# The Essential Microsoft Excel Formulas Cheat Sheet 

## Date and Time

=NOW<br>=TODAY()<br>=DAY(TODAY())<br>=MONTH(TODAY())<br>=TODAY()+10

Show the date and time Show the current date without the time
Show today's date in a cell Show current month in a cell
Add 10 days to current date

## Counting and Rounding

| =SUM | Calculates the sum of a group of values |
| :---: | :---: |
| =AVERAGE | Calculates the mean of a group of values |
| =COUNT | Counts the number of cells in a range that contains numbers |
| =INT | Removes the decimal portion of a number |
| =ROUND | Rounds a number to a specified number of decimal places |
| =IF | Tests for a true or false condition |
| =NOW | Returns the date and time |
| =TODAY | Returns the date, without the time |
| =SUMIF | Calculates a sum from a group of values in which a condition has been met |
| =COUNTIF | Counts the number of cells in a range that match a criteria |
| $=$ COUNTA(A1:A5) | Count the number of nonblank cells in a range |
| $=\operatorname{ROUND}(1.45,1)$ | Rounds 1.45 to one decimal place |
| $=$ ROUND (-1.457, 2 ) | Rounds -1.457 to two decimal places |
| =TRUE | Returns the logical value TRUE |
| =FALSE | Returns the logical value FALSE |
| =AND | Returns TRUE if all of its arguments are TRUE |
| = OR | Returns TRUE if any argument is TRUE |

## Unit Conversion

$\begin{array}{ll}=C O N V E R T(A 1, " d a y ", " h r ") & \begin{array}{l}\text { Converts value of A1 } \\ \text { from days to hours }\end{array} \\ =\text { CONVERT(A1,"hr","mn") } & \begin{array}{l}\text { Converts value of A1 } \\ \text { from hours to minutes }\end{array} \\ =\text { CONVERT(A1,"yr", "day") } & \begin{array}{l}\text { Converts value of A1 } \\ \text { from years to days }\end{array} \\ =\text { CONVERT(A1,"C","F") } & \begin{array}{l}\text { Converts value of A1 } \\ \text { from Celsius to }\end{array} \\ & \text { Fahrenheit }\end{array}$
=CONVERT(A1,"tsp","tbs") Converts value of A1 from teaspoons to tablespoons
=CONVERT(A1,"gal","l") Converts value of A1 from gallons to liters
=CONVERT(A1,"mi","km") Converts value of A1 from miles to kilometers
=CONVERT(A1,"km","mi") Converts value of A1 from kilometers to miles
=CONVERT(A1,"in","ft") Converts value of A1 from inches to feet
=CONVERT(A1,"cm","in") Converts value of A1 from centimeters to inches
Converts binary 1100100 to decimal (100)
Converts a number into a Roman numeral

## Mathematics

| =B2-C9 | Subtracts values in the two <br> cells |
| :--- | :--- |
| =D8*A3 | Multiplies the numbers in the <br> two cells |
| =PRODUCT(A1:A20) | Multiplies the cells in the range <br> =PRODUCT(F6:A1,2) <br> Multiplies the cells in the <br> range, and mulitplies the result <br> by 2 |
| =A1/A3 | Divides value in A1 by the value <br> in A3 |
| =MOD | Returns the remainder from <br> division |
| =MIN(A1:A9) | Calculates the smallest <br> number in a range |
| =MAX(C27:C34) | Calculates the largest number <br> in a range |


| =SMALL(B1:B7, 2) | Calculates the second smallest number in a range | =PROPER | Converts a text string to proper case |
| :---: | :---: | :---: | :---: |
| $=$ LARGE(G13:D7,3) | Calculates the third largest number in a range | =LEN | Returns a text string's length in characters |
| =POWER(9,2) | Calculates nine squared | =REPT | Repeats text a given number |
| =9^3 | Calculates nine cubed |  | of times |
| =FACT(A1) | Factorial of value in A1 | =TEXT | Formats a number and |
| =EVEN | Rounds a number up to the nearest even integer | =VALUE | converts it to text Converts a text cell to a |
| =ODD | Rounds a number up to the nearest odd integer | =EXACT | number Checks to see if two text |
| =AVERAGE | Calculates the average |  | values are identical |
| =MEDIAN | Calculates the median | =DOLLAR | Converts a number to text, |
| =SQRT | Calculates the square root of a number | =CLEAN | using the USD currency format Removes all non-printable |
| = PI | Shows the value of pi |  | characters from text |
| =POWER | Calculates the result of a number raised to a power | Finance |  |
| =RAND | Returns a random number between 0 and 1 | =INTRATE | Calculates the interest rate for |
| =RANDBETWEEN | Returns a random number between the numbers you specify | =EFFECT | a fully invested security Calculates the effective annual interest rate |
| $=C O S$ | Calculates the cosine of a number | =FV | Calculates the future value of an investment |
| =SIN Returns the sine of the given angle | Calculates the sine of the given angle | =FVSCHEDULE | Calculates the future value of an initial principal after applying a series of compound |
| $=\mathrm{TAN}$ | Calculates the tangent of a number | =PMT | interest rates <br> Calculates the total payment |
| $=$ CORREL | Calculates the correlation coefficient between two data |  | (debt and interest) on a debt security |
|  | sets | = IPMT | Calculates the interest |
| =STDEVA | Estimates standard deviation based on a sample |  | payment for an investment for a given period |
| =PROB | Returns the probability that values in a range are between two limits | =ACCRINT | Calculates the accrued interest for a security that pays periodic interest |
| Text |  | =ACCRINTM | Calculates the accrued interest for a security that pays interest at maturity |
| =LEFT | Extracts one or more characters from the left side of | =AMORLINC | Calculates the depreciation for each accounting period |
|  | a text string | =NPV | Calculates the net present |
| =RIGHT | Extracts one or more characters from the right side of a text string | =YIELD | value of cash flows based on a discount rate <br> Calculates the yield of a |
| =MID | Extracts characters from the middle of a text string |  | security based on maturity, face value, and interest rate |
| =CONCATENATE | Merges two or more text strings | =PRICE | Calculates the price per $\$ 100$ face value of a periodic coupon |
| =REPLACE | Replaces part of a text string |  | bond |
| =LOWER | Converts a text string to all lowercase |  |  |
| =UPPER | Converts a text string to all uppercase |  |  |

