

Microsoft Excel Functions for Data Cleaning

Function	What It Does	Example Formulas
EXACT	Checks for duplicates. For example, EXACT(A2,A3) checks whether the values in second and third columns match.	=EXACT(A2,A3)
TRIM	Removes spaces from beginning and end of text.	=TRIM(A2:A300)
CLEAN	Removes all nonprintable characters from text.	=CLEAN(A2:A300)
SUBSTITUTE	Substitutes one or more instances of a given character with new character. For example, the formula on the right will substitute all instances of 1 with a 3 in cell C2.	=SUBSTITUTE(C2,"1","3")
REPLACE	Replaces characters in a specified position of a text string. For example, the formula on the right will replace the second character in cell C2 with "new." Replace only one character.	=REPLACE(C2, 2, 1, "new")
LEFT/RIGHT	Extracts a given number of characters from the left/right side of a text string. For example, LEFT("parking", 4) changes "parking" to "park."	=LEFT(A2,4) =RIGHT(A2, 4)
PROPER	Changes the first letter in each word to upper case. For example, PROPER("id") changes "id" to "Id."	=PROPER(A2)
LOWER/UPPER	Changes text to lower/upper case letters. For example, UPPER("id") changes "id" to "ID."	=LOWER(A2) =UPPER(A2)
CONCATENATE	Joins text from different cells into one cell. & " " adds space between the cells. For example, =CONCATENATE("John"& " ", "Smith") changes "John" and "Smith" in separate cells to "John Smith" in a single cell.	=CONCATENATE(A2& " ", B2)
ISBLANK	Identifies whether a cell is blank and returns a "True" or "False."	=ISBLANK(A2)
MIN/MAX	Identifies the lowest or highest value in a range of cells.	=MIN(A2:A300) =MAX(A2:A300)

Note. Adapted from the following sources:

Cunningham, K. (2016, November 7). *10 Excel functions you need to know for data analysis*. Adept. <https://blog.adeptmarketing.com/10-excel-functions-you-need-to-know-for-data-analysis>

De Groot, L. (2014). *Intro to cleaning data*. Berkeley Graduate School of Journalism, Advanced Media Institute. <https://multimedia.journalism.berkeley.edu/tutorials/cleaning-data/>

Microsoft. (n.d.). *Excel functions (by category)*. <https://support.office.com/en-us/article/Excel-functions-by-category-5f91f4e9-7b42-46d2-9bd1-63f26a86c0eb>

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