

Basic Excel Functions and Commonly Used Excel Functions

Basic Excel Functions

SUM(range):

Adds a range of numbers. Example:

Suppose cells A1:A5 contain the numbers 2, 4, 6, 8, and 10.

Formula: =SUM(A1:A5)

Result: 30

AVERAGE(range):

Calculates the average of numbers. Example:

Suppose cells B1:B5 contain the numbers 5, 10, 15, 20, and 25.

Formula: =AVERAGE(B1:B5)

Result: 15

MIN(range) / MAX(range):

Finds the smallest or largest value. Example:

Suppose cells C1:C5 contain the numbers 3, 7, 2, 9, and 5.

Formula: =MIN(C1:C5)

Result: 2

Formula: =MAX(C1:C5)

Result: 9

COUNT(range):

Counts the number of numeric entries. Example:

Suppose cells D1:D5 contain the values 5, 'text', 10, "", and 20.

Formula: =COUNT(D1:D5)

Result: 3

IF(logical_test, value_if_true, value_if_false):

Performs logical tests. Example:

Suppose cell E1 contains the value 15.

Formula: =IF(E1>10, "High", "Low")

Result: High

Commonly Used Functions

VLOOKUP(lookup_value, table_array, col_index_num, range_lookup):

Searches for a value in a table. Example:

Suppose A1:C5 is a table where the first column contains IDs (101, 102) and the second column contains names.

Formula: =VLOOKUP(101, A1:C5, 2, FALSE)

Result: Corresponding name.

HLOOKUP(lookup_value, table_array, row_index_num, range_lookup):

Searches for a value in a row. Example:

Suppose A1:E2 contains headers in row 1 and data in row 2.

Formula: =HLOOKUP("Header1", A1:E2, 2, FALSE)

Result: Value below Header1.

INDEX(array, row_num, column_num):

Returns the value of a cell in a table. Example:

Suppose A1:C5 contains data.

Formula: =INDEX(A1:C5, 2, 3)

Result: Value in the 2nd row, 3rd column.

MATCH(lookup_value, lookup_array, match_type):

Returns the position of a value. Example:

Suppose cells A1:A10 contain the numbers 10, 20, 30, etc.

Formula: =MATCH(30, A1:A10, 0)

Result: 3 (position of 30).

CONCATENATE(text1, text2, ...):

Combines text from different cells. Example:

Suppose A1 contains 'Hello' and B1 contains 'World'.

Formula: =CONCATENATE(A1, " ", B1)

Result: Hello World.

TEXTJOIN(delimiter, ignore_empty, text1, ...):

Joins text with a delimiter. Example:

Suppose A1:A3 contain 'Apple', 'Banana', 'Cherry'.

Formula: =TEXTJOIN(", ", TRUE, A1:A3)

Result: Apple, Banana, Cherry.

LEFT(text, num_chars):

Extracts characters from the start. Example:

Suppose A1 contains 'Excel Functions'.

Formula: =LEFT(A1, 5)

Result: Excel.

RIGHT(text, num_chars):

Extracts characters from the end. Example:

Suppose A1 contains 'Excel Functions'.

Formula: =RIGHT(A1, 9)

Result: Functions.

MID(text, start_num, num_chars):

Extracts characters from the middle. Example:

Suppose A1 contains 'Excel Functions'.

Formula: =MID(A1, 7, 4)

Result: Func.

LEN(text):

Returns the length of a text string. Example:

Suppose A1 contains 'Excel'.

Formula: =LEN(A1)

Result: 5.

TRIM(text):

Removes unnecessary spaces. Example:

Suppose A1 contains ' Excel '.

Formula: =TRIM(A1)

Result: Excel.

ROUND(number, num_digits):

Rounds a number to a specific number of digits. Example:

Suppose A1 contains 3.14159.

Formula: =ROUND(A1, 2)

Result: 3.14.

ROUNDUP(number, num_digits):

Rounds a number up. Example:

Suppose A1 contains 3.14159.

Formula: =ROUNDUP(A1, 2)

Result: 3.15.

ROUNDDOWN(number, num_digits):

Rounds a number down. Example:

Suppose A1 contains 3.14159.

Formula: =ROUNDDOWN(A1, 2)

Result: 3.14.