

MATCH

MATCH Formula in Excel

The **MATCH** function **searches for a value** in a range and returns its **relative position**.
Use it with **INDEX** for flexible lookups (better than VLOOKUP/HLOOKUP).

Syntax

excel

```
=MATCH(lookup_value, lookup_array, [match_type])
```

Argument	Description
lookup_value	The value you want to find (number, text, or cell reference)
lookup_array	The single row or column to search
[match_type]	Optional: 1, 0, or -1 (default is 1)

Match Type Options

Value	Behavior	Requirement
1 (default)	Finds largest value $\leq$ lookup_value	Data must be sorted ascending
0	Finds exact match	No sorting needed
-1	Finds smallest value $\geq$ lookup_value	Data must be sorted descending

Basic Examples

- Exact match (most common)** excel `=MATCH("Apple", A1:A10, 0)` Returns the position of "Apple" in A1:A10 (e.g., 3 if in A3).
- Find number (approximate, sorted data)** excel `=MATCH(75, B1:B10, 1)` If B1:B10 = {10, 20, 50, 80, 90} → returns **3** (80 is closest $\leq$ 75).
- Case-sensitive?** → No. Use **EXACT** or **FIND** for that.

Powerful Combo: INDEX + MATCH

excel

```
=INDEX(B2:B100, MATCH("John", A2:A100, 0))
```

→ Finds "John" in A column, returns corresponding value from B.

Two-way lookup (row + column):

excel

```
=INDEX(A1:E10,  
    MATCH("Q3", A1:A10, 0),    // row  
    MATCH("Sales", A1:E1, 0))  // column
```

Common Errors

Error	Cause
#N/A	Value not found
#VALUE!	lookup_array is not 1D (use single row/column)