Tip Sheet: Excel Level-Up

Charity Insights Canada Project (CICP)
Community Education Centre (CEC): https://carleton.ca/cicp-pcpob/cec/

Removing Duplicates

Duplicates are not always errors. The same values may appear more than once for valid reasons.

Always inspect duplicates first. Use Conditional Formatting to highlight duplicates so you can review them before deleting.

Sort to reveal patterns. Sorting the column helps group possible duplicates together for review.

How to Decide If Something Is Truly a Duplicate (An example)

Ask yourself:

- Same participant, different programs → not a duplicate
- Same participant, same program and same start date → likely a duplicate
- Same participant, same program and date, but different completion status values → investigate before removing

Removing duplicates is a judgment call, not just a button click!

Tips

-Copy the table to a new sheet before removing duplicates.
-Excel only compares the columns you choose.
-If all selected columns match exactly, Excel treats the rows as duplicates and removes them:

Fewer columns = more rows removed
More columns = stricter comparison and fewer accidental deletions

-Make sure Excel knows whether your data includes column headers.
-Always keep records of what you have done!

VLOOKUP

One of the most commonly used functions that works in all versions of Excel. Works in all versions of Excel

Searches for a value in the first column of a table or range and returns a value from the same row in another column. Returns the first match found (even if duplicates exist).

Syntax

=VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])

Arguments

- lookup_value: The value or cell you want to search for
- table_array: The range that contains both the lookup values and the results (lookup value must be in the first column)
- col_index_num: The column number (from the left) that contains the value to return
- [range_lookup]
  FALSE or 0 → Exact match (recommended)
  TRUE or 1 → Approximate match (Columns with lookup values must be sorted in ascending order to work properly)

Tips

-Set the last argument to FALSE if you want VLOOKUP to find an exact match.
-VLOOKUP can only search for values in the first (leftmost) column of the selected table or range.
-Lock the table range (for example, $A$1:$D$10) so it doesn't change when you copy the formula to other cells.
-Using entire columns (such as A:D) automatically includes any new rows you add later and removes the need to adjust or lock the range when copying the formula.
-VLOOKUP only returns values from columns to the right of the lookup column. If you need more flexibility, use XLOOKUP, which can search in any direction.

XLOOKUP

Newer and more flexible, only available for Microsoft 365 (all versions), Excel 2021, Excel 2024, and Excel on the web/iPad.
Can return values from columns to the left or right, up or down.
Easier to read and less error-prone.

Syntax

=XLOOKUP(lookup_value, lookup_array, return_array)

Arguments

- lookup_value: The value or cell you want to search for
- lookup_array: The range that contains the lookup values
- return_array: The range that contains the value(s) to return

Tips

-XLOOKUP automatically looks for an exact match, so there's no need to use FALSE or 0 like you do with VLOOKUP.
-Because XLOOKUP uses ranges rather than column index numbers, your formula won't break if columns are added or moved.
-As with VLookup, lock the lookup and return ranges (for example, $A$1:$A$10) if you plan to copy the formula to keep the references consistent, or consider using entire columns instead for a more dynamic formula.