

INDEX

INDEX Formula in Excel

The **INDEX** function returns a value or reference from a specified position in a range or array.

Syntax

excel

=INDEX(array, row_num, [column_num])

- **array**: The range or array to search (e.g., A1:C10).
- **row_num**: The row number within the array (required).
- **[column_num]**: The column number within the array (optional; defaults to 1 if omitted).

Use **0** for *row_num* or *column_num* to return an entire row/column.

Basic Examples

- 1 **Single value from a 1D range** excel =INDEX(A1:A5, 3) Returns the 3rd value in A1:A5.
- 2 **Value from a 2D table** excel =INDEX(A1:C5, 2, 3) Returns the value in **row 2, column 3** of the range A1:C5 (i.e., cell C2).
- 3 **Dynamic row/column with cell references** excel =INDEX(A1:C10, B1, B2) If B1 = 4 and B2 = 2 → returns value from **D5** (row 4, column 2 in A1:C10).

Advanced Uses

- 1 **Return entire row or column** excel =INDEX(A1:C10, 5, 0) Returns **all values in row 5** (A5:C5) as a horizontal array. excel =INDEX(A1:C10, 0, 2) Returns **all values in column 2** (B1:B10) as a vertical array.
- 2 **With MATCH (Dynamic Lookup – like VLOOKUP but more flexible)** excel =INDEX(B2:B100, MATCH("John", A2:A100, 0)) Finds "John" in A2:A100 and returns the corresponding value from B column.
- 3 **Two-way lookup (row + column)** excel =INDEX(A1:E10, MATCH("Q3", A1:A10, 0), MATCH("Sales", A1:E1, 0)) Looks up "Sales" in Q3 from a table.

Common Errors

Error	Cause
#REF!	Row/column number outside range
#VALUE!	Invalid arguments (e.g., text instead of number)