

Absolute cell references

Pressing function key **F4** after clicking on a cell will add \$ signs and changes A5 to \$A\$5. This makes the cell an absolute reference which won't change if the cell is copied.

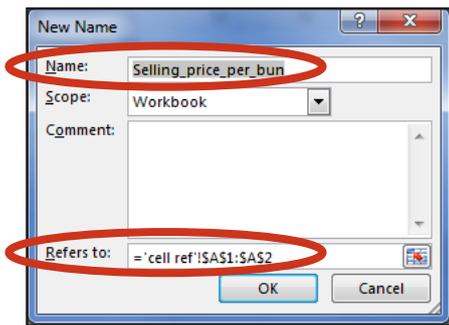
By repeatedly pressing **F4** (or editing manually), the \$ can just make the row or column fixed.

	A	B	C	D	E	F
1	Number of buns		Selling Price	Number Sold	Total cost	Total Sold
2	35		35	200	=D2*\$A\$5	
3						

	C	D	E	F
	Selling Price	Number Sold	Total cost	Total Sold
	35	200	£ 24.00	
	10	32	£ 3.84	
	14	75	£ 9.00	
	11	23	£ 2.76	
	42	13	£ 1.56	

Define names

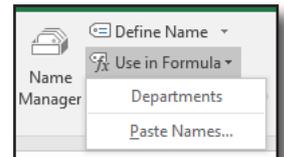
Defining a name can make formulae easier to read and will fix the location of data. Highlight the cells and click on the **Formulas** menu and on define name.



The name may be picked up automatically or you can change it.

The **refers to** can be a single cell or a range.

To use the name either click on the **Formulas** menu and **Use in formula**.



K	L	M
Total Taken	Profit	
	=Selling_price_per_bun*12	

Order of evaluation

Formulae follow the BODMAS system where Brackets and Ordinances are more important than Divide and Multiply which are more important than Add and Subtract.

In practice this means that $A1 * A2 + 1$ will multiply the two cells before adding one. Often brackets will help clarify e.g. $A1 * (A2 + 1)$ the one is added to A2 and then the result multiplied by A1.

Types of pasting

There are many types of pasting. Of particular note are:



Transpose to swap a column for rows or vice versa.



Paste Values will fix the results of calculations as if the result numbers had just been typed in.



Paste link will create copies of cells linked back to the originals.



IF

=if(CHECK, YES, NO) returns **YES** if **CHECK** is true, otherwise returns **NO**

=if(CHECK1, =if(CHECK2, YES, NO1), NO2) if commands can be nested to make further checks

Countif

=countif(RANGE, FIND) counts how many times **FIND** appears in cells in **RANGE**

=countifs(RANGE1, FIND1, RANGE2, FIND2)
counts times both **FIND1** appears in **RANGE1** at the same position down as **FIND2** in **RANGE2**

String Functions

=left(CELL, CHARS) finds the left **CHARS** characters from **CELL**

=mid(CELL, START, CHARS) finds **CHARS** characters from **CELL** starting from **START**

=right(CELL, CHARS) finds the right **CHARS** characters from **CELL**

=len(CELL) returns the length of the string in **CELL**

=find(FIND, CELL, START) finds the position of **FIND** in **CELL** (optionally after **START**)

Concatenate &

The & function in Excel provides an easy way to join text together.

= A1 & " " & A2

	C1	fx	=A1&" "&B1
1	Fred	Flinstone	Fred Flinstone
2			

vlookup

Fails for non-sorted lists. Here the search gets down to grape and stops with the previous find.

		Vookup words
orange	sun	coconut skin
apple	tree	
banana	skin	
grape	vine	
coconut	matting	
strawberry	switchblade	
coconut	chunk	

Lookup using Match and Index

To find matches in unsorted data use the index and match functions.

=INDEX(B13:C19, MATCH(D13, B13:B19), 2)

Index(ALL data, MATCH(Search for, In column) First exact match)

This leaflet can be provided in other formats; let us know your requirements.

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