

DESCRIPTION

VLOOKUP

Vertical

Searches for a value in the first column of a table array and returns a value in the same row from another column in the table array.

SYNTAX

VLOOKUP(lookup_value,table_array,col_index_num,range_lookup)

BASIC EXAMPLES

	A	B	C	D
1	Product ID	Product Name	Unit Price	Quantity
2	1001	ABC	10	12
3	1002	BCD	20	14
4	1006	CDE	30	16
5	1007	DEF	40	16
6	1008	EFG	50	10

RESULT

=VLOOKUP(1006,A2:D6,2)
=VLOOKUP(1006,A2:D6,3)
=VLOOKUP(1006,A2:D6,4)

CDE
30
16

	A	B	C	D
1	Product ID	Product Name	Unit Price	Quantity
2	1001	ABC	10	12
3	1002	BCD	20	14
4	1006	CDE	30	16
5	1007	DEF	40	16
6	1008	EFG	50	10

1005 is not available. Next largest value that is less than 1005 is 1002. These results are from the row of 1002.

=VLOOKUP(1005,A2:D6,2,TRUE)
=VLOOKUP(1005,A2:D6,3,TRUE)
=VLOOKUP(1005,A2:D6,4,TRUE)

BCD
20
14

=VLOOKUP(1005,A2:D6,2,FALSE) #N/A
=VLOOKUP(1005,A2:D6,3,FALSE) #N/A
=VLOOKUP(1005,A2:D6,4,FALSE) #N/A

We don't have an exact match.

	A	B	C	D
1	Product ID	Product Name	Unit Price	Quantity
2	1001	ABC	10	12
3	1002	BCD	20	14
4	1006	CDE	30	16
5	1007	DEF	40	16
6	1008	EFG	50	10

RESULT

"BCD" is not in the first column of the range

=VLOOKUP("BCD",A2:D6,2)
=VLOOKUP("BCD",A2:D6,3)

#N/A
#N/A

	A	B	C	D
1	Product ID	Product Name	Unit Price	Quantity
2	1001	ABC	10	12
3	1002	BCD	20	14
4	1006	CDE	30	16
5	1007	DEF	40	16
6	1008	EFG	50	10

RESULT

=VLOOKUP("BCD",B2:D6,2)
=VLOOKUP("BCD",B2:D6,3)

20
14

ADVANCED EXAMPLES

UNSORTED

	A	B
1		
2	Cheater	25
3	John	45
4	Charlize	33
5	George	21

When you perform a text search, you should always specify FALSE for the range_lookup parameter.

RESULT

=VLOOKUP("Cheater",A2:B5,2)
=VLOOKUP("Cheater",A2:B5,2,FALSE)

33
25

INCORRECT
CORRECT

	A	B	C	D
1	Product ID	Product Name	Unit Price	Quantity
2	1001	ABC	10	12
3	1002	BCD	20	14
4	1006	CDE	30	16
5	1007	DEF	40	16
6	1008	EFG	50	10

=VLOOKUP(1006,A2:D6,3)*VLOOKUP(1006,A2:D6,4)
=VLOOKUP(1005,A2:D6,3)*VLOOKUP(1005,A2:D6,4)

30 * 16 = 480
20 * 14 = 280

	A	B	C	D	E	F	G
1							
2	Unit Price	2011	2012	Other	Year		2011
3	\$10,000	\$2,000	\$3,000	\$5,000	Unit Price	\$30,000	
4	\$20,000	\$4,000	\$6,000	\$10,000	Raise	\$6,000	
5	\$30,000	\$6,000	\$9,000	\$15,000	Total	\$36,000	
6	\$40,000	\$8,000	\$12,000	\$20,000			

RESULT

=VLOOKUP(G3,A3:D6,IF(G2=2011,2,(IF(G2=2012,3,4))))

\$30,000
TRUE
column=2
\$6,000

	A	B	C	D	E	F	G
1							
2	Unit Price	2011	2012	Other	Year		2012
3	\$10,000	\$2,000	\$3,000	\$5,000	Unit Price	\$30,000	
4	\$20,000	\$4,000	\$6,000	\$10,000	Raise	\$9,000	
5	\$30,000	\$6,000	\$9,000	\$15,000	Total	\$39,000	
6	\$40,000	\$8,000	\$12,000	\$20,000			

RESULT

=VLOOKUP(G3,A3:D6,IF(G2=2011,2,(IF(G2=2012,3,4))))

\$30,000
2012
FALSE
2012
TRUE
column=3
\$9,000

	A	B	C	D	E	F	G
1							
2	Unit Price	2011	2012	Other	Year		2015
3	\$10,000	\$2,000	\$3,000	\$5,000	Unit Price	\$40,000	
4	\$20,000	\$4,000	\$6,000	\$10,000	Raise	\$20,000	
5	\$30,000	\$6,000	\$9,000	\$15,000	Total	\$60,000	
6	\$40,000	\$8,000	\$12,000	\$20,000			

RESULT

=VLOOKUP(G3,A3:D6,IF(G2=2011,2,(IF(G2=2012,3,4))))

\$40,000
2015
FALSE
2015
FALSE
column=4
\$20,000

ARGUMENTS

lookup_value : Required. The value to search in the first column of the table or range. The lookup_value argument can be a value or a reference. If the value you supply for the lookup_value argument is smaller than the smallest value in the first column of the table_array argument, VLOOKUP returns the #N/A error value.

table_array : Required. The range of cells that contains the data. You can use a reference to a range (for example, A2:D8), or a range name. The values in the first column of table_array are the values searched by lookup_value. These values can be text, numbers, or logical values. Uppercase and lowercase text are equivalent.

col_index_num : Required. The column number in the table_array argument from which the matching value must be returned. A col_index_num argument of 1 returns the value in the first column in table_array; a col_index_num of 2 returns the value in the second column in table_array, and so on.

If the col_index_num argument is:

- Less than 1, VLOOKUP returns the #VALUE! error value.
- Greater than the number of columns in table_array, VLOOKUP returns the #REF! error value.

range_lookup : Optional. A logical value that specifies whether you want VLOOKUP to find an exact match or an approximate match:

- If range_lookup is either TRUE or is omitted, an exact or approximate match is returned. If an exact match is not found, the next largest value that is less than lookup_value is returned.

Important : If range_lookup is either TRUE or is omitted, the values in the first column of table_array must be placed in ascending sort order; otherwise, VLOOKUP might not return the correct value.

If range_lookup is FALSE, the values in the first column of table_array do not need to be sorted.

- If the range_lookup argument is FALSE, VLOOKUP will find only an exact match. If there are two or more values in the first column of table_array that match the lookup_value, the first value found is used. If an exact match is not found, the error value #N/A is returned.

REMARKS

- When searching text values in the first column of table_array, ensure that the data in the first column of table_array does not contain leading spaces, trailing spaces, inconsistent use of straight (') or (") and curly (' or ") quotation marks, or nonprinting characters. In these cases, VLOOKUP might return an incorrect or unexpected value.

- When searching number or date values, ensure that the data in the first column of table_array is not stored as text values. In this case, VLOOKUP might return an incorrect or unexpected value.

- If range_lookup is FALSE and lookup_value is text, you can use the wildcard characters — the question mark (?) and asterisk (*) — in lookup_value. A question mark matches any single character; an asterisk matches any sequence of characters. If you want to find an actual question mark or asterisk, type a tilde (~) preceding the character.