

Excel 2013

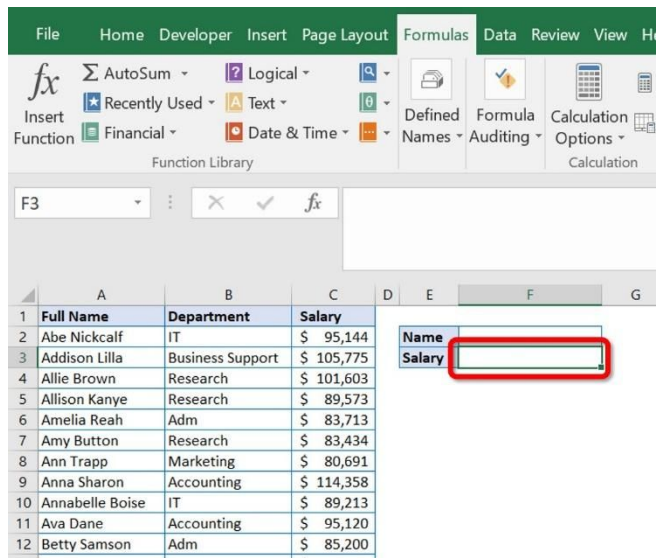
Quick Reference Card

How to Use VLOOKUP in Excel 2013

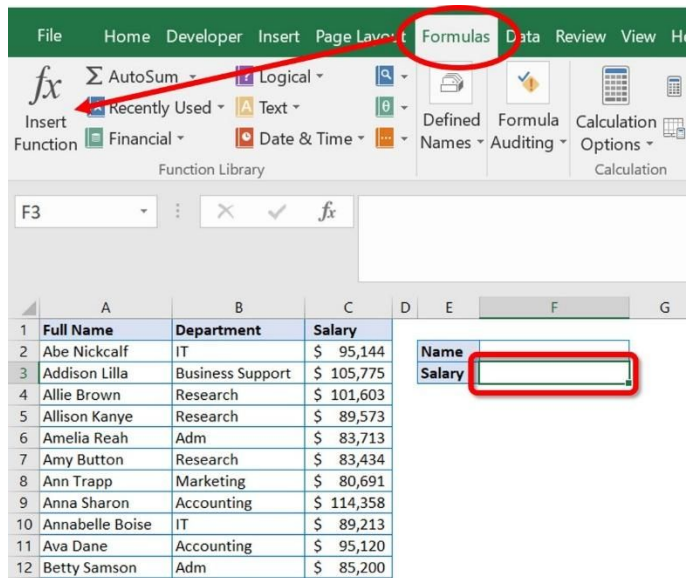
This short tutorial uses Excel 2013 to show you a working example of the VLOOKUP function.

1. Decide where you will place your VLOOKUP formula.

This example uses a spreadsheet of employee names, departments, and salaries. You want to add a VLOOKUP box that allows you to enter an employee's name and have their salary automatically populate so that you don't have to manually search through thousands of data rows. This is an exact lookup. Next to your data table, you've added a *lookup box*.



2. Click cell F3. Click the *Formulas* tab and select *Insert Function*.



3. In the Search for a function: text box, type "vlookup". Click the Go button.

Full Name	Department	Salary
Abe Nickcalf	IT	\$ 95,144
Addison Lilla	Business Support	\$ 105,775
Allie Brown	Research	\$ 101,603
Allison Kanye	Research	\$ 89,513
Amelia Reah	Adm	\$ 83,713
Amy Button	Research	\$ 83,434
Ann Trapp	Marketing	\$ 80,691
Anna Sharon	Accounting	\$ 114,358
Annabelle Boise	IT	\$ 89,213
Ava Dane	Accounting	\$ 95,120
Betty Samson	Adm	\$ 85,200
Bill Blasko	Sales	\$ 109,758
Bob Michaels	Research	\$ 97,380
Bob Miller	Research	\$ 119,458
Bobbi Brown	Marketing	\$ 85,237
Bradley Pigg	IT	\$ 84,717
Carter Foley	IT	\$ 80,682
Cat Amelie	Research	\$ 81,173
Dane Duckworth	HR	\$ 106,281
David Billsworth	Adm	\$ 115,055
Davis Woodworth	Sales	\$ 99,876
Davita Paige	Sales	\$ 118,302
Devon Leonard	Research	\$ 106,438

4. Click the highlighted VLOOKUP and click OK.

Insert Function

Search for a function: vlookup

Or select a category: Most Recently Used

Select a function:

- VLOOKUP**
- SUM
- AVERAGE
- IF
- HYPERLINK
- COUNT
- MAX

VLOOKUP(lookup_value,table_array,col_index_num,range_lookup)
Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.

OK Cancel

5. Now you can create the VLOOKUP formula that will look up the salary for the employee whose name you enter in cell F2.

Function Library

Defined Names

VLOOKUP

=VLOOKUP()

Full Name	Department	Salary
Abe Nickcalf	IT	\$ 95,144
Addison Lilla	Business Support	\$ 105,775
Allie Brown	Research	\$ 101,603
Allison Kanye	Research	\$ 89,513
Amelia Reah	Adm	\$ 83,713
Amy Button	Research	\$ 83,434
Ann Trapp	Marketing	\$ 80,691
Anna Sharon	Accounting	\$ 114,358
Annabelle Boise	IT	\$ 89,213
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Betty Samson	Adm	\$ 85,200
Bill Blasko	Sales	\$ 109,758
Bob Michael	Research	\$ 97,380
Bob Miller	Research	\$ 119,458
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Dane Duckworth	HR	\$ 106,281
David Billsworth	Adm	\$ 115,055
Davis Woodworth	Sales	\$ 99,876
Davita Paige	Sales	\$ 118,302
Devon Leonard	Research	\$ 106,438
Ed Kimmy		

Function Arguments

VLOOKUP

Lookup_value = any

Table_array = number

Col_index_num = number

Range_lookup = logical

Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.

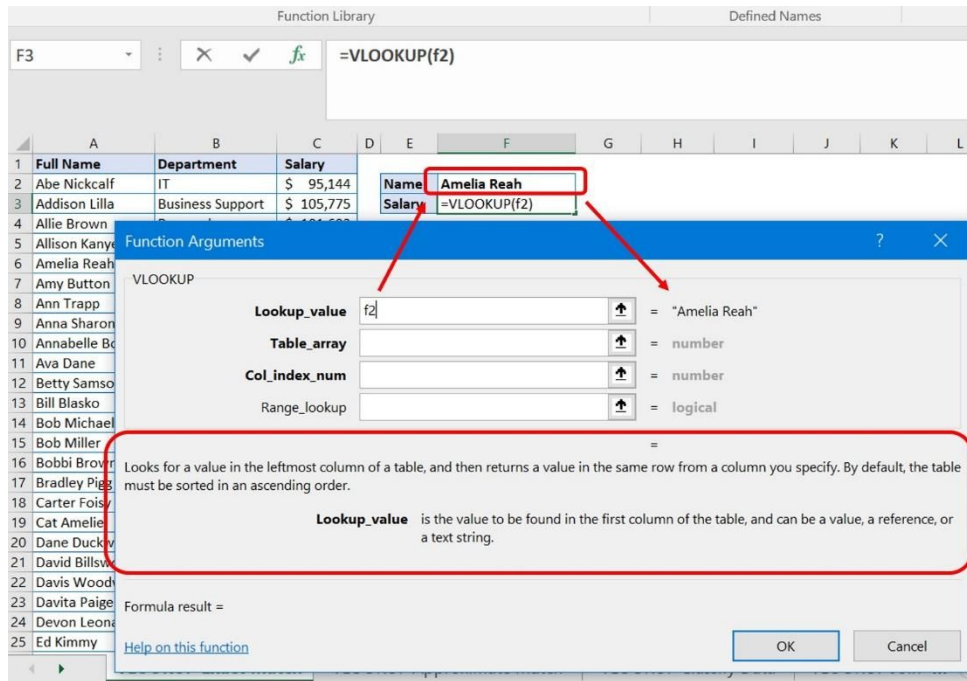
Lookup_value is the value to be found in the first column of the table, and can be a value, a reference, or a text string.

Formula result =

OK Cancel

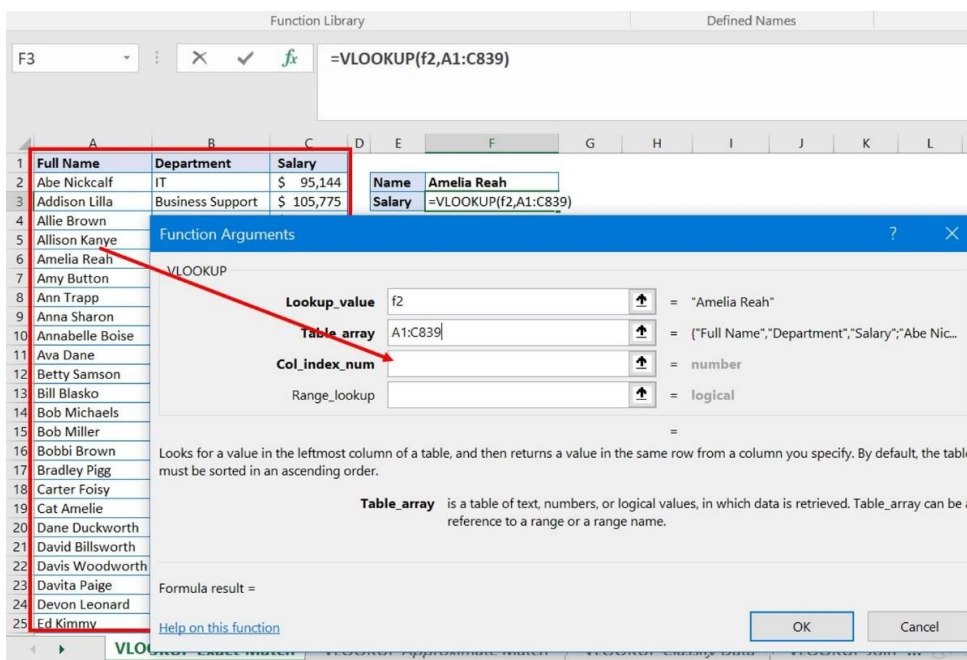
VLOOKUP operates on the four arguments numbered above. Argument number four, *Range_lookup*, is optional and you may leave it blank. However, it is not recommended that you do so.

6. In the *Lookup_value* text box, type "F2".



In this step, you are asking Excel to look up the contents of cell F2. Excel displays the cell's value to the right of the text box, helping you check your entry. Here is a manually entered employee name so that you can see what Excel sees. Also, Excel provides information below the text boxes to help you understand each argument.

7. In the *Table_array* text box, select the table area that Excel should use to find your lookup.



Excel adds the range you select as you highlight a table or area of your worksheet.

8. In the *Col_index_num* field, type "3". This is the index column number in the table that contains employees' salaries.

The screenshot shows the Excel interface with the Function Arguments dialog box open for the VLOOKUP function. The formula bar shows `=VLOOKUP(f2,A1:C839,3)`. The dialog box has the following arguments:

- Lookup_value:** f2 = "Amelia Reah"
- Table_array:** A1:C839 = {"Full Name","Department","Salary";"Abe Nickcalf";"Addison Lilla";"Allie Brown";"Allison Kanye";"Amelia Reah";"Amy Button";"Ann Trapp";"Anna Sharon";"Annabelle Boise";"Ava Dane";"Betty Samson";"Bill Blasko";"Bob Michaels";"Bob Miller";"Bobbi Brown";"Bradley Pigg";"Carter Foisy";"Cat Amelie";"Dane Duckworth";"David Billsworth";"Davis Woodworth";"Davita Paige";"Devon Leonard";"Ed Kimmy"}
- Col_index_num:** 3 = 3
- Range_lookup:** (blank) = logical

The formula result is \$ 83,713. A red circle highlights the '3' in the Col_index_num field, and a red arrow points to the result.

As before, Excel builds the formula as we add the function arguments and shows the value it sees. For the cell F3, Excel tells you the salary of employee "Amelia Reah" is "83713".

9. In the *Range_lookup* box, type "false" or "0", as you want an exact match, not an approximate match.

The screenshot shows the Excel interface with the Function Arguments dialog box open for the VLOOKUP function. The formula bar shows `=VLOOKUP(f2,A1:C839,3,0)`. The dialog box has the following arguments:

- Lookup_value:** f2 = "Amelia Reah"
- Table_array:** A1:C839 = {"Full Name","Department","Salary";"Abe Nickcalf";"Addison Lilla";"Allie Brown";"Allison Kanye";"Amelia Reah";"Amy Button";"Ann Trapp";"Anna Sharon";"Annabelle Boise";"Ava Dane";"Betty Samson";"Bill Blasko";"Bob Michaels";"Bob Miller";"Bobbi Brown";"Bradley Pigg";"Carter Foisy";"Cat Amelie";"Dane Duckworth";"David Billsworth";"Davis Woodworth";"Davita Paige";"Devon Leonard";"Ed Kimmy"}
- Col_index_num:** 3 = 3
- Range_lookup:** 0 = FALSE

The formula result is \$ 83,713. A red box highlights the '0' in the Range_lookup field and the explanatory text: "Range_lookup is a logical value: to find the closest match in the first column (sorted in ascending order) = TRUE or omitted; find an exact match = FALSE."

Excel also provides tips for each argument below the text boxes.

10. Click *OK*.

The screenshot shows the Microsoft Excel interface with the **Formulas** ribbon selected. The **Function Library** group is visible, containing buttons for **Insert Function**, **AutoSum**, **Recently Used**, **Financial**, **Logical**, **Text**, **Date & Time**, **Lookup & Reference**, and **Math & Trig**. The **Lookup & Reference** group is expanded, showing the **VLOOKUP** function. The formula bar displays the formula `=VLOOKUP(F2,A1:C839,3,0)`. Below the formula bar, a table of employee data is visible, with a small table to the right showing the result for 'Amelia Reah' with a salary of '\$ 83,713'.

	A	B	C	D	E	F
1	Full Name	Department	Salary			
2	Abe Nickcalf	IT	\$ 95,144		Name	Amelia Reah
3	Addison Lilla	Business Support	\$ 105,775		Salary	\$ 83,713
4	Allie Brown	Research	\$ 101,603			
5	Allison Kopp	Research	\$ 88,573			

Excel translated the formula to “\$87,713” for employee “Amelia Reah”.