

### 3-D Formulas

You can use references to cells located on other worksheets in the same workbook in formulas, and not just cells in the current worksheet.

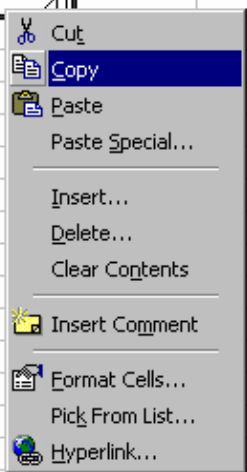
A 3-D reference is a range that spans two or more worksheets in a workbook.

For example: Go to cell A2 in sheet 1 and enter the value 10.

	A	B
1		
2	10	
3		
4		

Select Sheet 2, cell A2, and enter the value 20. Now right click and select **Copy**.

	A	B	C
1			
2	20		
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			



A context menu is open over cell A2 of Sheet 2. The menu items are: Cut, Copy (highlighted), Paste, Paste Special..., Insert..., Delete..., Clear Contents, Insert Comment, Format Cells..., Pick From List..., and Hyperlink... An arrow points to the Copy option.

## Using The IF Function

This function allows you to test a condition on the worksheet (a logical test), and depending on whether the condition is met, Excel will perform the task referred to in either True or False arguments. If the condition is met, Excel will carry out the True argument, and if it is not, it will carry out the False argument.

For example, you could test if you were over budget or not. If you were, Excel could return the statement "Over Budget", and if you were not, Excel could return the statement "Under Budget".

Enter the following data on a new spreadsheet...

	A	B	C	D	E	F
1						
2		Costs			Budget=	5500
3	Jan	5000				
4	Feb	6000				
5	March	7000				
6	April	6000				
7	May	7000				
8	June	6000				
9						

## Using LOOKUP Tables

In this example, the price of a product needs to be established from the database, and the only information available is the product number. Remember this example uses a small list of data, but the VLOOKUP function is extremely useful when the data consists of hundreds or thousands of entries.

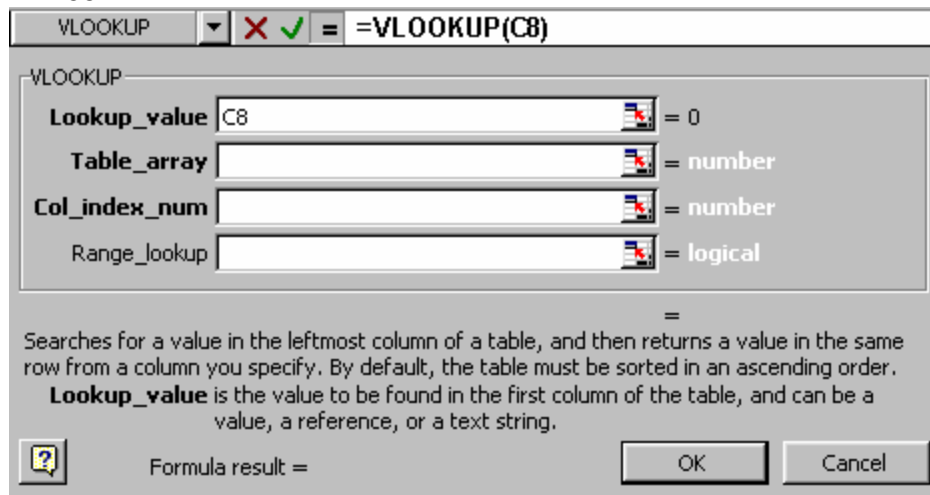
1. In cell B8 enter the text **Prod No =**

2. In cell B9 enter the text **Price =**

	A	B	C	D	E
1	<b>Prod No</b>	<b>Description</b>	<b>Supplier</b>	<b>Price (£)</b>	
2	2234	Red biro	Stationary Deals	0.10	
3	2235	Writing Pad	Writers Bits	0.90	
4	2446	Rubber	Stationary Deals	0.40	
5	2450	Ruler	Acme Spares	1.80	
6					
7					
8		Prod No=			
9		Price =			
10					
11					

The example will enable the product number to be entered in cell C8 and the matching price will be displayed in cell C9. To do this we have to set up the VLOOKUP function...Cont...

1. Click in the **Lookup\_value** field and click on the collapse icon to view the spreadsheet and select cell C8. This is where you enter the product number to search through the data. Press enter or the expand icon.



## String Formulas

A string formula is a way of combining calculations and text in the same cell.

For example, you might want to include a statement ...

**John sold 20 mobile phones in January**

...in a cell, where 20 is the result of a calculation and not a number that you have entered as text.

Each string, piece of text or calculation, is joined by an ampersand (&) and text must be surrounded by “ “

1. Copy the following example.

	A	B	C	D	E
1	January				
2	Week 1	Week 2	Week 3	Week 4	
3	3	4	5	8	
4					

2. In cell A5 enter the following text...