDEV	=AVEDEV(number1,number2,)	Returns the average of the absolute deviations of data points from their mean
BETA.DIST	=BETA.DIST(x,alpha,beta,cu mulative,A,B)	Returns the beta cumulative distribution function
BETA.INV	=BETA.INV(probability,alpha, beta,A,B)	Returns the inverse of the cumulative distribution function for a specified beta distribution
BINOM.DIST	=BINOM.DIST(number_s,tria ls,probability_s,cumulative)	Returns the individual term binomial distribution probability
BINOM.INV	=BINOM.INV(trials,probabilit y_s,alpha)	Returns the smallest value for which the cumulative binomial distribution is less than or equal to a criterion value
CHISQ.DIST	=CHISQ.DIST(x,deg_freedom, cumulative)	Returns the cumulative beta probability density function
CHISQ.DIST.RT	=CHISQ.DIST.RT(x,deg_freed om)	Returns the one-tailed probability of the chi-squared distribution
CHISQ.INV	=CHISQ.INV(probability,deg_ freedom)	Returns the cumulative beta probability density function
CHISQ.INV.RT	=CHISQ.INV.RT(probability,d eg_freedom)	Returns the inverse of the one- tailed probability of the chi- squared distribution
CHISQ.TEST	=CHISQ.TEST(actual_range,e xpected_range)	Returns the test for independence



Functions	Syntax	Description
CONFIDENCE.NOR M	=CONFIDENCE.NORM(alpha, standard_dev,size)	Returns the confidence interval for a population mean
CONFIDENCE.T	=CONFIDENCE.T(alpha,stand ard_dev,size)	Returns the confidence interval for a population mean, using a Student's t distribution
CORREL	=CORREL(array1,array2)	Returns the correlation coefficient between two data sets
COVARIANCE.P	=COVARIANCE.P(array1,arra y2)	Returns covariance, the average of the products of paired deviations
COVARIANCE.S	=COVARIANCE.S(array1,array 2)	Returns the sample covariance, the average of the products deviations for each data point pair in two data sets
DEVSQ	=DEVSQ(number1,number2,)	Returns the sum of squares of deviations
EXPON.DIST	=EXPON.DIST(x,lambda,cum ulative)	Returns the exponential distribution
F.DIST	=F.DIST(x,deg_freedom1,deg _freedom2,cumulative)	Returns the F probability distribution
F.DIST.RT	=F.DIST.RT(x,deg_freedom1,d eg_freedom2)	Returns the F probability distribution
F.INV	=F.INV(probability,deg_freed om1,deg_freedom2)	Returns the inverse of the F probability distribution



Functions	Syntax	Description
F.INV.RT	=F.INV.RT(probability,deg_fr eedom1,deg_freedom2)	Returns the inverse of the F probability distribution
F.TEST	=F.TEST(array1,array2)	Returns the result of an F-test
FINV	=FINV(probability,deg_freedo m1,deg_freedom2)	Returns the inverse of the F probability distribution
FISHER	=FISHER(x)	Returns the Fisher transformation
FISHERINV	=FISHERINV(y)	Returns the inverse of the Fisher transformation
FORECAST	=FORECAST(x,known_y's,kno wn_x's)	Returns a value along a linear trend
FREQUENCY	=FREQUENCY(data_array,bin s_array)	Returns a frequency distribution as a vertical array
GAMMA.DIST	=GAMMA.DIST(x,alpha,beta,c umulative)	Returns the gamma distribution
GAMMA.INV	=GAMMA.INV(probability,alp ha,beta)	Returns the inverse of the gamma cumulative distribution
GAMMALN	=GAMMALN(x)	Returns the natural logarithm of the gamma function, $\Gamma(x)$
GAMMALN.PRECIS E	=GAMMALN.PRECISE(x)	Returns the natural logarithm of the gamma function, $\Gamma(x)$
GROWTH	=GROWTH(known_y's,known _x's,new_x's,const)	Returns values along an exponential trend



Functions	Syntax	Description
HARMEAN	=HARMEAN(number1,numbe r2,)	Returns the harmonic mean
HYPGEOM.DIST	=HYPGEOM.DIST(sample_s, number_sample,population_s, number_pop,cumulative)	Returns the hypergeometric distribution
KURT	=KURT(number1,number2,)	Returns the kurtosis of a data set
LOGNORM.DIST	=LOGNORM.DIST(x,mean,sta ndard_dev,cumulative)	Returns the cumulative lognormal distribution
LOGNORM.INV	=LOGNORM.INV(probability, mean,standard_dev)	Returns the inverse of the lognormal cumulative distribution
NEGBINOM.DIST	=NEGBINOM.DIST(number_f ,number_s,probability_s,cum ulative)	Returns the negative binomial distribution
NORM.DIST	=NORM.DIST(x,mean,standar d_dev,cumulative)	Returns the normal cumulative distribution
NORM.INV	=NORM.INV(probability,mea n,standard_dev)	Returns the inverse of the normal cumulative distribution
NORM.S.DIST	=NORM.S.DIST(z,cumulative)	Returns the standard normal cumulative distribution
PEARSON	=PEARSON(array1,array2)	Returns the Pearson product moment correlation coefficient
PERCENTILE.EXC	=PERCENTILE.EXC(array,k)	Returns the k-th percentile of values in a range, where k is in the range 01, exclusive



Functions	Syntax	Description
PERCENTILE.INC	=PERCENTILE.INC(array,k)	Returns the k-th percentile of values in a range
PERCENTRANK.EX C	=PERCENTRANK.EXC(array, x,significance)	Returns the rank of a value in a data set as a percentage (01, exclusive) of the data set
PERCENTRANK.IN C	=PERCENTRANK.INC(array,x ,significance)	Returns the percentage rank of a value in a data set
PERMUT	=PERMUT(number,number_c hosen)	Returns the number of permutations for a given number of objects
POISSON.DIST	=POISSON.DIST(x,mean,cum ulative)	Returns the Poisson distribution
QUARTILE.EXC	=QUARTILE.EXC(array,quart	Returns the quartile of the data set, based on percentile values from 01, exclusive
QUARTILE.INC	=QUARTILE.INC(array,quart)	Returns the quartile of a data set
RSQ	=RSQ(known_y's,known_x's)	Returns the square of the Pearson product moment correlation coefficient
STDEV.P	=STDEV.P(number1,number2,)	Calculates standard deviation based on the entire population
STDEV.S	=STDEV.S(number1,number2,)	Estimates standard deviation based on a sample



Functions	Syntax	Description
STDEVA	=STDEVA(value1,value2,)	Estimates standard deviation based on a sample, including numbers, text, and logical values
STDEVPA	=STDEVPA(value1,value2,)	Calculates standard deviation based on the entire population, including numbers, text, and logical values
STEYX	=STEYX(known_y's,known_x' s)	Returns the standard error of the predicted y-value for each x in the regression
T.DIST	=T.DIST(x,deg_freedom,cumu lative)	Returns the Percentage Points (probability) for the Student t- distribution
T.DIST.2T	=T.DIST.2T(x,deg_freedom)	Returns the Percentage Points (probability) for the Student t- distribution
T.DIST.RT	=T.DIST.RT(x,deg_freedom)	Returns the Student's t- distribution
T.INV	=T.INV(probability,deg_freed om)	Returns the t-value of the Student's t-distribution as a function of the probability and the degrees of freedom
T.INV.2T	=T.INV.2T(probability,deg_fre edom)	Returns the inverse of the Student's t-distribution
T.TEST	=T.TEST(array1,array2,tails,ty pe)	Returns the probability associated with a Student's t-test



Functions	Syntax	Description
TRIMMEAN	=TRIMMEAN(array,percent)	Returns the mean of the interior of a data set
VAR.P	=VAR.P(number1,number2,)	Calculates variance based on the entire population
VAR.S	=VAR.S(number1,number2,)	Estimates variance based on a sample
VARA	=VARA(value1,value2,)	Estimates variance based on a sample, including numbers, text, and logical values
VARPA	=VARPA(value1,value2,)	Calculates variance based on the entire population, including numbers, text, and logical values
WEIBULL.DIST	=WEIBULL.DIST(x,alpha,beta,cumulative)	Returns the Weibull distribution
Z.TEST	=Z.TEST(array,x,sigma)	Returns the one-tailed probability- value of a z-test
ASC	=ASC(text)	Changes full-width (double-byte) English letters or katakana within a character string to half-width (single-byte) characters
BETADIST	=BETADIST(x,alpha,beta,A,B)	Returns the beta cumulative distribution function
BETAINV	=BETAINV(probability,alpha, beta,A,B)	Returns the inverse of the cumulative distribution function for a specified beta distribution



Functions	Syntax	Description
COVAR	=COVAR(array1,array2)	Returns covariance, the average of the products of paired deviations
CRITBINOM	=CRITBINOM(trials,probabilit y_s,alpha)	Returns the smallest value for which the cumulative binomial distribution is less than or equal to a criterion value
EXPONDIST	=EXPONDIST(x,lambda,cumu lative)	Returns the exponential distribution
FDIST	=FDIST(x,deg_freedom1,deg_ freedom2)	Returns the F probability distribution
GAMMADIST	=GAMMADIST(x,alpha,beta,c umulative)	Returns the gamma distribution
GAMMAINV	=GAMMAINV(probability,alp ha,beta)	Returns the inverse of the gamma cumulative distribution
HYPGEOMDIST	=HYPGEOMDIST(sample_s,n umber_sample,population_s,n umber_pop)	Returns the hypergeometric distribution
NEGBINOMDIST	=NEGBINOMDIST(number_f, number_s,probability_s)	Returns the negative binomial distribution
TTEST	=TTEST(array1,array2,tails,ty pe)	Returns the probability associated with a Student's t-test
WEIBULL	=WEIBULL(x,alpha,beta,cum ulative)	Calculates variance based on the entire population, including numbers, text, and logical values



Functions	Syntax	Description
ZTEST	=ZTEST(array,x,sigma)	Returns the one-tailed probability- value of a z-test
BESSELI	=BESSELI(x,n)	Returns the modified Bessel function In(x)
BESSELJ	=BESSELJ(x,n)	Returns the Bessel function $Jn(x)$
BESSELK	=BESSELK(x,n)	Returns the modified Bessel function Kn(x)
BESSELY	=BESSELY(x,n)	Returns the Bessel function Yn(x)
BIN2DEC	=BIN2DEC(number)	Converts a binary number to decimal
BIN2HEX	=BIN2HEX(number,places)	Converts a binary number to hexadecimal
BIN2OCT	=BIN2OCT(number,places)	Converts a binary number to octal
COMPLEX	=COMPLEX(real_num,i_num,suffix)	Converts real and imaginary coefficients into a complex number
DEC2BIN	=DEC2BIN(number,places)	Converts a decimal number to binary
DEC2HEX	=DEC2HEX(number,places)	Converts a decimal number to hexadecimal
DEC2OCT	=DEC2OCT(number,places)	Converts a decimal number to octal



Functions	Syntax	Description
HEX2BIN	=HEX2BIN(number,places)	Converts a hexadecimal number to binary
HEX2DEC	=HEX2DEC(number)	Converts a hexadecimal number to decimal
HEX2OCT	=HEX2OCT(number,places)	Converts a hexadecimal number to octal
IMABS	=IMABS(inumber)	Returns the absolute value (modulus) of a complex number
IMAGINARY	=IMAGINARY(inumber)	Returns the imaginary coefficient of a complex number
IMARGUMENT	=IMARGUMENT(inumber)	Returns the argument theta, an angle expressed in radians
IMCONJUGATE	=IMCONJUGATE(inumber)	Returns the complex conjugate of a complex number
IMCOS	=IMCOS(inumber)	Returns the cosine of a complex number
IMDIV	=IMDIV(inumber1,inumber2)	Returns the quotient of two complex numbers
IMEXP	=IMEXP(inumber)	Returns the exponential of a complex number
IMLN	=IMLN(inumber)	Returns the natural logarithm of a complex number



Functions	Syntax	Description
IMLOG10	=IMLOG10(inumber)	Returns the base-10 logarithm of a complex number
IMLOG2	=IMLOG2(inumber)	Returns the base-2 logarithm of a complex number
IMPOWER	=IMPOWER(inumber,number)	Returns a complex number raised to an integer power
IMPRODUCT	=IMPRODUCT(inumber1,inu mber2,)	Returns the product of complex numbers
IMREAL	=IMREAL(inumber)	Returns the real coefficient of a complex number
IMSIN	=IMSIN(inumber)	Returns the sine of a complex number
IMSQRT	=IMSQRT(inumber)	Returns the square root of a complex number
IMSUB	=IMSUB(inumber1,inumber2)	Returns the difference between two complex numbers
IMSUM	=IMSUM(inumber1,inumber2,)	Returns the sum of complex numbers
OCT2BIN	=OCT2BIN(number,places)	Converts an octal number to binary
OCT2DEC	=OCT2DEC(number)	Converts an octal number to decimal



Functions	Syntax	Description
OCT2HEX	=OCT2HEX(number,places)	Converts an octal number to hexadecimal
ACCRINT	=ACCRINT(issue,first_interes t,settlement,rate,par,frequency ,basis,calc_method)	Returns the accrued interest for a security that pays periodic interest
ACCRINTM	=ACCRINTM(issue,settlement,rate,par,basis)	Returns the accrued interest for a security that pays interest at maturity
COUPDAYBS	=COUPDAYBS(settlement,mat urity,frequency,basis)	Returns the number of days from the beginning of the coupon period to the settlement date
COUPDAYS	=COUPDAYS(settlement,maturity,frequency,basis)	Returns the number of days in the coupon period that contains the settlement date
COUPDAYSNC	=COUPDAYSNC(settlement,m aturity,frequency,basis)	Returns the number of days from the settlement date to the next coupon date
COUPNCD	=COUPNCD(settlement,matur ity,frequency,basis)	Returns the next coupon date after the settlement date
COUPNUM	=COUPNUM(settlement,maturity,frequency,basis)	Returns the number of coupons payable between the settlement date and maturity date
COUPPCD	=COUPPCD(settlement,maturi ty,frequency,basis)	Returns the previous coupon date before the settlement date
CUMIPMT	=CUMIPMT(rate,nper,pv,start _period,end_period,type)	Returns the cumulative interest paid between two periods



Functions	Syntax	Description
CUMPRINC		Returns the cumulative principal paid on a loan between two periods
DISC	=DISC(settlement,maturity,pr, redemption,basis)	Returns the discount rate for a security
DURATION	=DURATION(settlement,matu rity,coupon,yld,frequency,basi s)	Returns the annual duration of a security with periodic interest payments
FVSCHEDULE	=FVSCHEDULE(principal,sch edule)	Returns the future value of an initial principal after applying a series of compound interest rates
INTRATE	=INTRATE(settlement,maturit y,investment,redemption,basis)	Returns the interest rate for a fully invested security
ISPMT	=ISPMT(rate,per,nper,pv)	Calculates the interest paid during a specific period of an investment
MDURATION	=MDURATION(settlement,ma turity,coupon,yld,frequency,ba sis)	•
ODDFPRICE		Returns the price per \$100 face value of a security with an odd first period
ODDFYIELD	=ODDFYIELD(settlement,mat urity,issue,first_coupon,rate,p r,redemption,frequency,basis)	Returns the yield of a security with an odd first period



Functions	Syntax	Description
ODDLPRICE		Returns the price per \$100 face value of a security with an odd last period
ODDLYIELD	=ODDLYIELD(settlement,mat urity,last_interest,rate,pr,rede mption,frequency,basis)	Returns the yield of a security with an odd last period
PMT	=PMT(rate,nper,pv,fv,type)	Returns the periodic payment for an annuity
PPMT	=PPMT(rate,per,nper,pv,fv,typ e)	Returns the payment on the principal for an investment for a given period
PRICE	=PRICE(settlement,maturity,r ate,yld,redemption,frequency, basis)	Returns the price per \$100 face value of a security that pays periodic interest
PRICEDISC	=PRICEDISC(settlement,maturity,discount,redemption,basis)	Returns the price per \$100 face value of a discounted security
PRICEMAT	=PRICEMAT(settlement,matu rity,issue,rate,yld,basis)	Returns the price per \$100 face value of a security that pays interest at maturity
RECEIVED	=RECEIVED(settlement,maturity,investment,discount,basis)	Returns the amount received at maturity for a fully invested security
TBILLEQ	=TBILLEQ(settlement,maturit y,discount)	Returns the bond-equivalent yield for a Treasury bill



Functions	Syntax	Description
TBILLPRICE	=TBILLPRICE(settlement,mat urity,discount)	Returns the price per \$100 face value for a Treasury bill
TBILLYIELD	=TBILLYIELD(settlement,mat urity,pr)	Returns the yield for a Treasury bill
VDB	=VDB(cost,salvage,life,start_p eriod,end_period,factor,no_s witch)	Returns the depreciation of an asset for a specified or partial period by using a declining balance method
XIRR	=XIRR(values,dates,guess)	Returns the internal rate of return for a schedule of cash flows that is not necessarily periodic
XNPV	=XNPV(rate,values,dates)	Returns the net present value for a schedule of cash flows that is not necessarily periodic
YIELDDISC	=YIELDDISC(settlement,matu rity,pr,redemption,basis)	Returns the annual yield for a discounted security; for example, a Treasury bill
YIELDMAT	=YIELDMAT(settlement,matu rity,issue,rate,pr,basis)	Returns the annual yield of a security that pays interest at maturity
ACOS	=ACOS(number)	Returns the arccosine of a number
ACOSH	=ACOSH(number)	Returns the inverse hyperbolic cosine of a number
ASIN	=ASIN(number)	Returns the arcsine of a number



Functions	Syntax	Description
ASINH	=ASINH(number)	Returns the inverse hyperbolic sine of a number
ATAN	=ATAN(number)	Returns the arctangent of a number
ATAN2	=ATAN2(x_num,y_num)	Returns the arctangent from x- and y-coordinates
ATANH	=ATANH(number)	Returns the inverse hyperbolic tangent of a number
DEGREES	=DEGREES(angle)	Converts radians to degrees
MDETERM	=MDETERM(array)	Returns the matrix determinant of an array
MINVERSE	=MINVERSE(array)	Returns the matrix inverse of an array
MMULT	=MMULT(array1,array2)	Returns the matrix product of two arrays
RADIANS	=RADIANS(angle)	Converts degrees to radians
ROMAN	=ROMAN(number,form)	Converts an arabic numeral to roman, as text
SQRTPI	=SQRTPI(number)	Returns the square root of (number * pi)
BAHTTEXT	=BAHTTEXT(number)	Converts a number to text, using the ß (baht) currency format



Functions	Syntax	Description
CUBEKPIMEMBER	=CUBEKPIMEMBER(connecti on,kpi_name,kpi_property,ca ption)	Returns a key performance indicator (KPI) name, property, and measure, and displays the name and property in the cell. A KPI is a quantifiable measurement, such as monthly gross profit or quarterly employee turnover, used to monitor an organization's performance.
CUBEMEMBER	=CUBEMEMBER(connection, member_expression,caption)	Returns a member or tuple in a cube hierarchy. Use to validate that the member or tuple exists in the cube.
CUBEMEMBERPR OPERTY	=CUBEMEMBERPROPERTY(connection,member_expressio n,property)	
CUBERANKEDME MBER		Returns the nth, or ranked, member in a set. Use to return one or more elements in a set, such as the top sales performer or top 10 students.
CUBESET	` _	Defines a calculated set of members or tuples by sending a set expression to the cube on the server, which creates the set, and then returns that set to Microsoft Office Excel.
CUBESETCOUNT	=CUBESETCOUNT(set)	Returns the number of items in a set.



Functions	Syntax	Description
CUBEVALUE	=CUBEVALUE(connection,me mber_expression1,)	Returns an aggregated value from a cube.

