

Two Way Lookups

VLOOKUP and HLOOKUP are great ways to search an array of data in Excel either vertically or horizontally.

	A	B	C	D
1		2005	2006	2007
2	Qtr 1	26145	21133	26867
3	Qtr 2	21951	28417	21856
4	Qtr 3	28016	18694	19078
5	Qtr 4	22293	24274	15595
6				
7	Qtr			
8	Year			
9	Amount			

What if the search needs to look through more than one array? This example has the user enter the quarter number and the year. The result should be the correct amount from the above data table.

B9		fx =VLOOKUP("Qtr "&B7,A2:D5,MATCH(B8,A1:D1),FALSE)								
	A	B	C	D	E	F	G	H	I	
1		2005	2006	2007						
2	Qtr 1	26145	21133	26867						
3	Qtr 2	21951	28417	21856						
4	Qtr 3	28016	18694	19078						
5	Qtr 4	22293	24274	15595						
6										
7	Qtr	3								
8	Year	2006								
9	Amount	18694								

=VLOOKUP("Qtr "&B7,A2:D5,MATCH(B8,A1:D1),FALSE)

"Qtr "&B7 concatenates "Qtr " with the quarter number entered in B7 so the entire label does not have to be keyed each time.

The VLOOKUP is in the first column of the range from A2:D5. The result is data in the other three columns. The MATCH function is used to determine which of those three columns are to be used. MATCH takes the first argument and looks it up in the range specified in the second. FALSE tells it to find an exact match. The result is a number indicating the relative position of the match (1-4 in this case).