

Excel 2016

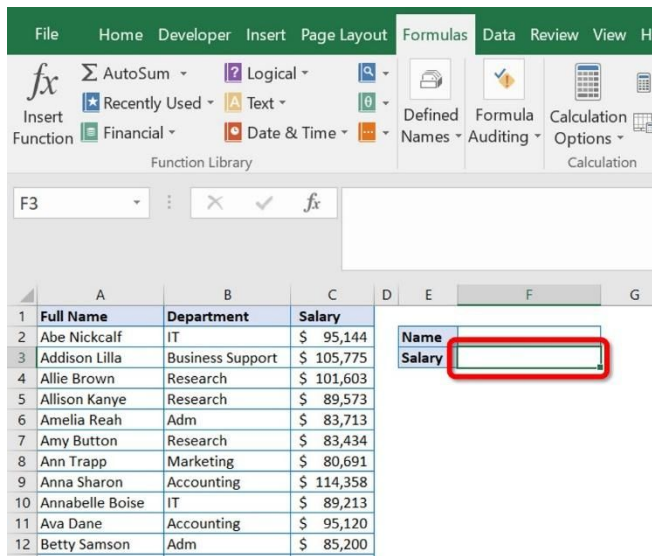
Quick Reference Card

How to Use VLOOKUP in Excel 2016

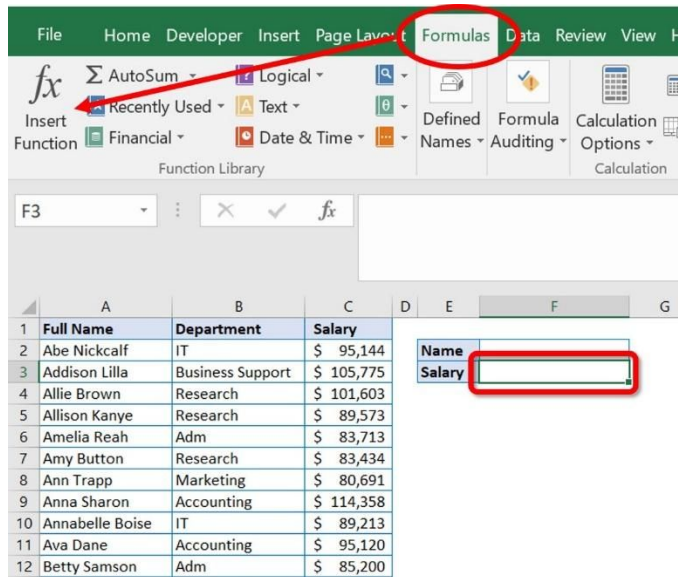
This short tutorial uses Excel 2016 to show you a working example of the VLOOKUP function.

1. Decide where you will place your VLOOKUP formula.

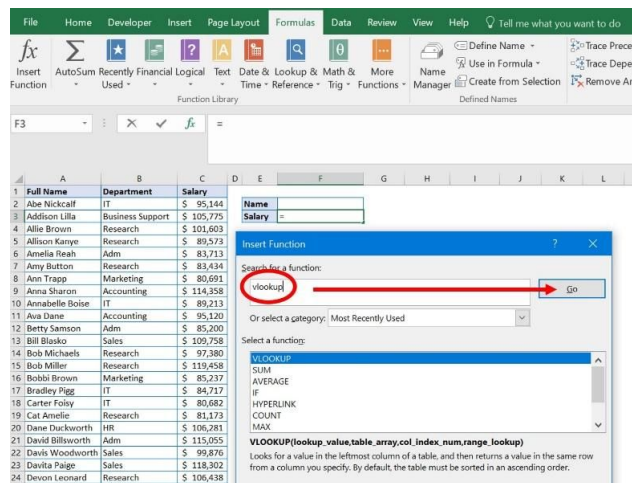
This example uses a spreadsheet of employee names, departments, and salaries. You want to add a VLOOKUP box that allows you to enter an employee's name and have their salary automatically populate so that you don't have to manually search through thousands of data rows. This is an exact lookup. Next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



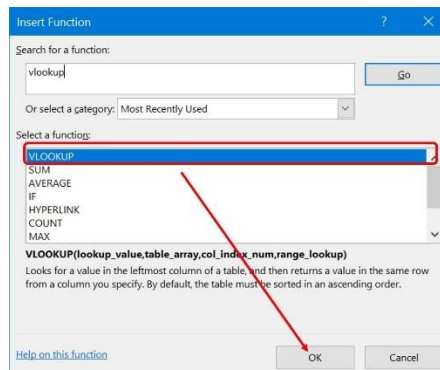
2. Click cell F3. Click the *Formulas* tab and select *Insert Function*.



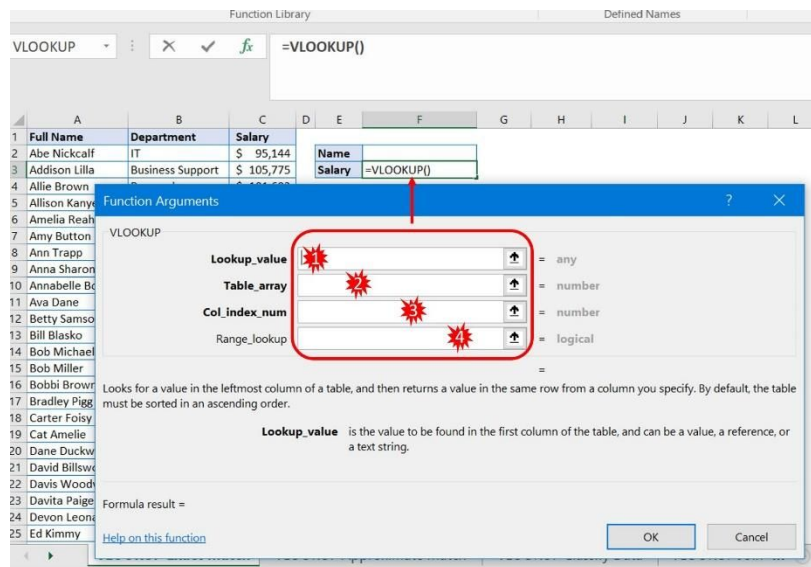
3. In the *Search for a function*: text box type “vlookup”. Click the Go button.



4. Click the highlighted VLOOKUP and click OK.

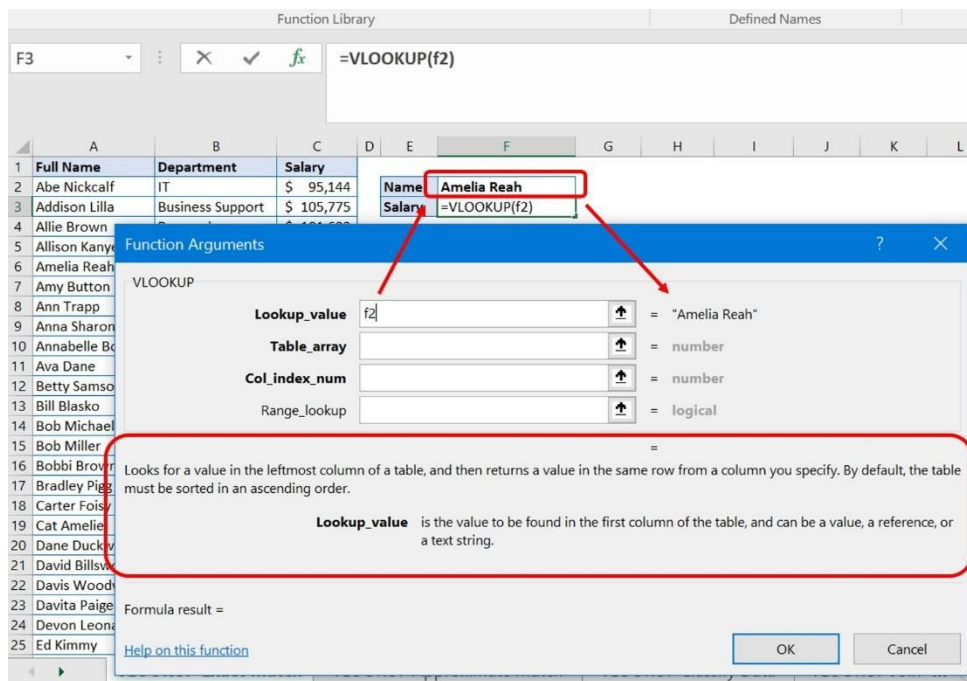


5. Now you can create the VLOOKUP formula that will look up the salary for the employee whose name you enter in cell F2.



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.

Function Library Defined Names

F3 =VLOOKUP(f2,A1:C839)

Full Name	Department	Salary
Abe Nickcalf	IT	\$ 95,144
Addison Lilla	Business Support	\$ 105,775
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		

Function Arguments

VLOOKUP

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: = number

Range_lookup: = logical

Formula result =

OK Cancel

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.

Function Library Defined Names

F3 =VLOOKUP(f2,A1:C839,3)

Full Name	Department	Salary
Abe Nickcalf	IT	\$ 95,144
Addison Lilla	Business Support	\$ 105,775
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		

Function Arguments

VLOOKUP

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: = logical

Formula result = \$ 83,713

OK Cancel

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 Function Arguments dialog box for the VLOOKUP function. The formula bar at the top displays `=VLOOKUP(f2,A1:C839,3,0)`. The dialog box contains the following arguments:

- Lookup_value:** f2 (points to cell F2, containing "Amelia Reah")
- Table_array:** A1:C839 (points to the employee data table)
- Col_index_num:** 3 (points to the Salary column)
- Range_lookup:** 0 (points to the Range_lookup box, which is highlighted with a red box in the image)

Below the arguments, a tooltip for the Range_lookup argument is displayed in a red box: "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." The formula result is shown as \$ 83,713.

Excel also provides tips for the arguments below the text boxes.

10. Click OK.

The screenshot shows the Excel ribbon with the **Formulas** tab selected. The **Function Library** group is expanded, and the **VLOOKUP** function is selected. The formula bar displays `=VLOOKUP(F2,A1:C839,3,0)`. Below the ribbon, the spreadsheet shows the employee data table with the salary for Amelia Reah highlighted in cell F3.

Full Name	Department	Salary
Abe Nickcalf	IT	\$ 95,144
Addison Lilla	Business Support	\$ 105,775
Allie Brown	Research	\$ 101,603
Allison Kanye	Research	\$ 89,572

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

