

Excel New Functions



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Cheat Sheet

These functions require Office 365 version of Excel. You can try these functions on browser version of Excel as well.

FUNCTION	Purpose	Comments
FORMULATEXT	Display formula from another cell	Use for explaining and documentation of the workbook structure. Use it to explain how you arrived at a result.
TEXTJOIN	Combine text from multiple cells into a single piece and add delimiters. Returns single value.	Use for combining text. Usually as a part of some larger operation.
CONCAT	Same as TEXTJOIN but does not provide delimiters option. Returns single value.	Same as TEXTJOIN.
ATOTEXT	Converts and array to Text. Converts non-text to text. Delimiters taken from current Locale (country) setting. Returns an array.	Strict mode returns {} and strings in quotes.
SEQUENCE	Generates a sequence of numbers	Usually combined with many other functions to created sophisticated capabilities. Here is an example. https://hi.switchy.io/seqsample
RANDARRAY	Generate random numbers between lower and upper boundary and across rows and columns.	Used with other functions to create randomized data for further processing. Typically used in sensitivity analysis and simulations https://hi.switchy.io/rsimul

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UNIQUE	Gets a list of unique values from inputs.	Used for populating dropdowns. More importantly, used in other formulas to achieve more complex objectives.
SORT, SORTBY	Sort data based upon specified row / column SORTBY is for more complex sorting logic with multiple separate conditions.	Use with UNIQUE and other functions to sort the output.
FILTER	Filter data based upon one or more criteria	Returns an array. Use with other functions for restricting the scope of operations.
LET	Simplify complex formulas by defining a variable and reusing it within the formula.	Look at your existing complex formulas and check if a part is repeating. If yes, try using LET. Check if it improved the performance as well (for large files).
SWITCH	Get an input and return different outputs	Like multiple If then conditions. Use where there is direct match. Similar to <u>CHOOSE</u> function. Choose works on index number whereas SWITCH works on actual value.
XLOOKUP	Enhanced and faster version of VLOOKUP (and HLOOKUP). Faster search (binary), forward / backward search and more.	Replace existing, poor performing VLOOKUP / HLOOKUP with XLOOKUP. Make sure to use Tables for the base data as well as the lookup tables.
VLOOK	Not a new function. Just remember that in the second parameter, you can input an array to return values from multiple columns	The returned array will spill. If you are adding this to an Excel table, you will need to use some text joining function to combine the output.
XMATCH	Like the MATCH function but with multiple options for faster search and forward / backward search.	Faster and more flexible compared to the regular MATCH function. Try replacing the older INDEX – MATCH formulas using XMATCH. You should get

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		performance gains as well as more compact formulas, especially if used with LET.
*IFS	Many functions have been added which take multiple conditions. IFS, MAXIFS, MINIFS, AVERAGEIFS and so on.	These functions will replace complex formulas which contain multiple, nested IF conditions.

How to learn the functions YOU need?

1. Create a Word document
2. Create a table with three columns – Function, Priority, Comment
3. Go to Formulas tab – choose Insert Function to open the dialog
4. Ignore Recently Used Functions
5. Open the category dropdown and choose Financial (even if you are not a finance person)
6. Now you will see a list of functions
7. Click in the list and notice the one-line description shown below
8. Read it. If you like it, note it down in the Word document
9. Press down arrow to move to the next function
10. Read the description
11. Repeat the process for all functions across all categories
12. Save the Word file
13. Add priorities to the shortlisted functions
14. This is your learning plan. Whenever you get time, learn these functions one by one.
15. Try each function with simple data first. Copy paste the examples from Help file to A1 in a new sheet.
16. Paste as plain text. All functions work after the copy paste
17. Play with the examples, try different values, combine functions and practice
18. Then try the function in a copy of your regular data
19. Once confident, implement in your day-to-day work
20. Document what you are doing. It helps with future maintenance and troubleshooting
21. Share the learnings with others
22. Try to standardize the usage of new and improved methods by creating Standard Operating Procedures for Excel