

Intermediate Excel

Format Cells

1. Select the cell(s) you want to change.
2. Click on the *Home* tab on the *Ribbon*.
3. Click on the dialog box launcher in the *Font*, *Alignment*, or *Number* group.
4. Click on the tabs across the top of the *Format Cells* dialog box to make changes to the cells or the way the information in the cells is displayed.
 - Change the *Number* format to specify a certain style of displaying the date, currency, numbers, and more.
 - Change the *Alignment* or the *Font* of the text in the cells.
 - Change the cell's *Borders* and background *Patterns*.
5. Click on the *OK* button to return to the spreadsheet and apply the formatting to the cells.



Referring to Cell Ranges

It is possible to refer to a group of adjacent cells using only two cell references. For example, A1:C3 is a shorthand reference for the cells selected below: A1, A2, A3, B1, B2, B3, C1, C2, and C3. Excel uses this shorthand reference system for most functions.

	A	B	C	D
1				
2				
3				
4				
5				


To determine the first cell name, locate within the group of selected cells the one that is furthest to the left and closest to the top. In this example, that is cell A1. To determine the second cell name, locate the one that is furthest to the right and closest to the bottom. In this example that is cell C3. Place a colon between them to indicate that A1:C3 actually refers to nine cells and not to just the two named.

Basic Functions

A function is another way to set up an equation. A function begins with an equal sign followed by a word (to determine the appropriate math calculation) and then a set of parentheses which contain the cell references used in the equation. Four examples of simple functions are as follows:

=SUM(A1:C3) =AVERAGE(A1:C3) =MIN(A1:C3) =MAX(A1:C3)

SUM indicates that Excel should add the contents of cells A1 thru C3. AVERAGE indicates that Excel should find the average of the cells by adding the contents of cells A1 thru C3 and dividing that total by the number of cells (in this case 9). MIN indicates that Excel should look at the nine cells referred to in the parentheses and then display the lowest number. MAX indicates that Excel should look at the nine cells referred to in the parentheses and then display the highest number.

To insert a function, select the cell where the answer should show. On the *Home* tab on the *Ribbon* in the *Editing* group locate the button that looks like this: 

To use the *Sum* function click on the picture on the button. To use the *Average*, *Min*, or *Max* functions, click on the down arrow on the right side of the button and select the function from the list. Excel will try to “guess” the group of cells to use in the function by surrounding them with moving dashed lines. If Excel guessed correctly, just press the *Enter* key on the keyboard. IF Excel guesses WRONG, use your mouse pointer to select the correct group of cells and then press the *Enter* key.

Relative Cell References

Relative Cell References adjust when formulas containing them are copied or AutoFilled. For example, in the spreadsheet below the formula in cell D2 is =B2*C2 which is saying take the two cells to the left of D2 and multiply the contents.

	A	B	C	D
1		Quantity	Cost	Total Cost
2	Desks	5	200	=B2*C2
3	Chairs	2	300	
4	Lamps	10	50	
5	Sofas	6	300	
6				

When the formula from D2 is copied to D3, D4, and D5, Excel adjusts the cell references to match the location for that row.

	A	B	C	D
1		Quantity	Cost	Total Cost
2	Desks	5	200	=B2*C2
3	Chairs	2	300	=B3*C3
4	Lamps	10	50	=B4*C4
5	Sofas	6	300	=B5*C5
6				

Absolute Cell References

An Absolute Cell Reference does NOT change when the formula is copied or AutoFilled to a new cell. When using Absolute References in formulas, type dollar signs before the letter and before the number of the cell name, i.e. \$B\$25.

Headers & Footers

The use of headers and footers allows you to place information in the top margin area (header) or the bottom margin area (footer) of the printed pages.

To access the Header and Footer areas:

1. Click on the *Insert* tab on the *Ribbon* and then click on the *Header & Footer* command in the *Text* group. The work screen will now change and you should be on the *Header & Footer Design* tab on the *Ribbon*.
2. In each header or footer, you will be able to place information in three areas: left side, center, and right side. Click in the area to activate it. To move between header and footer, click on the *Go to Header/Footer* commands in the *Navigation* group.
3. You can insert the pre-formatted *Header & Footer Elements* by clicking on them in the *Ribbon*.

NOTE: You will not see header and footer information on the Excel worksheets in *Normal* view. You will only see them in *Page Layout* view, on the printed page, or when using *Print Preview* to view the pages before printing.

