



Excel

250+ Formulas with Examples

Basic Aggregations

- SUM() =SUM(B2:B10) -- Add numeric range.
- AVERAGE() =AVERAGE(C2:C10) -- Mean of numbers.
- COUNT() =COUNT(A2:A10) -- Count numeric cells.
- COUNTA() =COUNTA(A2:A10) -- Count non-blank cells.
- COUNTBLANK() =COUNTBLANK(A2:A10) -- Number of blank cells.
- MAX() =MAX(D2:D10) -- Largest value.
- MIN() =MIN(D2:D10) -- Smallest value.
- LARGE() =LARGE(D2:D10,3) -- Nth largest value.
- SMALL() =SMALL(D2:D10,2) -- Nth smallest value.
- SUBTOTAL() =SUBTOTAL(109,E2:E10) -- Aggregate visible rows (109=SUM).
- AGGREGATE() =AGGREGATE(14,6,F2:F10) -- Flexible aggregate with options.
- SUMPRODUCT() =SUMPRODUCT(B2:B10,C2:C10) -- Array product-sum (weighted totals).
- SUMIF() =SUMIF(A2:A10,"East",B2:B10) -- Conditional sum single criterion.
- SUMIFS() =SUMIFS(B2:B10,A2:A10,"East",C2:C10,">100") -- Conditional sum multiple criteria.
- COUNTIF() =COUNTIF(A2:A10,"<>"&"") -- Count matching single condition.
- COUNTIFS() =COUNTIFS(A2:A10,"East",C2:C10,">100") -- Count with multiple conditions.
- AVERAGEIF() =AVERAGEIF(A2:A10,"East",B2:B10) -- Average with single condition.
- AVERAGEIFS() =AVERAGEIFS(B2:B10,A2:A10,"East",C2:C10,">100") -- Average multiple conditions.

Date & Time

- TODAY() =TODAY() -- Current date volatile.
- NOW() =NOW() -- Current date & time.
- DATE() =DATE(2025,4,23) -- Construct date.
- DATEVALUE() =DATEVALUE("23-Apr-2025") -- Convert text to date.
- TIME() =TIME(14,30,0) -- Construct time.
- TIMEVALUE() =TIMEVALUE("14:30") -- Convert text to time.
- YEAR() =YEAR(A2) -- Extract year.
- MONTH() =MONTH(A2) -- Month number.
- DAY() =DAY(A2) -- Day of month.
- WEEKDAY() =WEEKDAY(A2,2) -- Weekday index.
- WEEKNUM() =WEEKNUM(A2,21) -- ISO week number.
- EOMONTH() =EOMONTH(A2,0) -- Last day of month.

Date & Time

Learn More at myai.in

- EDATE() =EDATE(A2,3) -- Shift date by months.
- DAYS() =DAYS(B2,A2) -- Days between dates.
- NETWORKDAYS() =NETWORKDAYS(A2,B2) -- Workdays between.
- NETWORKDAYS.INTL() =NETWORKDAYS.INTL(A2,B2,"0000011") -- Custom weekend schedule.
- WORKDAY() =WORKDAY(A2,5) -- Future workday excluding weekends.
- WORKDAY.INTL() =WORKDAY.INTL(A2,10,"0000011") -- Workday with custom weekend.
- YEARFRAC() =YEARFRAC(A2,B2) -- Fractional years between.
- HOUR() =HOUR(B2) -- Hour part.
- MINUTE() =MINUTE(B2) -- Minute part.
- SECOND() =SECOND(B2) -- Second part.

Dynamic Array Functions

- UNIQUE() =UNIQUE(A2:A100) -- Distinct list.
- FILTER() =FILTER(A2:D100,B2:B100="East") -- Filter rows by condition.
- SORT() =SORT(A2:B100,2,-1) -- Sort range.
- SORTBY() =SORTBY(A2:B100,B2:B100,-1) -- Sort by column, keep all data.
- SEQUENCE() =SEQUENCE(10,1,1,1) -- Generate sequence numbers.
- RANDARRAY() =RANDARRAY(5,3,1,100,TRUE) -- Random array.
- XLOOKUP() =XLOOKUP(E2,A2:A10,B2:B10,"NF") -- Modern lookup spills.
- XMATCH() =XMATCH(E2,A2:A10) -- Array-enabled match.
- CHOOSECOLS() =CHOOSECOLS(A2:F10,1,4) -- Return selected columns.
- CHOOSEROWS() =CHOOSEROWS(A2:F10,1,-1) -- Return selected rows.
- TAKE() =TAKE(A2:F100,5) -- First N rows/cols.
- DROP() =DROP(A2:F100,-3) -- Drop last rows/cols.
- WRAPROWS() =WRAPROWS(B2:B13,3) -- Wrap list into rows.
- WRAPCOLS() =WRAPCOLS(B2:B13,3) -- Wrap list into columns.
- LET() =LET(rng,A2:A10,AVG,AVERAGE(rng),AVG) -- Use variables for clarity.
- LAMBDA() =LAMBDA(x,y,x+y)(2,3) -- Create reusable custom function.

Excel Features & Shortcuts

Learn More at [imyai.in](https://www.imyai.in)

- Absolute Reference Use \$ like \$A\$1 -- Lock row & column in copy.
- Named Range Formulas > Define Name -- Readable references.
- Data Validation Data > Data Validation -- Restrict cell input.
- Conditional Formatting Home > Conditional Formatting -- Visualize patterns.
- Freeze Panes View > Freeze Panes -- Keep headers visible.
- PivotTable Insert > PivotTable -- Summarize data quickly.
- Flash Fill Data > Flash Fill -- Automatic pattern extraction.
- Quick Analysis Ctrl+Q -- Recommended charts & totals.
- AutoFilter Data > Filter -- Interactive column filters.
- CTRL+Shift+L Toggle filters -- Shortcut for filter toggle.
- Ctrl+; Insert today's date -- Quick date entry.
- Ctrl+Shift+! Apply number formatting -- Two decimal numeric style.

Information

- ISBLANK() =ISBLANK(A2) -- Test blank cell.
- ISNUMBER() =ISNUMBER(A2) -- Test numeric.
- ISTEXT() =ISTEXT(A2) -- Test text.
- ISERROR() =ISERROR(A2/B2) -- Test any error.
- ISERR() =ISERR(A2/B2) -- Error except #N/A.
- ISNA() =ISNA(VLOOKUP(...)) -- Test #N/A error.
- TYPE() =TYPE(A2) -- Return type code.
- CELL() =CELL("address",A2) -- Info about cell.
- FORMULATEXT() =FORMULATEXT(A2) -- Return formula as text.
- N() =N(A2) -- Convert value to number.
- T() =T(A2) -- Return text or blank.
- INFO() =INFO("osversion") -- System info.
- ERROR.TYPE() =ERROR.TYPE(A2) -- Numeric code of error.

Logical & Error Handling

Learn More at myai.in

- IF() =IF(D2>0,"Profit","Loss") -- Branch based on test.
- IFS() =IFS(B2>90,"A",B2>80,"B",TRUE,"C") -- Multiple conditions without nesting.
- AND() =AND(A2>0,B2>0) -- Test if all logicals TRUE.
- OR() =OR(A2>100,B2>100) -- TRUE if any argument TRUE.
- NOT() =NOT(A2="Yes") -- Reverse logical value.
- XOR() =XOR(A2>0,B2>0) -- TRUE if odd number of TRUEs.
- SWITCH() =SWITCH(A2,"M",1,"F",2,0) -- Map expression to values.
- IFERROR() =IFERROR(A2/B2,0) -- Handle errors gracefully.
- IFNA() =IFNA(VLOOKUP(E2,\$A\$2:\$B\$10,2,0),"Not Found") -- Handle #N/A specifically.
- CHOOSE() =CHOOSE(3,"Red","Blue","Green","Yellow") -- Pick value by index.
- LET() =LET(taxRate,0.18,Price*taxRate) -- Store variables in formula.

Lookup & Reference

- VLOOKUP() =VLOOKUP(E2,\$A\$2:\$C\$10,3,0) -- Vertical lookup left-to-right.
- HLOOKUP() =HLOOKUP(B5,\$A\$1:\$G\$3,3,FALSE) -- Horizontal lookup top-to-bottom.
- XLOOKUP() =XLOOKUP(E2,\$A\$2:\$A\$10,\$B\$2:\$B\$10,"NF") -- Modern flexible lookup.
- LOOKUP() =LOOKUP(2,1/(A2:A10<>""),A2:A10) -- Last non-blank in column.
- INDEX() =INDEX(B2:B10,5) -- Return value by row/col index.
- MATCH() =MATCH(E2,A2:A10,0) -- Position of item in range.
- INDEX+MATCH =INDEX(B2:B10,MATCH(E2,A2:A10,0)) -- Lookup without column order limit.
- OFFSET() =OFFSET(A1,5,2) -- Reference range offset by rows/cols.
- INDIRECT() =INDIRECT("B"&ROW()) -- Convert text to reference.
- ADDRESS() =ADDRESS(ROW(),COLUMN()) -- Return cell address.
- ROW() =ROW(A5) -- Row number of reference.
- COLUMN() =COLUMN(D2) -- Column number.
- ROWS() =ROWS(A2:C10) -- Number of rows in range.
- COLUMNS() =COLUMNS(A2:C10) -- Number of columns in range.
- XMATCH() =XMATCH(E2,A2:A10,0) -- Modern array-aware match.
- FILTER() =FILTER(A2:C10,B2:B10>100) -- Return rows passing condition.
- UNIQUE() =UNIQUE(A2:A100) -- Distinct list spill.
- SORT() =SORT(A2:B10,2,-1) -- Sort range by column.
- SORTBY() =SORTBY(A2:B10,B2:B10,-1) -- Sort using helper column.
- SEQUENCE() =SEQUENCE(10,1,1,1) -- Generate sequential numbers.

Math & Trig

Learn More at [imyai.in](https://www.imyai.in)

- ROUND() =ROUND(A2,2) -- Round to decimals.
- ROUNDUP() =ROUNDUP(A2,0) -- Always round up.
- ROUNDDOWN() =ROUNDDOWN(A2,0) -- Always round down.
- MROUND() =MROUND(A2,5) -- Round to nearest multiple.
- INT() =INT(A2) -- Integer part.
- MOD() =MOD(A2,3) -- Remainder.
- CEILING() =CEILING(A2,10) -- Round up to multiple.
- FLOOR() =FLOOR(A2,10) -- Round down to multiple.
- ABS() =ABS(A2) -- Absolute value.
- POWER() =POWER(A2,3) -- Raise to power.
- SQRT() =SQRT(A2) -- Square root.
- RAND() =RAND() -- Random 0-1.
- RANDBETWEEN() =RANDBETWEEN(1,100) -- Random integer range.
- PI() =PI() -- Pi constant.
- EXP() =EXP(1) -- e^x function.
- LN() =LN(A2) -- Natural logarithm.
- LOG() =LOG(A2,10) -- Log base n.
- LOG10() =LOG10(A2) -- Log base 10.
- PRODUCT() =PRODUCT(B2:B10) -- Multiply set of numbers.

Statistical

- MEDIAN() =MEDIAN(A2:A10) -- Median value.
- MODE.SNGL() =MODE.SNGL(A2:A10) -- Most frequent value.
- PERCENTILE.EXC() =PERCENTILE.EXC(A2:A10,0.9) -- Exclusive percentile.
- PERCENTILE.INC() =PERCENTILE.INC(A2:A10,0.9) -- Inclusive percentile.
- QUARTILE.EXC() =QUARTILE.EXC(A2:A10,1) -- First quartile excl.
- QUARTILE.INC() =QUARTILE.INC(A2:A10,1) -- First quartile incl.
- STDEV.P() =STDEV.P(A2:A10) -- Population stdev.
- STDEV.S() =STDEV.S(A2:A10) -- Sample stdev.
- VAR.P() =VAR.P(A2:A10) -- Population variance.
- VAR.S() =VAR.S(A2:A10) -- Sample variance.
- COVARIANCE.P() =COVARIANCE.P(A2:A10,B2:B10) -- Population covariance.

Statistical

Learn More at myai.in

- CORREL() =CORREL(A2:A10,B2:B10) -- Correlation coefficient.
- TREND() =TREND(known_y,known_x,new_x) -- Linear trend values.
- FORECAST.LINEAR() =FORECAST.LINEAR(new_x,known_y,known_x) -- Predict with linear regression.

Text Functions

- LEFT() =LEFT(A2,3) -- Leftmost characters.
- RIGHT() =RIGHT(A2,2) -- Rightmost characters.
- MID() =MID(A2,2,4) -- Substring by position.
- LEN() =LEN(A2) -- Length of text string.
- FIND() =FIND("@",A2) -- Case-sensitive position.
- SEARCH() =SEARCH("cat",A2) -- Case-insensitive position.
- SUBSTITUTE() =SUBSTITUTE(A2," ","") -- Replace text by match.
- REPLACE() =REPLACE(A2,1,3,"New") -- Replace by location.
- TEXT() =TEXT(A2,"dd-mmm-yyyy") -- Format number/date to text.
- TEXTJOIN() =TEXTJOIN(", ",TRUE,A2:A5) -- Concatenate range with delimiter.
- CONCAT() =CONCAT(A2:A5) -- Join text ignoring delimiter.
- CONCATENATE() =CONCATENATE(A2," ",B2) -- Legacy join.
- TRIM() =TRIM(A2) -- Remove extra spaces.
- UPPER() =UPPER(A2) -- Convert to uppercase.
- LOWER() =LOWER(A2) -- Convert to lowercase.
- PROPER() =PROPER(A2) -- Capitalize each word.
- VALUE() =VALUE(A2) -- Convert text to number.
- EXACT() =EXACT(A2,B2) -- Case-sensitive text compare.
- CHAR() =CHAR(10) -- Character by code.
- CODE() =CODE("A") -- ASCII code of char.