



# EXCEL LOOKUP FUNCTIONS CHEAT SHEET



Master Formulas here: <https://bit.ly/xlformulas>

## XLOOKUP



Searches a range or an array and returns an item corresponding to the first match it finds.

**Syntax** - XLOOKUP(lookup\_value, lookup\_array, return\_array, [if\_not\_found], [match\_mode], [search\_mode])

Key	Match Mode	Search Mode
0	Exact Match	-
-1	Exact match or next smaller	Search from first to last
1	Exact match or next larger	Search from last to first

**Example** `=XLOOKUP(B12,C4:C9,D4:D9,"Not Found",0,1)`

	A	B	C	D	E
3		Category	Product	Sales	Average Rating
4		Accessories	Bike Racks	64400	94%
5		Accessories	Helmets	36400	65%
6		Accessories	Lights	36700	90%
7		Accessories	Locks	35000	100%
8		Bikes	Cargo Bike	13000	54%
9		Bikes	Mountain Bikes	8500	46%
10					
11		Product	Sales		
12		Lights	36700		
13		Helmets	36400		
14		Locks	35000		

### Benefits:

1. Supports searching from both the top and bottom of the array.
2. Can handle both horizontal and vertical lookups.
3. More flexible error handling and match types.

### Limitation:

Not compatible with Excel 2019 or earlier.



XLOOKUP Masterclass: <https://bit.ly/fnxlookup>

## VLOOKUP



Looks for a value in the first column of a table and returns a value in the same row from a specified column.

**Syntax** - VLOOKUP(lookup\_value, table\_array, col\_index\_num, [range\_lookup])

**Example** `=VLOOKUP(B12,C3:D9,2,FALSE)`

	A	B	C	D	E
3		Category	Product	Sales	Average Rating
4		Accessories	Bike Racks	64400	94%
5		Accessories	Helmets	36400	65%
6		Accessories	Lights	36700	90%
7		Accessories	Locks	35000	100%
8		Bikes	Cargo Bike	13000	54%
9		Bikes	Mountain Bikes	8500	46%
10					
11		Product	Sales		
12		Lights	36700		
13		Helmets	36400		
14		Locks	35000		

### Benefit:

Compatible with Excel 2019 and earlier.

### Limitations:

1. Can only search for values in the first column or row.
2. Requires the lookup column to be sorted if using approximate match.
3. Does not support dynamic column or row referencing.

### Related Function:

HLOOKUP(lookup\_value, table\_array, row\_index\_num, [range\_lookup])



VLOOKUP Masterclass: <https://bit.ly/fnvlookup>



HLOOKUP Masterclass: <https://bit.ly/fnhlookup>

## INDEX



Returns the value of a cell in a table at the intersection of the provided row and column number.

**Syntax** INDEX(array, row\_num, [column\_num])

**Example** `=INDEX(C4:D9,3,2)`

	A	B	C	D	E
3		Category	Product	Sales	Average Rating
4		Accessories	Bike Racks	64400	94%
5		Accessories	Helmets	36400	65%
6		Accessories	Lights	36700	90%
7		Accessories	Locks	35000	100%
8		Bikes	Cargo Bike	13000	54%
9		Bikes	Mountain Bikes	8500	46%
10					
11		Product	Sales		
12		Lights	36700		
13		Helmets	36400		
14		Locks	35000		

### Benefits:

1. Compatible with Excel 2019 and older versions.
2. Unlike VLOOKUP, INDEX can have the return value to the left of the lookup value.

### Limitation:

Static function because the row and column numbers need to be hard-keyed.



INDEX Masterclass: <https://bit.ly/fnindex>

## MATCH



Searches for a specified item in a range and returns the relative position of that item.

**Syntax** - MATCH (lookup\_value, lookup\_array, [match\_type])

**Example** `=MATCH(B12,C4:C9,0)`

	A	B	C	D	E
3		Category	Product	Sales	Average Rating
4		Accessories	Bike Racks	64400	94%
5		Accessories	Helmets	36400	65%
6		Accessories	Lights	36700	90%
7		Accessories	Locks	35000	100%
8		Bikes	Cargo Bike	13000	54%
9		Bikes	Mountain Bikes	8500	46%
10					
11		Product	Row Number	Column Number	
12		Lights	3	2	
13		Helmets	2	2	
14		Locks	4	2	

### Benefits:

1. Compatible with Excel 2019 and older versions.
2. Can be used to make INDEX function's row and column number arguments dynamic.
3. Together, INDEX & MATCH overcome VLOOKUP limitations.

### Limitation:

Unlike INDEX, Match doesn't return the value but the relative position of the lookup value.



MATCH Masterclass: <https://bit.ly/match-fn>



INDEX & MATCH Combined Masterclass: <https://bit.ly/fnindex-match>

## CHOOSEROWS



Selects and returns specified rows from an array or range.

**Syntax** - CHOOSEROWS(array, row\_num1, [row\_num2], ...)

**Example** `=CHOOSEROWS(C4:D9,3)`

	B	C	D	E
3		Category	Product	Sales
4		Accessories	Bike Racks	64400
5		Accessories	Helmets	36400
6		Accessories	Lights	36700
7		Accessories	Locks	35000
8		Bikes	Cargo Bike	13000
9		Bikes	Mountain Bikes	8500
10				
11		Product	Sales	
12		Lights	36700	
13		Helmets	36400	
14		Locks	35000	

### Benefits:

1. Has a more straightforward & intuitive syntax compared to INDEX and MATCH combined.
2. Can select multiple rows in a single formula, compared to INDEX and MATCH.

### Limitation:

1. Only compatible with Excel for Microsoft 365.
2. Row numbers need to be hard-keyed.

### Related Function:

CHOOSECOLS(array, col\_num1, [col\_num2], ...)



CHOOSEROWS Masterclass: <https://bit.ly/fnchooseroes>



CHOOSECOLS Masterclass: <https://bit.ly/fnchoosecols>

## FILTER



Returns a range filtered on criteria you define.

**Syntax** - FILTER(array, include, [if\_empty])

**Example** `=FILTER(D4:D9,C4:C9=B12,"No Sales")`

	B	C	D	E
3		Category	Product	Sales
4		Accessories	Bike Racks	64400
5		Accessories	Helmets	36400
6		Accessories	Lights	36700
7		Accessories	Locks	35000
8		Bikes	Cargo Bike	13000
9		Bikes	Mountain Bikes	8500
10				
11		Product	Sales	
12		Lights	36700	
13		Helmets	36400	
14		Locks	35000	

### Benefits:

1. Dynamically extracts & displays data that meets specific criteria.
2. Has a more straightforward & intuitive syntax compared to INDEX and MATCH combined.

### Limitation:

Not compatible with Excel 2019 or earlier.



FILTER Masterclass: <https://bit.ly/filter-fn>

