

Engineering Functions	
FUNCTION	DESCRIPTION
BESSELI	Calculates the modified Bessel function $I_n(x)$
BESSELJ	Calculates the Bessel function $J_n(x)$
BESSELK	Calculates the modified Bessel function $K_n(x)$
BESSELY	Calculates the modified Bessel function $Y_n(x)$
BIN2DEC	Converts a binary number to a decimal
BIN2HEX	Converts a binary number to hexadecimal
BIN2OCT	Converts a binary number to octal
BITAND	Returns a Bitwise 'And' of two numbers (New in Excel 2013)
BITLSHIFT	Returns a number shifted left by a specified number of bits (New in Excel 2013)
BITOR	Returns a Bitwise 'Or' of two numbers (New in Excel 2013)
BITRSHIFT	Returns a number shifted right by a specified number of bits (New in Excel 2013)
BITXOR	Returns a Bitwise 'Exclusive Or' of two numbers (New in Excel 2013)
COMPLEX	Converts user-supplied real and imaginary coefficients into a complex number
CONVERT	Converts a number from one measurement system to another
DEC2BIN	Converts a decimal number to binary
DEC2HEX	Converts a decimal number to hexadecimal
DEC2OCT	Converts a decimal number to octal
DELTA	Tests whether two supplied numbers are equal
ERF	Returns the error function integrated between two supplied limits
ERF.PRECISE	Returns the error function integrated between 0 and a supplied limit (New in Excel 2010)
ERFC	Returns the complementary error function integrated between a supplied lower limit and infinity
ERFC.PRECISE	Returns the complementary error function integrated between a supplied lower limit and infinity (New in Excel 2010)
GESTEP	Tests whether a number is greater than a supplied threshold value
HEX2BIN	Converts a hexadecimal number to binary
HEX2DEC	Converts a hexadecimal number to a decimal
HEX2OCT	Converts a hexadecimal number to octal
IMABS	Returns the absolute value (the modulus) of a complex number
IMAGINARY	Returns the imaginary coefficient of a complex number
IMARGUMENT	Returns the argument Θ (an angle expressed in radians) of a complex number
IMCONJUGATE	Returns the complex conjugate of a complex number
IMCOS	Returns the cosine of a complex number
IMCOSH	Returns the hyperbolic cosine of a complex number (New in Excel 2013)
IMCOT	Returns the cotangent of a complex number (New in Excel 2013)
IMCSC	Returns the cosecant of a complex number (New in Excel 2013)
IMCSCH	Returns the hyperbolic cosecant of a complex number (New in Excel 2013)
IMDIV	Returns the quotient of two supplied complex numbers
IMEXP	Returns the exponential of a complex number
IMLN	Returns the natural logarithm of a complex number
IMLOG10	Returns the base-10 logarithm of a complex number
IMLOG2	Returns the base-2 logarithm of a complex number
IMPOWER	Calculates a complex number raised to a supplied power
IMPRODUCT	Returns the product of up to 255 supplied complex numbers
IMREAL	Returns the real coefficient of a complex number
IMSEC	Returns the secant of a complex number (New in Excel 2013)

IMSECH	Returns the hyperbolic secant of a complex number (New in Excel 2013)
IMSIN	Returns the sine of a complex number
IMSINH	Returns the hyperbolic sine of a complex number (New in Excel 2013)
IMSQRT	Returns the square root of a complex number
IMSUB	Subtracts two complex numbers
IMSUM	Calculates the sum of two complex numbers
IMTAN	Returns the tangent of a complex number (New in Excel 2013)
OCT2BIN	Converts octal number to binary
OCT2DEC	Converts octal number to a decimal
OCT2HEX	Converts octal number to hexadecimal
Database Functions	
FUNCTION	DESCRIPTION
DAVERAGE	Calculates the average of values in a field of a list or database, that satisfy specified conditions
DCOUNT	Returns the number of cells containing numbers in a field of a list or database that satisfy specified conditions
DCOUNTA	Returns the number of non-blank cells in a field of a list or database, that satisfy specified conditions
DGET	Returns a single value from a field of a list or database, that satisfy specified conditions
DMAX	Returns the maximum value from a field of a list or database, that satisfy specified conditions
DMIN	Returns the minimum value from a field of a list or database, that satisfy specified conditions
DPRODUCT	Calculates the product of values in a field of a list or database, that satisfy specified conditions
DSTDEV	Calculates the standard deviation (based on a sample of a population) of values in a field of a list or database, that satisfy specified conditions
DSTDEVP	Calculates the standard deviation (based on an entire population) of values in a field of a list or database, that satisfy specified conditions
DSUM	Calculates the sum of values in a field of a list or database, that satisfy specified conditions
DVAR	Calculates the variance (based on a sample of a population) of values in a field of a list or database, that satisfy specified conditions
DVARP	Calculates the variance (based on an entire population) of values in a field of a list or database, that satisfy specified conditions
Date and Time Functions	
FUNCTION	DESCRIPTION
DATE	Returns a date, from a user-supplied year, month and day
DATEVALUE	Converts a text string showing a date, to an integer that represents the date in Excel's date-time code
DAY	Returns the day (of the month) from a user-supplied date
DAYS	Calculates the number of days between 2 dates (New in Excel 2013)
DAYS360	Calculates the number of days between 2 dates, based on a 360-day year (12 x 30 months)
EDATE	Returns a date that is the specified number of months before or after an initial supplied start date
EOMONTH	Returns a date that is the last day of the month which is a specified number of months before or after an initial supplied start date
HOUR	Returns the hour part of a user-supplied time
ISOWEEKNUM	Returns the ISO week number of the year for a given date (New in Excel 2013)
MINUTE	Returns the minute part of a user-supplied time
MONTH	Returns the month from a user-supplied date

NETWORKDAYS	Returns the number of whole networkdays (excluding weekends & holidays), between two supplied dates
NETWORKDAYS.INTL	Returns the number of whole networkdays (excluding weekends & holidays), between two supplied dates, using parameters to specify weekend days (New in Excel 2010)
NOW	Returns the current date & time
SECOND	Returns the seconds part of a user-supplied time
TIME	Returns a time, from a user-supplied hour, minute and second
TIMEVALUE	Converts a text string showing a time, to a decimal that represents the time in Excel
TODAY	Returns today's date
WEEKDAY	Returns an integer representing the day of the week for a supplied date
WEEKNUM	Returns an integer representing the week number (from 1 to 53) of the year from a user-supplied date
WORKDAY	Returns a date that is a supplied number of working days (excluding weekends & holidays) ahead of a given start date
WORKDAY.INTL	Returns a date that is a supplied number of working days (excluding weekends & holidays) ahead of a given start date, using supplied parameters to specify weekend days (New in Excel 2010)
YEAR	Returns the year from a user-supplied date
YEARFRAC	Calculates the fraction of the year represented by the number of whole days between two dates
Financial Functions	
FUNCTION	DESCRIPTION
ACCRINT	Calculates the accrued interest for a security that pays periodic interest
ACCRINTM	Calculates the accrued interest for a security that pays interest at maturity
AMORDEGRC	Calculates the prorated linear depreciation of an asset for each accounting period (with depreciation coefficient applied, depending on the life of the asset)
AMORLINC	Calculates the prorated linear depreciation of an asset for each accounting period
COUPDAYBS	Calculates the number of days from the beginning of the coupon period to the settlement date
COUPDAYS	Calculates the number of days in the coupon period that contains the settlement date
COUPDAYSNC	Calculates the number of days from the settlement date to the next coupon date
COUPNCD	Returns the next coupon date after the settlement date
COUPNUM	Returns the number of coupons payable between the settlement date and maturity date
COUPPCD	Returns the previous coupon date, before the settlement date
CUMIPMT	Calculates the cumulative interest paid between two specified periods
CUMPRINC	Calculates the cumulative principal paid on a loan, between two specified periods
DB	Calculates the depreciation of an asset for a specified period, using the fixed-declining balance method
DDB	Calculates the depreciation of an asset for a specified period, using the double-declining balance method, or some other user-specified method
DISC	Calculates the discount rate for a security
DOLLARDE	Converts a dollar price expressed as a fraction, into a dollar price expressed as a decimal
DOLLARFR	Converts a dollar price expressed as a decimal, into a dollar price expressed as a fraction
DURATION	Calculates the Macauley duration of a security with an assumed par value of \$100

EFFECT	Calculates the effective annual interest rate from a supplied Nominal interest rate and number of periods
FV	Calculates the future value of an investment with periodic constant payments and a constant interest rate
FVSCHEDULE	Calculates the future value of an initial principal, after applying a series of compound interest rates
INTRATE	Calculates the interest rate for a fully invested security
IPMT	Calculates the interest payment for a given period of an investment, with periodic constant payments and a constant interest rate
IRR	Calculates the internal rate of return for a series of periodic cash flows
ISPMT	Returns the interest paid during a specified period of an investment
MDURATION	Calculates the Macauley modified duration for a security with an assumed par value of \$100
MIRR	Calculates the internal rate of return for a series of periodic cash flows, considering the cost of the investment and the interest on the reinvestment of cash
NOMINAL	Calculates the annual nominal interest rate from a supplied Effective interest rate and number of periods
NPER	Returns the number of periods for an investment with periodic constant payments and a constant interest rate
NPV	Calculates the net present value of an investment, based on a supplied discount rate, and a series of periodic cash flows
ODDFPRICE	Calculates the price per \$100 face value of a security with an odd first period
ODDFYIELD	Calculates the yield of a security with an odd first period
ODDLPRICE	Calculates the price per \$100 face value of a security with an odd last period
ODDLYIELD	Calculates the yield of a security with an odd last period
PDURATION	Calculates the number of periods required for an investment to reach a specified value (New in Excel 2013)
PMT	Calculates the payments required to reduce a loan, from a supplied present value to a specified future value
PPMT	Calculates the payment on the principal for a given investment, with periodic constant payments and a constant interest rate
PRICE	Calculates the price per \$100 face value of a security that pays periodic interest
PRICEDISC	Calculates the price per \$100 face value of a discounted security
PRICEMAT	Calculates the price per \$100 face value of a security that pays interest at maturity
PV	Calculates the present value of an investment (i.e. the total amount that a series of future periodic constant payments is worth now)
RATE	Calculates the interest rate required to pay off a specified amount of a loan, or reach a target amount on an investment over a given period
RECEIVED	Calculates the amount received at maturity for a fully invested Security
RRI	Calculates the interest rate required for an investment to grow to a specified future value (New in Excel 2013)
SLN	Returns the straight-line depreciation of an asset for one period
SYD	Returns the sum-of-years' digits depreciation of an asset for a specified period
TBILLEQ	Calculates the bond-equivalent yield for a treasury bill
TBILLPRICE	Calculates the price per \$100 face value for a treasury bill
TBILLYIELD	Calculates the yield for a treasury bill
VDB	Returns the depreciation of an asset for a specified period, (including partial periods), using the double-declining balance method or another user-specified method
XIRR	Calculates the internal rate of return for a schedule of cash flows occurring at a series of supplied dates

XNPV	Calculates the net present value for a schedule of cash flows occurring at a series of supplied dates
YIELD	Calculates the yield of a security that pays periodic interest
YIELDDISC	Calculates the annual yield of a discounted security
YIELDMAT	Calculates the annual yield of a security that pays interest at maturity
Information Functions	
FUNCTION	DESCRIPTION
CELL	Returns information about the contents, formatting or location of a given cell
ERROR.TYPE	Tests a supplied value and returns an integer relating to the supplied value's error type
INFO	Returns information about the current operating environment
ISBLANK	Tests if a supplied cell is blank (empty), and if so, returns TRUE; Otherwise, returns FALSE
ISERR	Tests if an initial supplied value (or expression) returns an error (EXCEPT for the #N/A error) and if so, returns TRUE; Otherwise returns FALSE
ISERROR	Tests if an initial supplied value (or expression) returns an error and if so, returns TRUE; Otherwise returns FALSE
ISEVEN	Tests if a supplied number (or expression) is an even number, and if so, returns TRUE; Otherwise, returns FALSE.
ISFORMULA	Tests if a supplied cell contains a formula and if so, returns TRUE; Otherwise, returns FALSE (New in Excel 2013)
ISLOGICAL	Tests if a supplied value is a logical value, and if so, returns TRUE; Otherwise, returns FALSE
ISNA	Tests if an initial supplied value (or expression) returns the Excel #N/A error and if so, returns TRUE; Otherwise returns FALSE
ISNONTEXT	Tests if a supplied value is text, and if it is NOT, returns TRUE; Otherwise, returns FALSE
ISNUMBER	Tests if a supplied value is a number, and if so, returns TRUE; Otherwise, returns FALSE.
ISODD	Tests if a supplied number (or expression) is an odd number, and if so, returns TRUE; Otherwise, returns FALSE.
ISREF	Tests if a supplied value is a reference, and if so, returns TRUE; Otherwise, returns FALSE
ISTEXT	Tests if a supplied value is text, and if so, returns TRUE; Otherwise, returns FALSE
N	Converts a non-number value to a number, a date to a serial number, the logical value TRUE to 1 and all other values to 0
NA	Returns the Excel #N/A error
SHEET	Returns the sheet number relating to a supplied reference (New in Excel 2013)
SHEETS	Returns the number of sheets in a reference (New in Excel 2013)
TYPE	Returns information about the data type of a supplied value
Statistical Functions	
FUNCTION	DESCRIPTION
AVEDEV	Returns the average of the absolute deviations of data points from their mean
AVERAGE	Returns the Average of a list of supplied numbers
AVERAGEA	Returns the Average of a list of supplied numbers, counting text and the logical value FALSE as the value 0 and counting the logical value TRUE as the value 1
AVERAGEIF	Calculates the Average of the cells in a supplied range, that satisfy a given criteria (New in Excel 2007)
AVERAGEIFS	Calculates the Average of the cells in a supplied range, that satisfy multiple criteria (New in Excel 2007)

BETA.DIST	Returns the cumulative beta distribution function or the beta probability density function (New in Excel 2010 - replaces the Betadist function)
BETA.INV	Returns the inverse of the cumulative beta probability density function (New in Excel 2010 - replaces the Betainv function)
BETADIST	Returns the cumulative beta probability density function (Replaced by Beta.Dist function in Excel 2010)
BETAINV	Returns the inverse of the cumulative beta probability density function (Replaced by Beta.Inv function in Excel 2010)
BINOM.DIST	Returns the individual term binomial distribution probability (New in Excel 2010 - replaces the Binomdist function)
BINOM.DIST.RANGE	Returns the probability of a trial result using a binomial distribution (New in Excel 2013)
BINOM.INV	Returns the smallest value for which the cumulative binomial distribution is greater than or equal to a criterion value (New in Excel 2010 - replaces the Critbinom function)
BINOMDIST	Returns the individual term binomial distribution probability (Replaced by Binom.Dist function in Excel 2010)
CHIDIST	Returns the right-tailed probability of the chi-squared distribution (Replaced by Chisq.Dist.Rt function in Excel 2010)
CHIINV	Returns the inverse of the right-tailed probability of the chi-squared distribution (Replaced by Chisq.Inv.Rt function in Excel 2010)
CHISQ.DIST	Returns the chi-squared distribution (probability density or cumulative distribution function) (New in Excel 2010)
CHISQ.DIST.RT	Returns the right-tailed probability of the chi-squared distribution (New in Excel 2010 - replaces the Chidist function)
CHISQ.INV	Returns the inverse of the left-tailed probability of the chi-squared distribution (New in Excel 2010)
CHISQ.INV.RT	Returns the inverse of the right-tailed probability of the chi-squared distribution (New in Excel 2010 - replaces the Chiinv function)
CHISQ.TEST	Returns the chi-squared statistical test for independence (New in Excel 2010 - replaces the Chitest function)
CHITEST	Returns the chi-squared statistical test for independence (Replaced by Chisq.Test function in Excel 2010)
CONFIDENCE	Returns the confidence interval for a population mean, using a normal distribution (Replaced by Confidence.Norm function in Excel 2010)
CONFIDENCE.NORM	Returns the confidence interval for a population mean, using a normal distribution (New in Excel 2010 - replaces the Confidence function)
CONFIDENCE.T	Returns the confidence interval for a population mean, using a Student's t distribution (New in Excel 2010)
CORREL	Returns the correlation coefficient between two sets of values
COUNT	Returns the number of numerical values in a supplied set of cells or values
COUNTA	Returns the number of non-blanks in a supplied set of cells or values
COUNTBLANK	Returns the number of blank cells in a supplied range
COUNTIF	Returns the number of cells (of a supplied range), that satisfy a given criteria
COUNTIFS	Returns the number of cells (of a supplied range), that satisfy a set of given criteria (New in Excel 2007)
COVAR	Returns population covariance (i.e. the average of the products of deviations for each pair within two supplied data sets) (Replaced by Covariance.P function in Excel 2010)
COVARIANCE.P	Returns population covariance (i.e. the average of the products of deviations for each pair within two supplied data sets) (New in Excel 2010 - replaces the Covar function)
COVARIANCE.S	Returns sample covariance (i.e. the average of the products of deviations for each pair within two supplied data sets) (New in Excel 2010)

CRITBINOM	Returns the smallest value for which the cumulative binomial distribution is greater than or equal to a criterion value (Replaced by Binom.Inv function in Excel 2010)
DEVSQ	Returns the sum of the squares of the deviations of a set of data points from their sample mean
EXPON.DIST	Returns the exponential distribution (New in Excel 2010 - replaces the Expondist function)
EXPONDIST	Returns the exponential distribution (Replaced by Expon.Dist function in Excel 2010)
F.DIST	Returns the F probability distribution (probability density or cumulative distribution function) (New in Excel 2010)
F.DIST.RT	Returns the right-tailed F probability distribution for two data sets (New in Excel 2010 - replaces the Fdist function)
F.INV	Returns the inverse of the Cumulative F distribution (New in Excel 2010)
F.INV.RT	Returns the inverse of the right-tailed F probability distribution for two data sets (New in Excel 2010 - replaces the Finv function)
F.TEST	Returns the result of an F-Test for 2 supplied data sets (New in Excel 2010 - replaces the Ftest function)
FDIST	Returns the right-tailed F probability distribution for two data sets (Replaced by F.Dist.Rt function in Excel 2010)
FINV	Returns the inverse of the right-tailed F probability distribution for two data sets (Replaced by F.Inv.Rt function in Excel 2010)
FISHER	Returns the Fisher transformation
FISHERINV	Returns the inverse of the Fisher transformation
FORECAST	Predicts a future point on a linear trend line fitted to a supplied set of x- and y-values (Replaced by Forecast.Linear function in Excel 2016)
FORECAST.ETS	Uses an exponential smoothing algorithm to predict a future value on a timeline, based on a series of existing values (New in Excel 2016 - not available in Excel 2016 for Mac)
FORECAST.ETS.CONFINT	Returns a confidence interval for a forecast value at a specified target date (New in Excel 2016 - not available in Excel 2016 for Mac)
FORECAST.ETS.SEASONALITY	Returns the length of the repetitive pattern Excel detects for a specified time series (New in Excel 2016 - not available in Excel 2016 for Mac)
FORECAST.ETS.STAT	Returns a statistical value relating to a time series forecasting (New in Excel 2016 - not available in Excel 2016 for Mac)
FORECAST.LINEAR	Predicts a future point on a linear trend line fitted to a supplied set of x- and y-values (New in Excel 2016 (not Excel 2016 for Mac) - replaces the Forecast function)
FREQUENCY	Returns an array showing the number of values from a supplied array, which fall into specified ranges
FTEST	Returns the result of an F-Test for 2 supplied data sets (Replaced by F.Test function in Excel 2010)
GAMMA	Return the gamma function value for a supplied number (New in Excel 2013)
GAMMA.DIST	Returns the gamma distribution (New in Excel 2010 - replaces the Gammadist function)
GAMMA.INV	Returns the inverse gamma cumulative distribution (New in Excel 2010 - replaces the Gammainv function)
GAMMADIST	Returns the gamma distribution (Replaced by Gamma.Dist function in Excel 2010)
GAMMAINV	Returns the inverse gamma cumulative distribution (Replaced by Gamma.Inv function in Excel 2010)
GAMMALN	Calculates the natural logarithm of the gamma function for a supplied value
GAMMALN.PRECISE	Returns the natural logarithm of the gamma function for a supplied value (New in Excel 2010)

GAUSS	Calculates the probability that a member of a standard normal population will fall between the mean and z standard deviations from the mean (New in Excel 2013)
GEOMEAN	Returns the geometric mean of a set of supplied numbers
GROWTH	Returns numbers in an exponential growth trend, based on a set of supplied x- and y- values
HARMEAN	Returns the harmonic mean of a set of supplied numbers
HYPGEOM.DIST	Returns the hypergeometric distribution (New in Excel 2010 - replaces the Hypgeomdist function)
HYPGEOMDIST	Returns the hypergeometric distribution (Replaced by Hypgeom.Dist function in Excel 2010)
INTERCEPT	Calculates the best fit regression line, through a supplied series of x- and y- values and returns the value at which this line intercepts the y-axis
KURT	Returns the kurtosis of a data set
LARGE	Returns the Kth LARGEST value from a list of supplied numbers, for a given value K
LINEST	Returns statistical information describing the trend of the line of best fit, through a supplied series of x- and y- values
LOGEST	Returns the parameters of an exponential trend for a supplied set of x- and y- values
LOGINV	Returns the inverse of the lognormal distribution (Replaced by Lognorm.Inv function in Excel 2010)
LOGNORM.DIST	Returns the log-normal probability density function or the cumulative log- normal distribution (New in Excel 2010 - replaces the Lognormdist function)
LOGNORM.INV	Returns the inverse of the lognormal distribution (New in Excel 2010 - replaces the Loginv function)
LOGNORMDIST	Returns the cumulative log-normal distribution (Replaced by Lognorm.Dist function in Excel 2010)
MAX	Returns the largest value from a list of supplied numbers
MAXA	Returns the largest value from a list of supplied values, counting text and the logical value FALSE as the value 0 and counting the logical value TRUE as the value 1
MAXIFS	Returns the largest value from a subset of values in a list that are specified according to one or more criteria. (New in Excel 2016 - not available in Excel 2016 for Mac)
MEDIAN	Returns the Median (the middle value) of a list of supplied numbers
MIN	Returns the smallest value from a list of supplied numbers
MINA	Returns the smallest value from a list of supplied values, counting text and the logical value FALSE as the value 0 and counting the logical value TRUE as the value 1
MINIFS	Returns the smallest value from a subset of values in a list that are specified according to one or more criteria. (New in Excel 2016 - not available in Excel 2016 for Mac)
MODE	Returns the Mode (the most frequently occurring value) of a list of supplied numbers (Replaced by Mode.Sngl function in Excel 2010)
MODE.MULT	Returns a vertical array of the most frequently occurring values in an array or range of data (New in Excel 2010)
MODE.SNGL	Returns the Mode (the most frequently occurring value) of a list of supplied numbers (New in Excel 2010 - replaces the Mode function)
NEGBINOM.DIST	Returns the negative binomial distribution (New in Excel 2010 - replaces the Negbinomdist function)
NEGBINOMDIST	Returns the negative binomial distribution (Replaced by Negbinom.Dist function in Excel 2010)
NORM.DIST	Returns the normal cumulative distribution (New in Excel 2010 - replaces the Normdist function)
NORM.INV	Returns the inverse of the normal cumulative distribution (New in Excel 2010 - replaces the Norminv function)

NORM.S.DIST	Returns the standard normal cumulative distribution (New in Excel 2010 - replaces the Normsdist function)
NORM.S.INV	Returns the inverse of the standard normal cumulative distribution (New in Excel 2010 - replaces the Normsinv function)
NORMDIST	Returns the normal cumulative distribution (Replaced by Norm.Dist function in Excel 2010)
NORMINV	Returns the inverse of the normal cumulative distribution (Replaced by Norm.Inv function in Excel 2010)
NORMSDIST	Returns the standard normal cumulative distribution (Replaced by Norm.S.Dist function in Excel 2010)
NORMSINV	Returns the inverse of the standard normal cumulative distribution (Replaced by Norm.S.Inv function in Excel 2010)
PEARSON	Returns the Pearson product moment correlation coefficient
PERCENTILE	Returns the K'th percentile of values in a supplied range, where K is in the range 0 - 1 (inclusive) (Replaced by Percentile.Inc function in Excel 2010)
PERCENTILE.EXC	Returns the K'th percentile of values in a supplied range, where K is in the range 0 - 1 (exclusive) (New in Excel 2010)
PERCENTILE.INC	Returns the K'th percentile of values in a supplied range, where K is in the range 0 - 1 (inclusive) (New in Excel 2010 - replaces the Percentile function)
PERCENTRANK	Returns the rank of a value in a data set, as a percentage (0 - 1 inclusive) (Replaced by Percentrank.Inc function in Excel 2010)
PERCENTRANK.EXC	Returns the rank of a value in a data set, as a percentage (0 - 1 exclusive) (New in Excel 2010)
PERCENTRANK.INC	Returns the rank of a value in a data set, as a percentage (0 - 1 inclusive) (New in Excel 2010 - replaces the Percentrank function)
PERMUT	Returns the number of permutations for a given number of objects
PERMUTATIONA	Returns the number of permutations for a given number of objects (with repetitions) that can be selected from the total objects (New in Excel 2013)
PHI	Returns the value of the density function for a standard normal distribution, for a supplied number (New in Excel 2013)
POISSON	Returns the Poisson distribution (Replaced by Poisson.Dist function in Excel 2010)
POISSON.DIST	Returns the Poisson distribution (New in Excel 2010 - replaces the Poisson function)
PROB	Returns the probability that values in a supplied range are within given limits
QUARTILE	Returns the specified quartile of a set of supplied numbers, based on percentile value 0 - 1 (inclusive) (Replaced by Quartile.Inc function in Excel 2010)
QUARTILE.EXC	Returns the specified quartile of a set of supplied numbers, based on percentile value 0 - 1 (exclusive) (New in Excel 2010)
QUARTILE.INC	Returns the specified quartile of a set of supplied numbers, based on percentile value 0 - 1 (inclusive) (New in Excel 2010 - replaces the Quartile function)
RANK	Returns the statistical rank of a given value, within a supplied array of values (Replaced by Rank.Eq function in Excel 2010)
RANK.AVG	Returns the statistical rank of a given value, within a supplied array of values (if more than one value has same rank, the average rank is returned) (New in Excel 2010)
RANK.EQ	Returns the Mode (the most frequently occurring value) of a list of supplied numbers (if more than one value has same rank, the top rank of that set is returned) (New in Excel 2010 - replaces the Rank function)
RSQ	Returns the square of the Pearson product moment correlation coefficient
SKEW	Returns the skewness of a distribution
SKEW.P	Returns the skewness of a distribution based on a population (New in Excel 2013)

SLOPE	Returns the slope of the linear regression line through a supplied series of x- and y- values
SMALL	Returns the Kth SMALLEST value from a list of supplied numbers, for a given value K
STANDARDIZE	Returns a normalized value
STDEV	Returns the standard deviation of a supplied set of values (which represent a sample of a population) (Replaced by Stdev.S function in Excel 2010)
STDEV.P	Returns the standard deviation of a supplied set of values (which represent an entire population) (New in Excel 2010 - replaces the Stdevp function)
STDEV.S	Returns the standard deviation of a supplied set of values (which represent a sample of a population) (New in Excel 2010 - replaces the Stdev function)
STDEVA	Returns the standard deviation of a supplied set of values (which represent a sample of a population), counting text and the logical value FALSE as the value 0 and counting the logical value TRUE as the value 1
STDEVP	Returns the standard deviation of a supplied set of values (which represent an entire population) (Replaced by Stdev.P function in Excel 2010)
STDEVPA	Returns the standard deviation of a supplied set of values (which represent an entire population), counting text and the logical value FALSE as the value 0 and counting the logical value TRUE as the value 1
STEYX	Returns the standard error of the predicted y-value for each x in the regression line for a set of supplied x- and y- values
T.DIST	Returns the Student's T-distribution (probability density or cumulative distribution function) (New in Excel 2010)
T.DIST.2T	Returns the two-tailed Student's T-distribution (New in Excel 2010 - replaces the Tdist function)
T.DIST.RT	Returns the right-tailed Student's T-distribution (New in Excel 2010 - replaces the Tdist function)
T.INV	Returns the left-tailed inverse of the Student's T-distribution (New in Excel 2010)
T.INV.2T	Returns the two-tailed inverse of the Student's T-distribution (New in Excel 2010 - replaces the Tinv function)
T.TEST	Returns the probability associated with a Student's T-Test (New in Excel 2010 - replaces the Ttest function)
TDIST	Returns the Student's T-distribution (Replaced by T.Dist.2t & T.Dist.Rt functions in Excel 2010)
TINV	Returns the two-tailed inverse of the Student's T-distribution (Replaced by T.Inv.2t function in Excel 2010)
TREND	Calculates the trend line through a given set of y-values and returns additional y-values for a supplied set of new x-values
TRIMMEAN	Returns the mean of the interior of a supplied set of values
TTEST	Returns the probability associated with a Student's T-Test (Replaced by T.Test function in Excel 2010)
VAR	Returns the variance of a supplied set of values (which represent a sample of a population) (Replaced by Var.S function in Excel 2010)
VAR.P	Returns the variance of a supplied set of values (which represent an entire population) (New in Excel 2010 - replaces the Varp function)
VAR.S	Returns the variance of a supplied set of values (which represent a sample of a population) (New in Excel 2010 - replaces the Var function)
VARA	Returns the variance of a supplied set of values (which represent a sample of a population), counting text and the logical value FALSE as the value 0 and counting the logical value TRUE as the value 1
VARP	Returns the variance of a supplied set of values (which represent an entire population) (Replaced by Var.P function in Excel 2010)
VARPA	Returns the variance of a supplied set of values (which represent an entire population), counting text and the logical value FALSE as the value 0 and counting the logical value TRUE as the value 1

WEIBULL	Returns the Weibull distribution (Replaced by Weibull.Dist function in Excel 2010)
WEIBULL.DIST	Returns the Weibull distribution (New in Excel 2010 - replaces the Weibull function)
Z.TEST	Returns the one-tailed probability value of a z-test (New in Excel 2010 - replaces the Ztest function)
ZTEST	Returns the one-tailed probability value of a z-test (Replaced by Z.Test function in Excel 2010)
Text Functions	
FUNCTION	DESCRIPTION
BAHTTEXT	Converts a number, plus the suffix "Baht" into Thai text
CHAR	Returns the character that corresponds to a supplied numeric value
CLEAN	Removes all non-printable characters from a supplied text string
CODE	Returns the numeric code for the first character of a supplied string
CONCAT	Joins together two or more text strings (New in Excel 2016 (not Excel 2016 for Mac) - replaces the Concatenate function)
CONCATENATE	Joins together two or more text strings (Replaced by Concat function in Excel 2016)
DOLLAR	Converts a supplied number into text, using a currency format
EXACT	Tests if two supplied text strings are exactly the same and if so, returns TRUE; Otherwise, returns FALSE. (case-sensitive)
FIND	Returns the position of a supplied character or text string from within a supplied text string (case-sensitive)
FIXED	Rounds a supplied number to a specified number of decimal places, and then converts this into text
LEFT	Returns a specified number of characters from the start of a supplied text string
LEN	Returns the length of a supplied text string
LOWER	Converts all characters in a supplied text string to lower case
MID	Returns a specified number of characters from the middle of a supplied text string
NUMBERVALUE	Converts text to a number, in a locale-independent way (New in Excel 2013)
PROPER	Converts all characters in a supplied text string to proper case (i.e. letters that do not follow another letter are upper case and all other characters are lower case)
REPLACE	Replaces all or part of a text string with another string (from a user supplied position)
REPT	Returns a string consisting of a supplied text string, repeated a specified number of times
RIGHT	Returns a specified number of characters from the end of a supplied text string
SEARCH	Returns the position of a supplied character or text string from within a supplied text string (non-case-sensitive)
SUBSTITUTE	Substitutes all occurrences of a search text string, within an original text string, with the supplied replacement text
T	Tests whether a supplied value is text and if so, returns the supplied text; If not, returns an empty text string.
TEXT	Converts a supplied value into text, using a user-specified format
TEXTJOIN	Joins together two or more text strings, separated by a delimiter (New in Excel 2016 - not available in Excel 2016 for Mac)
TRIM	Removes duplicate spaces, and spaces at the start and end of a text string
UNICHAR	Returns the Unicode character that is referenced by the given numeric value (New in Excel 2013)
UNICODE	Returns the number (code point) corresponding to the first character of a supplied text string (New in Excel 2013)

UPPER	Converts all characters in a supplied text string to upper case
VALUE	Converts a text string into a numeric value
Math and Trig Functions	
FUNCTION	DESCRIPTION
ABS	Returns the absolute value (i.e. the modulus) of a supplied number
ACOS	Returns the Arccosine of a number
ACOSH	Returns the inverse hyperbolic cosine of a number
ACOT	Returns the arccotangent of a number (New in Excel 2013)
ACOTH	Returns the hyperbolic arccotangent of a number (New in Excel 2013)
AGGREGATE	Performs a specified calculation (e.g. the sum, product, average, etc.) for a list or database, with the option to ignore hidden rows and error values (New in Excel 2010)
ARABIC	Converts a Roman numeral to an Arabic numeral (New in Excel 2013)
ASIN	Returns the Arcsine of a number
ASINH	Returns the Inverse Hyperbolic Sine of a number
ATAN	Returns the Arctangent of a given number
ATAN2	Returns the Arctangent of a given pair of x and y coordinates
ATANH	Returns the Inverse Hyperbolic Tangent of a given number
BASE	Converts a number into a text representation, with the supplied base (New in Excel 2013)
CEILING	Rounds a number away from zero (i.e. rounds a positive number up and a negative number down), to a multiple of significance
CEILING.MATH	Rounds a number up to the nearest integer or to the nearest multiple of significance (New in Excel 2013)
CEILING.PRECISE	Rounds a number up, regardless of the sign of the number, to a multiple of significance (New in Excel 2010)
COMBIN	Returns the number of combinations (without repetitions) for a given number of objects
COMBINA	Returns the number of combinations (with repetitions) for a given number of items (New in Excel 2013)
COS	Returns the Cosine of a given angle
COSH	Returns the hyperbolic cosine of a number
COT	Returns the cotangent of an angle (New in Excel 2013)
COTH	Returns the hyperbolic cotangent of an angle (New in Excel 2013)
CSC	Returns the cosecant of an angle (New in Excel 2013)
CSCH	Returns the hyperbolic cosecant of an angle (New in Excel 2013)
DECIMAL	Converts a text representation of a number in a specified base into a decimal number (New in Excel 2013)
DEGREES	Converts Radians to Degrees
EVEN	Rounds a number away from zero (i.e. rounds a positive number up and a negative number down), to the next even number
EXP	Returns e raised to a given power
FACT	Returns the Factorial of a given number
FACTDOUBLE	Returns the Double Factorial of a given number
FLOOR	Rounds a number towards zero, (i.e. rounds a positive number down and a negative number up), to a multiple of significance
FLOOR.MATH	Rounds a number down, to the nearest integer or to the nearest multiple of significance (New in Excel 2013)
FLOOR.PRECISE	Rounds a number down, regardless of the sign of the number, to a multiple of significance (New in Excel 2010)
GCD	Returns the Greatest Common Divisor of two or more supplied numbers
INT	Rounds a number down to the next integer
ISO.CEILING	Rounds a number up, regardless of the sign of the number, to a multiple of significance. (New in Excel 2010)
LCM	Returns the Least Common Multiple of two or more supplied numbers
LN	Returns the natural logarithm of a given number

LOG	Returns the logarithm of a given number, to a specified base
LOG10	Returns the base 10 logarithm of a given number
MDETERM	Returns the matrix determinant of a supplied array
MINVERSE	Returns the matrix inverse of a supplied array
MMULT	Returns the matrix product of two supplied arrays
MOD	Returns the remainder from a division between two supplied numbers
MROUND	Rounds a number up or down, to the nearest multiple of significance
MULTINOMIAL	Returns the Multinomial of a given set of numbers
MUNIT	Returns the unit matrix for a specified dimension (New in Excel 2013)
ODD	Rounds a number away from zero (i.e. rounds a positive number up and a negative number down), to the next odd number
PI	Returns the constant value of pi
POWER	Returns the result of a given number raised to a supplied power
PRODUCT	Returns the product of a supplied list of numbers
QUOTIENT	Returns the integer portion of a division between two supplied numbers
RADIANS	Converts Degrees to Radians
RAND	Returns a random number between 0 and 1
RANDBETWEEN	Returns a random number between two given integers
ROMAN	Returns a text string depicting the roman numeral for a given number
ROUND	Rounds a number up or down, to a given number of digits
ROUNDDOWN	Rounds a number towards zero, (i.e. rounds a positive number down and a negative number up), to a given number of digits
ROUNDUP	Rounds a number away from zero (i.e. rounds a positive number up and a negative number down), to a given number of digits
SEC	Returns the secant of an angle (New in Excel 2013)
SECH	Returns the hyperbolic secant of an angle (New in Excel 2013)
SERIESSUM	Returns the sum of a power series
SIGN	Returns the sign (+1, -1 or 0) of a supplied number
SIN	Returns the Sine of a given angle
SINH	Returns the Hyperbolic Sine of a number
SQRT	Returns the positive square root of a given number
SQRTPI	Returns the square root of a supplied number multiplied by pi
SUBTOTAL	Performs a specified calculation (e.g. the sum, product, average, etc.) for a supplied set of values
SUM	Returns the sum of a supplied list of numbers
SUMIF	Adds the cells in a supplied range, that satisfy a given criteria
SUMIFS	Adds the cells in a supplied range, that satisfy multiple criteria (New in Excel 2007)
SUMPRODUCT	Returns the sum of the products of corresponding values in two or more supplied arrays
SUMSQ	Returns the sum of the squares of a supplied list of numbers
SUMX2MY2	Returns the sum of the difference of squares of corresponding values in two supplied arrays
SUMX2PY2	Returns the sum of the sum of squares of corresponding values in two supplied arrays
SUMXMY2	Returns the sum of squares of differences of corresponding values in two supplied arrays
TAN	Returns the Tangent of a given angle
TANH	Returns the Hyperbolic Tangent of a given number
TRUNC	Truncates a number towards zero (i.e. rounds a positive number down and a negative number up), to the next integer.
Logical Functions	
FUNCTION	DESCRIPTION
AND	Tests a number of user-defined conditions and returns TRUE if ALL of the conditions evaluate to TRUE, or FALSE otherwise

IF	Tests a user-defined condition and returns one result if the condition is TRUE, and another result if the condition is FALSE
IFERROR	Tests if an initial supplied value (or expression) returns an error, and if so, returns a supplied value; Otherwise the function returns the initial value. (New in Excel 2007)
IFNA	Tests if an expression returns the #N/A error and if so, returns an alternative specified value; Otherwise the function returns the value of the supplied expression. (New in Excel 2013)
IFS	Tests a number of supplied conditions and returns a result corresponding to the first condition that evaluates to TRUE. (New in Excel 2016 - not available in Excel 2016 for Mac)
NOT	Returns a logical value that is the opposite of a user supplied logical value or expression (i.e. returns FALSE if the supplied argument is TRUE and returns TRUE if the supplied argument is FALSE)
OR	Tests a number of user-defined conditions and returns TRUE if ANY of the conditions evaluate to TRUE, or FALSE otherwise
SWITCH	Compares a number of supplied values to a supplied test expression and returns a result corresponding to the first value that matches the test expression. (New in Excel 2016 - not available in Excel 2016 for Mac)
XOR	Returns a logical Exclusive Or of all arguments (New in Excel 2013)
FALSE	Returns the logical value FALSE
TRUE	Returns the logical value TRUE

Lookup and Reference Functions

FUNCTION	DESCRIPTION
ADDRESS	Returns a reference, in text format, for a supplied row and column number
AREAS	Returns the number of areas in a supplied range
CHOOSE	Returns one of a list of values, depending on the value of a supplied index number
COLUMN	Returns the column number of a supplied range, or of the current cell
COLUMNS	Returns the number of columns in a supplied range
FORMULATEXT	Returns a formula as a string (New in Excel 2013)
GETPIVOTDATA	Extracts data stored in a Pivot Table
HLOOKUP	Looks up a supplied value in the first row of a table, and returns the corresponding value from another row
HYPERLINK	Creates a hyperlink to a document in a supplied location.
INDEX	Returns a reference to a cell (or range of cells) for requested rows and columns within a supplied range
INDIRECT	Returns a cell or range reference that is represented by a supplied text string
LOOKUP	Searches for a specific value in one data vector, and returns a value from the corresponding position of a second data vector
MATCH	Finds the relative position of a value in a supplied array
OFFSET	Returns a reference to a range of cells that is a specified number of rows and columns from an initial supplied range
ROW	Returns the row number of a supplied range, or of the current cell
ROWS	Returns the number of rows in a supplied range
RTD	Retrieves real-time data from a program that supports COM automation
TRANSPOSE	Performs a transpose transformation on a range of cells (i.e. transforms a horizontal range of cells into a vertical range and vice versa)
VLOOKUP	Looks up a supplied value in the first column of a table, and returns the corresponding value from another column

Cube Functions

FUNCTION	DESCRIPTION
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CUBEKPIMEMBER	Returns a Key Performance Indicator (KPI) property and displays the KPI name in the cell (New in Excel 2007)
CUBEMEMBER	Returns a member or tuple from the cube (New in Excel 2007)
CUBEMEMBERPROPERTY	Returns the value of a member property from the cube (New in Excel 2007)
CUBERANKEDMEMBER	Returns the nth, or ranked, member in a set (New in Excel 2007)
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 (New in Excel 2007)
CUBESETCOUNT	Returns the number of items in a set (New in Excel 2007)
CUBEVALUE	Returns an aggregated value from the cube (New in Excel 2007)
Web Functions	
FUNCTION	DESCRIPTION
ENCODEURL	Returns a URL-encoded string (New in Excel 2013)
FILTERXML	Returns data from XML content, using a specified XPath (New in Excel 2013)
WEBSERVICE	Returns data from a web service on the Internet or Intranet (New in Excel 2013)