How can I use the XMATCH function in Excel to find the position of a value in a specified range or array?

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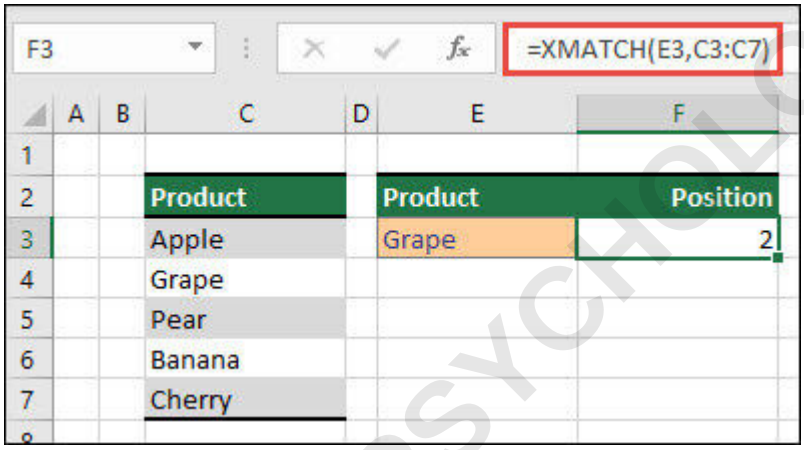
The XMATCH function in Excel allows users to easily find the position of a specific value within a given range or array. This function is particularly useful for large datasets where manually searching for a value can be time-consuming and prone to errors. By inputting the value and range or array into the XMATCH function, Excel will return the position of the value within the range or array. This allows for efficient data analysis and decision making based on the position of a specific value.

The **XMATCH** function searches for a specified item in an array or range of cells, and then returns the item's relative position.

Assume we have a list of products in cells C3 through C7 and we wish to determine where in the list the product from cell E3 is located. Here, we'll use XMATCH to determine an item's position within a list.



Syntax

The XMATCH function returns the relative position of an item in an array or range of cells.

=XMATCH(lookup_value, lookup_array, ,)

Argument	Description
lookup_value Required	The lookup value
lookup_array Required	The array or range to search

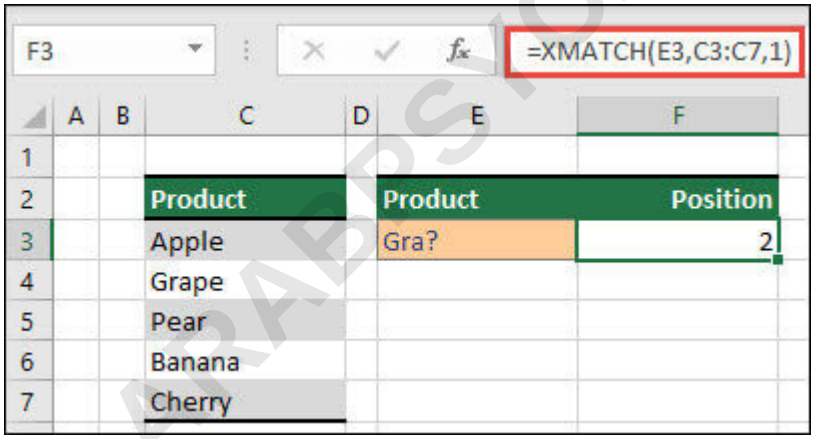
Argument	Description
Optional	Specify the match type: 0 - Exact match (default) -1 - Exact match or next smallest item 1 - Exact match or next largest item 2 - A wildcard match where *, ?, and ~ have special meaning.
Optional	Specify the search type: 1 - Search first-to-last (default) -1 - Search last-to-first (reverse search). 2 - Perform a binary search that relies on lookup_array being sorted in ascending order. If not sorted, invalid results will be returned. -2 - Perform a binary search that relies on lookup_array being sorted in descending order. If not sorted, invalid results will be returned.

Examples

Example 1

The exact position of the first phrase that exactly matches or comes closest to the value of "Gra" is determined in the example that follow.

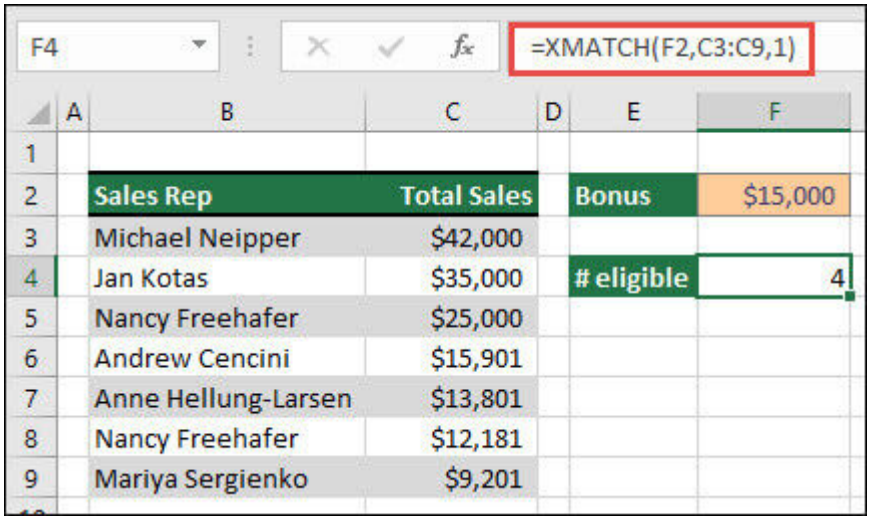
Formula: **XMATCH(E3,C3:C7,1)**



Example 2

The number of salespeople qualified for a bonus is determined in the following example. In order to discover the closest item in the list or an exact match, this also uses 1 for the match_mode; however, because the data is numeric, it returns a count of values. Since there were four sales representatives that exceeded the bonus amount in this instance, the function yields 4.

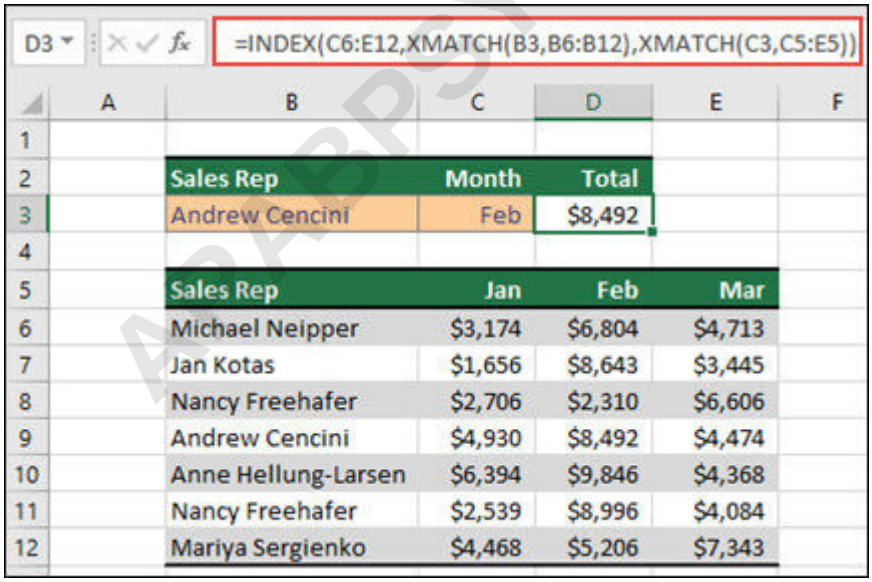
Formula=**XMATCH(F2,C3:C9,1)**



Example 3

Next, we'll perform a simultaneous vertical and horizontal lookup using a mix of INDEX/XMATCH/XMATCH. In this instance, we would want the sales total for a certain sales representative and month to be returned. This is comparable to combining INDEX and MATCH methods, but it takes less arguments.

Formula=**INDEX(C6:E12;XMATCH(B3,B6B12), XMATCH(C3,C5:E5))**



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