

Excel functions list

Below are over 200 Excel functions to help you become a world-class financial analyst.

Date and Time

DATE

Create a valid date from year, month, and day

year

month

day

DATEDIF

Get days, months, or years between two dates

start_date

end_date

unit

DATEVALUE

Convert a date in text format to a valid date

date_text

DAY

Get the day as a number (1-31) from a date

date

DAYS

Get days between dates

end_date

start_date

DAYS360

Get days between 2 dates in a 360-day year

start_date

end_date

method

EDATE

Get the same date in future or past months

start_date

months

EOMONTH

Get the last day of the month in future or past months

start_date

months

HOUR

Get the hour as a number (0-23) from a time

serial_number

ISOWEEKNUM

Get ISO week number for a given date

date

MINUTE

Get the minute as a number (0-59) from a time

serial_number

MONTH

Get the month as a number (1-12) from a date

date

NETWORKDAYS

Get the number of working days between two dates

start_date

end_date

holidays

NETWORKDAYS.INTL

Get work days between two dates

start_date

end_date

weekend

holidays

NOW

Get the current date and time

-

SECOND

Get the second as a number (0-59) from a time

serial_number

TIME

Create a time with hours, minutes, and seconds

hour

minute

second

TIMEVALUE

Get a valid time from a text string

time_text

TODAY

Get the current date

-

WEEKDAY

Get the day of the week as a number

serial_number

return_type

WEEKNUM

Get the week number for a given date

serial_number

return_type

WORKDAY

Get a date n working days in the future or past

start_date

days

holidays

WORKDAY.INTL

Get date n working days in future or past

start_date

days

weekend

holidays

YEAR

Get the year from a date

date

YEARFRAC

Get the fraction of a year between two dates

start_date

end_date

basis

Financial

ACCRINT

Get the accrued interest for a security that pays interest on a periodic basis

issue first interest settlement rate par frequency basis

calc_method

ACCRINTM

Get the accrued interest for a security that pays interest on maturity

issue settlement rate par basis

CUMIPMT

Get the cumulative interest paid on a loan

rate nper pv start_period end_period type

CUMPRINC

Get the cumulative principal paid on a loan

rate nper pv start_period end_period type

DB

Calculate the depreciation of an asset

cost salvage life period month

DISC

Calculate the rate of discount for a bond

settlement maturity pr redemption basis

DOLLARDE

Converts a dollar value in fractional notation into a dollar value expressed in decimal notation

fractional_dollar

fraction

DOLLARFR

Convert a dollar value in decimal notation into a dollar value in fractional notation

decimal_dollar

fraction

DURATION

Get the duration of a security

settlement

maturity

coupon

yield

frequency

basis

EFFECT

Get the annual interest rate and the number of compounding periods per year

nominal_rate

npery

FV

Get the future value of an investment

rate

nper

pmt

pv

type

FVSCHEDULE

Get the future value of an investment with a variable interest rate

principal

schedule

INTRATE

Get the interest rate for a security

settlement maturity investment redemption basis

IPMT

Get principal for given period

rate per nper pv fv type

IRR

Get the Internal Rate of Return for a given cash flow

values guess

ISPMT

Get the interest paid during a specific period of Investment

rate per nper pv

MDURATION

Get the duration of a security using the Modified Macauley method

settlement maturity coupon yld frequency basis

MIRR

Get the modified internal rate of return for given periodic cash flows

values finance_rate reinvest rate

NOMINAL

Get the nominal annual interest rate

effect_rate npery

NPER

Get number of periods for loan or investment

rate pmt pv fv type

NPV

Get the Net Present Value (NPV) for periodic cash flows

rate value1 value2

PDURATION

Get the time or specific number of periods required for an investment to reach a particular value

rate pv fv

PMT

Get the periodic payment for a loan

rate nper pv fv type

PPMT

Get the payment on the principal for an investment or a loan

rate per pv fv type

PRICE

Get the price of a bond per \$100 face value

settlement maturity rate yld redemption frequency basis



PRICEDISC

Get the price of a bond per \$100 face value of a discounted security

settlement maturity discount redemption basis

PRICEMAT

Get the price of a bond that pays interest at maturity per \$100 face value

settlement maturity issue rate yld basis

PV

Get the present value of an investment

rate nper pmt fv type

RATE

Get the interest rate per period of an annuity

nper pmt pv fv type guess

RECEIVED

Get the amount received at maturity for a fully invested security

settlement maturity investment discount basis

SLN

Get the straight-line depreciation of an asset

cost salvage life

SYD

Get the sum-of-years' digits depreciation of an asset

cost salvage life per

TBILLPRICE

Get the fair market value of a Treasury bill

settlement

maturity

discount

TBILLEQ

Get the bond-equivalent yield of a Treasury bill

settlement

maturity

discount

TBILLYIELD

Get the yield on a Treasury bill

settlement

maturity

pr

VDB

Get the depreciation of an asset using the Double Declining Balance method

cost

salvage

life

start_period

end_period

factor

no_switch

XIRR

Get the Internal Rate of Return (IRR) for a series of cash flows that may not be periodic

values

dates

guess

XNPV

Get the Net Present Value (NPV) for a series of cash flows that may not be periodic

rate

values

dates

YIELD

Get the yield on a security

settlement

maturity

rate

pr

redemption

frequency

basis

YIELDDISC

Get the annual yield for a discounted security

settlement

maturity

pr

redemption

basis

YIELDMAT

Get the annual yield on a security

settlement

maturity

issue

rate

pr

basis

Engineering

CONVERT

Convert measurement units

number

from_unit

to_unit

Information

CELL

Get information about a cell

info_type

reference

ERROR.TYPE

Test for a specific error value

error_val

INFO

Get information about current environment

type_text

ISBLANK

Test if a cell is blank

value

ISERR

Test for any error but #N/A

value

ISERROR

Test for any error

value

ISEVEN

Test if a value is even

value

ISFORMULA

Test if a cell contains a formula

reference

ISLOGICAL

Test if a value is logical

value

ISNA

Test for the #N/A error

value

ISNONTEXT

Test for a non-text value

value

ISNUMBER

Test for numeric value

value

ISODD

Test if a value is odd

value

ISREF

Test for a reference

value

ISTEXT

Test for a text value

value

N

Convert a value to a number

value

NA

Create an #N/A error

-

TYPE

Get the type of value in a cell

value

Logical

AND

Test multiple conditions with AND

logical1

logical2

...

FALSE

Generate the logical value FALSE

-

IF

Test for a specific condition

logical_test

value_if_true

value_if_false

IFERROR

Trap and handle errors

value value_if_error

IFNA

Returns a specified alternate value if a formula results in an #N/A error

value value_if_na

IFS

Test multiple conditions, return first true

test1 value1 test2 value2 ...

NOT

Reverse arguments or results

logical

OR

Test multiple conditions with OR

logical1 logical2 ...

SWITCH

Evaluates a given expression and returns a result corresponding to the first matching value

expression value1 result1 default value2 result2 ...

TRUE

Generate the logical value TRUE



XOR

Perform exclusive OR



Lookup and Reference

ADDRESS

Create a cell address from a given row and column



AREAS

Get the number of areas in a reference



CHOOSE

Get a value from a list based on position



COLUMN

Get the column number of a reference



COLUMNS

Get the number of columns in an array or reference

array

FORMULATEXT

Get the formula in a cell

reference

GETPIVOTDATA

Get data from a pivot table in a formula

data_field

pivot_table

field1

item1

...

HLOOKUP

Look up a value in a table by matching on the first row

value

table

row_index

range_lookup

HYPERLINK

Create a clickable link

link_location

friendly_name

INDEX

Get a value in a list or table based on location

array

row_num

col_num

area_num

INDIRECT

Create a reference from text

ref_text

a1

LOOKUP

Look up a value in a one-column range

lookup_value lookup_vector result_vector

MATCH

Get the position of an item in an array

lookup_value lookup_array match_type

OFFSET

Create a reference offset from given starting point

reference rows cols height width

ROW

Get the row number of a reference

- reference

ROWS

Get the number of rows in an array or reference

array

RTD

Get real-time data from a COM automation server

progID server topic1 topic2 ...

TRANSPOSE

Flip the orientation of a range of cells

array

VLOOKUP

Look up a value in a table by matching on the first column

value table col_index range_lookup

Math

ABS

Find the absolute value of a number

number

ARABIC

Convert a Roman numeral to an Arabic numeral

roman_text

BASE

Converts a number into the supplied base

number radix min_length

CEILING

Round a number up to the nearest specified multiple

number multiple

CEILING.MATH

Round a number to the nearest integer or multiple of significance

number significance mode



CEILING.PRECISE

Round up a number to the nearest integer or multiple of significance

number

significance

COMBIN

Calculate the total number of combinations

number

number_chosen

COMBINA

Calculate the total number of combinations along with repetitions

number

number_chosen

DEGREES

Convert radians to degrees

angle

EVEN

Round a number up to the next even integer

number

ISO.CEILING

Get a number rounded up to the nearest integer or multiple of significance

number

significance

MOD

Get the remainder from division

number

divisor

MROUND

Round a number to the nearest specified multiple

number

multiple

ODD

Round a number up to the next odd integer

number

PI

Get the value of π

-

RAND

Get a random number between 0 and 1

-

RANDBETWEEN

Get a random integer between two values

bottom

top

ROUND

Round a number to a given number of digits

number

num_digits

ROUNDDOWN

Round a number down to a given number of digits

number

num_digits

ROUNDUP

Round a number up to a given number of digits

number

num_digits

SQRT

Find the positive square root of a number

number

SUBTOTAL

Get a subtotal in a list or database

function_num

ref1

ref2

...

SUM

Add numbers together

number1

number2

number3

...

SUMIF

Sum numbers in a range that meet supplied criteria

range

criteria

sum_range

SUMIFS

Sum cells that match multiple criteria

sum_range

range1

criteria1

range2

criteria2

...

SUMPRODUCT

Multiply, then sum arrays

array1

array2

...

TRUNC

Truncate a number to a given precision

number

num_digits

Statistical

AVERAGE

Get the average of a group of numbers

number1

number2

...

AVERAGEA

Get the average of a group of numbers and text

value1

value2

...

AVERAGEIF

Get the average of numbers that meet criteria

range

criteria

average-criteria

AVERAGEIFS

Average cells that match multiple criteria

avg_rng

range1

criteria1

range2

criteria2

...

BINOM.DIST

Get the binomial distribution probability for the number of successes from the trials

number_s

trials

probability_s

cumulative

BINOM.DIST.RANGE

Get the binomial distribution probability for a given number of successes

trials

probability_s

number_s

number_s2

CHISQ.DIST

Get the chi-square distribution

x

deg_freedom

cumulative

CHISQ.DIST.RT

Get the right-tailed probability of a chi-square distribution

x

deg_freedom

CHISQ.INV

Get the inverse of the left-tailed probability of the chi-square distribution

probability

deg_freedom

CHISQ.INV.RT

Get the inverse of the right-tailed probability of a chi-square distribution

probability

deg_freedom

CHISQ.TEST

Get the chi-square distribution of two provided datasets

actual_range

expected_range

CONFIDENCE

Get the confidence interval for a population mean

alpha

standard_dev

size

CONFIDENCE.NORM

Get the confidence interval for a population mean

alpha

standard_dev

size

CONFIDENCE.T

Get the confidence value for the confidence interval of a population mean

alpha

standard_dev

size

CORREL

Calculate the correlation coefficient between two variables

array1

array2

COUNT

Count numbers

value1

value2

...

COUNTA

Count the number of non-blank cells

value1

value2

...

COUNTBLANK

Count cells that are blank

range

COUNTIF

Count cells that match criteria

range

criteria

COUNTIFS

Count cells that match multiple criteria

range1 criteria1 range2 criteria2 ...

COVAR

Get the covariance of two sets of values

array1 array2

COVARIANCE.P

Get the covariance of two given set of values

array1 array2

COVARIANCE.S

Get the sample covariance for two sets of values

array1 array2

CRITBINOM

Get the smallest value that is greater than or equal to the criterion value in a Cumulative Binomial Distribution

trials probability_s trials

DEVSQ

Get the sum of the squared deviations from the sample mean

number1 number2

F.DIST

Calculate the probability density function

x deg_freedom1 deg_freedom2 cumulative

F.DIST.RT

Calculate the (right-tailed) F Probability Distribution

x deg_freedom1 deg_freedom2

F.INV

Calculate the inverse of the Cumulative F Distribution for a supplied probability

x deg_freedom1 deg_freedom2

F.INV.RT

Calculate the inverse of the (right-tailed) F probability distribution

probability deg_freedom1 deg_freedom2

FORECAST

Get the future value using existing values

x known_y's known_x's

FORECAST.LINEAR

Get the future value using linear progression

x known_y's known_x's



FREQUENCY

Get the frequency of values in a data set

data_array

bins_array

F.TEST

Get the result of an F-test for two given arrays or ranges

array1

array2

GAUSS

Get the probability that a member of a standard normal population will be between the mean and a specified number of standard deviations

z

GROWTH

Get the predicted exponential growth using existing data

known_y's

known_x's

new_x's

const

LARGE

Get the nth largest value

array

n

LOGNORM.DIST

Get the cumulative log-normal distribution function at a given value of x

x

mean

standard_dev

cumulative

LOGNORM.INV

Get the inverse of the lognormal cumulative lognormal distribution function at a given value of x

probability

mean

standard_dev

MAX

Get the largest value

number1

number2

...

MAXA

Get the largest value

value1

value2

...

MAXIFS

Get maximum value with criteria

max_range

range1

criteria1

range2

criteria2

...

MEDIAN

Get the median of a group of numbers

number1

number2

...

MIN

Get the smallest value

number1

number2

...

MINA

Get the smallest value

value1 value2 ...

MINIFS

Get minimum value with criteria

min_range range1 criteria1 range2 criteria2 ...

MODE

Get the mode of a group of numbers

number1 number2 ...

MODE.MULT

Get a vertical array of statistical modes within a list of given numbers

number1 number2

MODE.SNGL

Get the most frequently occurring number in a numeric data set

number1 number2

NEGBINOM.DIST

Get the negative binomial distribution probability

number_f number_s probability_s cumulative

NORMDIST

Get the normal distribution for a stated mean and standard distribution

x mean standard_dev cumulative

NORM.DIST

Get the probability that variable x falls below or at a specified value

x

mean

standard_dev

cumulative

NORMINV

Get the inverse of a normal cumulative distribution

probability

mean

standard_dev

NORM.INV

Get the inverse of a normal cumulative distribution

probability

mean

standard_dev

NORM.S.DIST

Get the standard normal distribution function for a given value

z

cumulative

NORM.S.INV

Get the inverse of the normal cumulative distribution for a given probability value

probability

PEARSON

Get the Pearson Product-Moment Correlation Coefficient for two sets of values

array1

array2

PERCENTILE

Get the k-th percentile of the values in a range

array k

PERCENTILERANK

Get the rank of a value in a data set

array x significance

PERMUT

Get the total number of permutations

number number_chosen

PERMUTATIONA

Get the total number of permutations, with repetitions

number number_chosen

PHI

Get the value of the density function for a standard normal distribution

x

POISSON.DIST

Get the Poisson probability mass function

x mean cumulative

PROB

Get the probability that is associated with a given range

x_range prob_range lower_limit upper_limit

QUARTILE

Get the quartile in a data set

array quart

QUARTILE.EXC

Get the quartile of a given data set based on percentile values from 0.1 exclusive

array quart

QUARTILE.INC

Get the quartile of a given data set based on percentile values from 0.1 inclusive

array quart

RANK

Rank a number against a range of numbers

number array order

SLOPE

Get the slope of a linear regression line

known_y's Known_x's

SMALL

Get the nth smallest value

array k



STANDARDIZE

Get a normalized value (z-score) based on the mean and standard deviation

x mean standard_dev

STDEV

Get the standard deviation in a sample

number1 number2 ...

STDEVA

Get the standard deviation in a sample

number1 number2 ...

STDEVPA

Get the standard deviation of an entire population given as arguments

value1 value2

STDEV.P

Get the standard deviation in a population

number1 number2 ...

STDEV.S

Get the standard deviation in a sample

number1 number2 ...

T.DIST

Get the student's t-distribution

x deg_freedom tails

T.DIST.RT

Get the right-tailed student's t-distribution

x deg_freedom

T.INV

Get the left-tailed student's t-distribution

probability deg_freedom

T.INV.2T

Get the two-tailed student's T-Distribution

probability deg_freedom

T.TEST

Get the probability associated with a student's t-test

array1 array2 tails type

TREND

Get the linear trend line to the arrays of known_y's and known_x's

known_y's known_x's new_x's const

VARA

Get the sample variance of a set of values

number1 number2 ...

VAR.P

Get the variance of a set of values (population)

number1 number2 ...

VAR.S

Get the variance of a sample

number1

number2

...

WEIBULL.DIST

Get the Weibull distribution for a supplied set of parameters

x

alpha

beta

cumulative

Z.TEST

Get the one-tailed P-value of a Z-test

array

x

sigma

Text

CHAR

Get a character from a number

number

CLEAN

Strip non-printable characters from text

text

CODE

Get the code for a character

text

CONCAT

Join text values without delimiter

text1 text2 ...

CONCATENATE

Join text together

text1 text2 text3 ...

DOLLARDE

Converts a dollar value in fractional notation into a dollar value in decimal notation

fractional_dollar fraction

EXACT

Compare two text strings

text1 text2

FIND

Get the location of text in a string

find_text within_text start_num

FIXED

Rounds and converts a supplied number to text

number decimal no_commas

LEFT

Extract text from the left of a string

text

num_chars

LEN

Get the length of text

text

LOWER

Convert text to lower case

text

MID

Extract text from inside a string

text

start_num

num_chars

NUMBERVALUE

Converts a text string into a number in a locale-independent manner

text

decimal_separator

group_separator

PROPER

Capitalize the first letter in each word

text

REPLACE

Replace text based on location

old_text

start_num

num_chars

new_text

REPT

Repeat text as specified

text

number_times

RIGHT

Extract text from the right of a string

text

num_chars

SEARCH

Get the location of text in a string

find_text

within_text

start_num

SUBSTITUTE

Replace text based on content

text

old_text

new_text

instance

I

Tests if the value provided is a text or not

value

TEXT

Convert a number to text in a number format

value

format_text

TEXTJOIN

Join text values with a delimiter

delimiter

ignore_empty

text1

text2

...

TRIM

Remove extra spaces from text

text

UNICHAR

Get the Unicode character for a given number

number

UNICODE

Get the code point for a given character

text

UPPER

Convert text to upper case

text

VALUE

Convert text to a number

text

