# A List of 101 Common Excel Functions

Whether you're a financial analyst, data scientist, teacher, or small business owner, Excel's extensive library of functions can help you perform complex calculations, analyze data, and automate tasks. The following list of 101 common Excel functions that can greatly enhance your productivity and proficiency in using Excel.

# A. Math and Trigonometry Functions

These functions can be extremely useful for a wide range of calculations and data analysis tasks in Excel.

Function Name	Description
SUM Function	Adds up a range of numbers.
SUMIF Function	Adds all the numbers in a range that meet a single condition.
SUMIFS Function	Adds all the numbers in a range that meet multiple conditions.
SUMPRODUCT Function	Multiplies corresponding elements in arrays and returns the sum.
ABS Function	Returns the absolute value of a number.
BASE Function	Converts a number from one base to another.
CEILING Function	Rounds a number up to the nearest integer or to the nearest multiple of significance.
COS Function	Calculates the cosine of an angle.
FLOOR Function	Rounds a number down to the nearest integer or to the nearest multiple of significance.
INT Function	Rounds a number down to the nearest integer.
MOD Function	Returns the remainder after division.
MROUND Function	Rounds a number to the nearest multiple.
RAND Function	Generates a random number between 0 and 1.
RANDBETWEEN Function	Generates a random number between specified minimum and maximum values.
ROUND Function	Rounds a number to a specified number of decimal places.
ROUNDDOWN Function	Rounds a number down to a specified number of decimal

	places.
ROUNDUP Function	Rounds a number up to a specified number of decimal places.
SIN Function	Calculates the sine of an angle.
SQRT Function	Calculates the square root of a number.
SUBTOTAL Function	Returns a subtotal in a list or database.
TRUNC Function	Truncates a number to an integer by removing the fractional part.

## **B.** Text Functions

These functions are essential for manipulating and cleaning text data within Excel, making them valuable tools for data analysis and reporting.

Function Name	Description
CHAR Function	Returns the character specified by a number.
CLEAN Function	Removes non-printable characters from text.
CODE Function	Returns the numeric Unicode value of the first character in a text string.
CONCAT Function	Combines two or more text strings into one.
CONCATENATE Function	Combines two or more text strings into one.
EXACT Function	Tests if two text strings are exactly the same.
FIND Function	Searches for a text string within another text string and returns its starting position.
LEFT Function	Extracts a specified number of characters from the beginning of a text string.
LEN Function	Returns the number of characters in a text string.
MID Function	Extracts characters from the middle of a text string.
PROPER Function	Capitalizes the first letter of each word in a text string.

REPLACE Function	Replaces part of a text string with another text string.
RIGHT Function	Extracts a specified number of characters from the end of a text string.
SEARCH Function	Finds one text string within another text string (case-insensitive) and returns its starting position.
SUBSTITUTE Function	Replaces occurrences of a specified text within a text string.
TEXT Function	Converts a value to text in a specified format.
TEXTJOIN Function	Concatenates text from multiple cells with specified delimiters.
TRIM Function	Removes extra spaces from a text string.
UPPER Function	Converts text to uppercase.
VALUE Function	Converts a text string that represents a number to a number.

## C. Date and Time Functions

These date and time functions in Excel are invaluable for working with date-related data, performing calculations, and managing schedules and timelines effectively.

Function Name	Description
DATE Function	Creates a date based on year, month, and day.
DATEDIF Function	Calculates the difference between two dates in various units (e.g., days, months, years).
DAY Function	Extracts the day from a date.
DAYS Function	Calculates the number of days between two dates.
HOUR Function	Extracts the hour from a time.
MINUTE Function	Extracts the minute from a time.
MONTH Function	Extracts the month from a date.

NETWORKDAYS Function	Calculates the number of working days between two dates, excluding weekends and specified holidays.
NOW Function	Returns the current date and time.
SECOND Function	Extracts the second from a time.
TIME Function	Creates a time based on hours, minutes, and seconds.
TODAY Function	Returns the current date.
WORKDAY Function	Calculates the date of the nth working day after a given date, excluding weekends and specified holidays.
YEAR Function	Extracts the year from a date.

# D. Statistical Functions

These functions are essential for performing various types of counting, averaging, and statistical calculations in Excel. They are commonly used in data analysis, reporting, and decision-making processes.

Function Name	Description
AVERAGE Function	Calculates the average of a range of numbers.
AVERAGEIFS Function	Calculates the average of cells that meet multiple criteria.
COUNT Function	Counts the number of cells that contain numbers.
COUNTA Function	Counts the number of cells that are not empty.
COUNTBLANK Function	Counts the number of empty cells in a range.
COUNTIF Function	Counts cells that meet a specific criterion.
COUNTIFS Function	Counts cells that meet multiple criteria.
MAX Function	Returns the highest value in a range.
MIN Function	Returns the lowest value in a range.

SMALL Function	Returns the k-th smallest value in a dataset.
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## E. Information Functions

These functions are useful for inspecting cell contents, checking for errors, and determining data types, which can be important in data analysis and troubleshooting tasks in Excel.

Function Name	Description
CELL Function	Returns information about a cell, such as its format.
ISBLANK Function	Checks if a cell is empty.
ISERROR Function	Checks if a cell contains an error.
ISNA Function	Checks if a cell contains the #N/A error.
ISTEXT Function	Checks if a cell contains text.
NA Function	Returns the #N/A error value.
TYPE Function	Returns a number that represents the data type of a value in a cell.

# F. Logical Functions

These logical functions in Excel are vital for performing conditional calculations, evaluating expressions, and making decisions based on specified conditions. They are essential tools for building dynamic and flexible worksheets.

Function Name	Description
AND Function	Returns true if all specified conditions are true.
FALSE Function	Returns the logical value "FALSE".
IF Function	Returns one value if a condition is true and another if false.
IFS Function	Returns a value based on multiple conditions.

IFERROR Function	Returns a specified value if a formula results in an error; otherwise, it returns the result of the formula.
NOT Function	Inverts the logical value of a cell.
OR Function	Returns true if at least one specified condition is true.
TRUE Function	Returns the logical value "TRUE".

### G.Lookup and Reference Functions

These functions are used for a wide range of tasks in Excel, including data manipulation, searching, and retrieving values based on various criteria. They are powerful tools for creating dynamic and flexible spreadsheets.

Function Name	Description
ADDRESS Function	Returns a cell address as text based on a specified row and column number.
CHOOSE Function	Returns a value from a list based on its position.
COLUMN Function	Returns the column number of a reference.
COLUMNS Function	Returns the number of columns in a range.
FILTER Function	Filters a range of data based on specified criteria.
FORMULATEXT Function	Returns a formula as text from a specified cell.
HLOOKUP Function	Searches for a value in the top row of a table and returns a corresponding value from a specified row.
HYPERLINK Function	Creates a clickable hyperlink.
INDEX Function	Returns the value of a cell in a specified row and column.
INDIRECT Function	Returns the value of a cell specified by a text string.

LOOKUP Function	Searches for a value in a range and returns a corresponding value.
MATCH Function	Searches for a value in a range and returns its relative position.
OFFSET Function	Returns a cell or range that is a specified number of rows and columns from a given reference.
ROW Function	Returns the row number of a reference.
ROWS Function	Returns the number of rows in a range.
SORT Function	Sorts a range of data in ascending or descending order.
TRANSPOSE Function	Switches rows and columns in a range.
UNIQUE Function	Returns unique values from a range.
VLOOKUP Function	Searches for a value in a vertical range and returns a corresponding value.
XLOOKUP Function	Searches for a value in a range and returns a corresponding value, with advanced capabilities.
XMATCH Function	Searches for a value in a range and returns its relative position, with advanced capabilities.

#### Conclusion

These 101 common Excel functions cover a wide range of tasks and scenarios, making Excel a versatile tool for data analysis, financial modeling, project management, and much more. By mastering these functions, you can significantly enhance your ability to work with data efficiently and effectively, no matter your profession or industry.