

# 100 EXCEL FUNCTIONS



## MATH & TRIGONOMETRY

ABS	Returns the absolute value of a number.
ACOS	Returns the arccosine of a number.
COS	Returns the cosine of an angle given in radians.
EVEN	Rounds a number up to the nearest even integer.
EXP	Returns e raised to the power of a given number.
FACT	Returns the factorial of a number.
FLOOR	Rounds a number down to the nearest multiple of significance.
GAMMADIST	Returns the gamma distribution.
GCD	Returns the greatest common divisor of two or more integers.
HARMEAN	Calculates the harmonic mean of a dataset.
INT	Rounds a number down to the nearest integer.
LN	Returns the natural logarithm of a number.
LOG	Returns the logarithm of a number to a specified base.
LOG10	Returns the base-10 logarithm of a number.
LET	Defines variables and calculates a result based on given expressions.
MOD	Returns the remainder of a division operation.
ODD	Rounds a number up to the nearest odd integer.
PI	Returns the mathematical constant $\pi$ .
POWER	Raises a number to a specified power.
RADIANS	Converts degrees to radians.
RAND	Returns a random number between 0 and 1.
SIGN	Returns the sign of a number.
SIN	Returns the sine of an angle given in radians.
SQRT	Returns the square root of a number.
TAN	Returns the tangent of an angle given in radians.
TRUNC	Truncates a number to a specified number of digits.

## TEXT

ADDRESS	Returns the cell address as text.
CONCAT	Concatenates multiple text strings into one.
CONCATENATEX	Concatenates the result of an expression evaluated for each row in a table.
LEFT	Extracts a specified number of characters from the left side of a text string.
LEN	Returns the number of characters in a text string.
REPLACE	Replaces part of a text string with another text string.
RIGHT	Extracts a specified number of characters from the right side of a text string.
SEARCH	Finds one text string within another and returns the starting position.
SUBSTITUTE	Replaces existing text with new text in a text string.
TEXT	Formats a number as text using a specified format.
UPPER	Converts text to uppercase.
VALUE	Converts a text string that represents a number to a number.

## DATE AND TIME

DATE	Returns the serial number of a date.
DAY	Extracts the day portion of a date.
DAYS	Calculates the number of days between two dates.
HOUR	Extracts the hour portion of a time.
MINUTE	Extracts the minute portion of a time.
MONTH	Extracts the month portion of a date.
NOW	Returns the current date and time.
SECOND	Extracts the second portion of a time.
TIME	Returns the serial number of a specific time.
TODAY	Returns the current date.
WEEKDAY	Returns the day of the week as a number.
YEAR	Extracts the year portion of a date.
YEARFRAC	Returns the fraction of the year represented by the number of whole days between two dates.

## STATISTICAL

AGGREGATE	Performs various aggregation functions on a range of data.
AVERAGE	Calculates the average of a range of numbers.
CHIDIST	Returns the one-tailed probability of the chi-squared distribution.
COUNT	Counts the number of cells containing numbers in a range.
COUNTBLANK	Counts the number of blank cells within a range.
COUNTIFS	Counts the number of cells that meet multiple criteria.
DAVERAGE	Returns the average of selected database entries.
FREQUENCY	Calculates the frequency distribution of data.
FDIST	Returns the one-tailed F probability distribution.
LINEST	Calculates statistics for a line by using the least squares method.
MAX	Returns the largest value in a range of cells.
MEDIAN	Calculates the median of a dataset.
MIN	Returns the smallest value in a range of cells.
MDETERM	Returns the matrix determinant of an array.
NPV	Returns the net present value of an investment based on a series of cash flows.
NPER	Returns the number of periods for an investment based on periodic, constant payments and a constant interest rate.
QUOTIENT	Returns the integer portion of a division operation.
RANK	Returns the rank of a number in a list of numbers.
SLOPE	Calculates the slope of the linear regression line through a given set of data points.
STDEV	Estimates standard deviation based on a sample.
VAR	Calculates the variance of a dataset.
ZTEST	Calculates the one-tailed probability-value of a Z-test.

## LOGICAL

AND	Returns TRUE if all its arguments are TRUE.
IF	Returns one value if a condition is true and another value if false.
IFERROR	Returns a value you specify if a formula evaluates to an error; otherwise, returns the result of the formula.
ISERR	Checks if a value is an error other than #N/A.
ISFORMULA	Checks if a cell contains a formula.
ISNONTEXT	Checks if a value is not text.
ISNUMBER	Checks if a value is a number.
NOT	Reverses the logical value of a statement.
OR	Returns TRUE if any argument is TRUE.
XOR	Returns TRUE if one argument is TRUE and the other is FALSE.

## LOOKUP AND REFERENCE

INDEX	Returns the value of a cell in a specified row and column.
MATCH	Searches for a value in a range and returns its relative position.
OFFSET	Returns a reference offset from a starting cell.
VLOOKUP	Searches for a value and returns a corresponding result from a specified column.
HLOOKUP	Searches for a value and returns a value in the same column from a specified row.
XLOOKUP	Searches for a value and returns a result from another range or array.

## FINANCIAL

PMT	Calculates the payment for a loan based on constant payments and a constant interest rate.
XNPV	Returns the net present value for cash flows at irregular intervals.
NPV	Returns the net present value of an investment based on a series of cash flows.
RATE	Calculates the interest rate per period of an annuity.
IRR	Calculates the internal rate of return for a series of cash flows that occur at regular intervals.

## ARRAY

SEQUENCE	Generates a sequence of numbers in an array.
UNIQUE	Returns unique values from a range or array.

## ERROR HANDLING

ERROR.TYPE	Returns a number corresponding to the type of error value.
IFERROR	Returns a value you specify if a formula evaluates to an error; otherwise, returns the result of the formula.

## CUSTOM FUNCTIONS

LAMBDA	Defines a custom function in Excel.
LET	Defines variables and calculates a result based on given expressions.