

ENTERING FORMULAS

1. Select the target cell.
2. Type the Equal sign (=)
3. Click on the first cell reference or type the cell address.
4. Type the symbol for Add, Subtract, Multiply or Divide.
5. Repeat the above, as needed.
6. Depress Enter or click on the green arrow in the Formula/Edit bar.
Example: =C3(A5-A4)

BASIC FORMULAS

FORMULA	EXPLANATION
=A1+A6	adds A1 and A6
=A1+A2 +A3	adds the three cells
=A3-A1	subtracts A1 from A3
=B2*B3	multiplies B2 and B3
=G5/A5	divides G5 A5
=G5^2	squares G5.
=(C1+C3)/C4	adds C1 to C3, and divides the result by C4
=4*(A2+A5)+3	adds A2 and A5, multiplies by 4, adds the number3

USING AUTOFILL

1. Select cells containing data.
2. Select the AutoFill handle.
3. When the pointer displays as a small, black cross, drag to highlight the target cells.

USING AUTOSUM

1. Select the numbers and the cells that should contain the formula.
2. Click on the AutoSum icon.
3. Click on the AutoSum down arrow for additional options.

TOTALING A CELL RANGE

Click on the target cell and click Home|Editing group|Sum button.

ENTERING FUNCTIONS

1. Select the target cell.
2. Depress the Equal sign (=).
3. Type function name followed by an open parentheses.
4. Select the target range of cells.
5. Type the closing parentheses or depress Enter.

Example: =SUM(B2:B6)

INSERTING FUNCTIONS

1. Select the Formula tab.
2. Click the Insert Function (fx Insert Function) button on the Ribbon.
3. Search for Function or select a category.
4. Select the target function.
5. Click OK.
6. Enter or select the target range.
7. Click OK.

THE AVERAGE FUNCTION

1. Enter necessary data.
2. Select cell where result is to display.
3. Click the Formulas tab.
4. Select More Function|Statistical from the Ribbon.
5. Click Average from the offered list.
6. Select the target list.
7. Click OK.

THE COUNT FUNCTION

This function ignores any cells containing text or that are empty.

1. Enter necessary data.
2. Select the cell where the result is to display.
3. Select Formulas tab|More Functions|Statistical.
4. Click Count from the offered list.
5. Select the target range.
6. Click OK.

THE MAX FUNCTION

1. Enter the necessary data.
2. Select the cell where the result is to display.
3. Click on the Insert Function button located on the Formula/Edit bar.
4. If the function does not display in the Select a function: box, click on the down arrow for Or select a category and select MAX.
5. Click OK.
6. Drag and select the target range.
7. Click OK.

THE COUNTA FUNCTION

This function counts all cells in a range regardless of type except those that are empty.

1. Enter necessary data.
2. Select the cell where the result is to display.
3. Select Formula tab|More Functions|Statistical.
4. Click on CountA from the offered list.
5. Select the target range.
6. Click OK.

THE MIN FUNCTION

1. Enter the necessary data.
2. Select the cell where the result is to display.
3. Click on the Insert Function button located on the Formula/Edit bar.
4. If the function does not display in the Select a function: box, click on the down arrow for Or select a category and select MAX.
5. Click OK.
6. Drag and select the target range.
7. Click OK.

TO REFERENCE A CELL IN A FORMULA

Type the cell reference or click on it.

TO CREATE A SERIES

1. Enter the necessary numbers into adjacent cells. i. e. D5 as 0 and D6 as 5.
2. Select both cells with the white cross.
3. Click on the Fill Handle and drag down to display a series of 0, 5, 10, 15 etc.

CELL ADDRESSES

Cells are referenced by addresses made from the column letter and the row number. You can find the address of a cell by looking in the Name Box.

Example: A1, B10, J5

5 BASIC RULES OF FORMULAS

1. All Formulas start with the = sign.
2. The results of a formula displays in the cell in which the formula is located.
3. Cells are references by their column and row.
4. The operators for formulas are +, -, * and / and with parentheses factored first.
5. Excel is blind to upper and lower case, it sees them the same so formulas are not case sensitive.

IMPORTANT KEYBOARD SHORTCUTS

Ctrl+Z	undo
Ctrl+X	cut
Ctrl+C	copy
Ctrl+V	paste
Ctrl+ Y	redo

ABSOLUTE CELL REFERENCING

Absolute cell reference always refers to the same cell, regardless of where the formula is copied. The \$ in a formula indicates an absolute reference. A cell address can also be part relative and part absolute.

Address	Type	Action
A2	Relative	column and row may change
\$A\$2	Absolute	columns and row cannot change
\$A2	Mixed	column remains constant but the row may change

CREATING AN ABSOLUTE CELL REFERENCE

Select the target cell and depress F4.

INSERT A FUNCTION

Select the target cell and click the *fx* (Insert Function button) on the Formula/Edit Bar.

DATES AND TIMES

Excel stores dates and times as a number representing the number of days since 1900-Jan-0, plus a fractional portion of a 24 hour day: dddd.ttttt. This is called a serial date, or serial date-time.

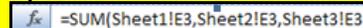
ENTERING 2 DIGIT YEARS

Entering a date with two digits in the year, Excel uses 29/30 as the "cutoff point" between 1900 and 2000. For example, entering a year between 30 and 99 causes Excel to treat the year as 1930 - 1999. Entering a year between 00 and 29 causes Excel to treat the year as 2000 - 2029.

SUM CELLS IN NON-GROUPED WORKSHEETS

1. Place a cell value in any cell of sheet1:sheet3.
2. Insert a 4th worksheet and click in a cell.
3. Type an Equal sign (=) followed by SUM and an open parentheses.
4. Click on the tab for sheet1, click on the cell containing the target value followed by a comma.
5. Repeat the above, targeting the cells on sheet2 and sheet3.
6. Depress Enter and Excel will complete the formula with the sum displayed in the selected cell on sheet4.

Example:



TRACE PRECEDENTS & DEPENDENTS

Excel's Tracing Precedents and Tracking Dependents feature will allow you to view the Precedents, the data field used for evaluating the formulas/functions and Dependents, the data field on which it depends.

1. Open a spreadsheet containing a sum formula.
2. Select Formula tab|Formula Auditing Group|Trace Precedents.



3. To display the Dependents, repeat the above, selecting on the Trace Dependents entry.



DISPLAYING FORMULAS

Depress the Ctrl key|tilde key (~).

TEXT FUNCTIONS

Function	Description
CLEAN	Removes all nonprintable characters from text
CONCATENATE	Joins several text items into one text item
TRIM	Converts text to uppercase
LEFT	Returns the leftmost characters from a text value
MID	Returns a specific number of characters from a text string starting at the position you specify
PROPER	Capitalizes the first letter in each word of a text value
RIGHT	Returns the rightmost characters from a text value
LOWER	Converts text to lowercase
LEN	Returns the number of characters in a text string
UPPER	Converts text to uppercase

WYSIWYG PASTE SPECIAL

In Excel 2010, when you copy a range and right click anywhere in the spreadsheet, you get a right-click menu that shows you the Paste Special icons.

Hovering over these, you can see a live preview of what the each Paste Special command will do to your data.

ONE TOUCH PASTE SPECIAL

In some instances it is easier to execute a normal paste then use the smart tag menu that activates in Excel 2010.

1. Copy the source data.
2. Complete a standard paste (Ctrl+V) where desired.
3. Excel 2010 will activate a smart tag that allows you to expand a small menu of Paste Special commands.
4. Click the target command.
5. You can also use Hot Keys to execute these Paste Special commands.

WATCH WINDOW

The Watch Window shows you the result of the cells being tracked, without having to switch to the sheet where the formula is to check its result.

The Watch Window button can be found on the Formula tab|Formula Audition group|Watch Window.

Select the cell that you want to watch and click on the Add button to close the dialog window.

CONDITIONAL FORMATTING

1. Select the target cells.
2. Select Home|Styles group|Conditional Formatting.
3. Choose the formatting scheme and set the conditions.