


Advance Excel Assignment 2

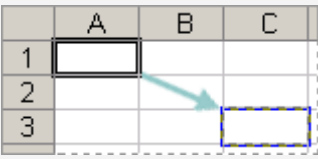
1. What does the dollar(\$) sign do?

->\$ symbol in Excel locks a specific cell or rows or columns in a worksheet. The shortcut to lock down a reference in Excel is pressing ALT + F4. This feature is used while working on formulas when we do not want the reference to be changed when copying or dragging the formula to other cell references.

2. How to Change the Reference from Relative to Absolute (or Mixed)?

1. Select the cell that contains the formula.
2. In the formula bar  , select the reference that you want to change.
3. Press F4 to switch between the reference types.

The table below summarizes how a reference type updates if a formula containing the reference is copied two cells down and two cells to the right.

For a formula being copied:	If the reference is:	It changes to:
	\$A\$1 (absolute column and absolute row)	\$A\$1 (the reference is absolute)
	A\$1 (relative column and absolute row)	C\$1 (the reference is mixed)
	\$A1 (absolute column and relative row)	\$A3 (the reference is mixed)
	A1 (relative column and relative row)	C3 (the reference is relative)

3. Explain the order of operations in excel?

->When evaluating a formula, Excel follows a standard math protocol called "order of operations". In general, Excel's order of operation follows the acronym PEMDAS (Parentheses, Exponents, Multiplication, Division, Addition, Subtraction) but with some customization to handle the formula syntax in a spreadsheet.

First, any expressions in parentheses are evaluated. Parentheses essentially override the normal order of operations to ensure certain operations are performed first.

Next, Excel will resolve references. This involves replacing cell references like A1 with the value from the cell, as well as evaluating range references like A1:A5, which become arrays of values. Other range operations like union (comma) and intersection (space) also happen at this time.

Next, Excel will perform exponentiation, negation, and percent conversions (in that order), followed by multiplication and division, addition and subtraction, and concatenation. Finally, Excel will evaluate logical operators, if present.

In summary, Excel solves formulas in the following order:

1. Parentheses
2. Reference operators
3. Exponents
4. Negation
5. Percent
6. Multiplication and Division
7. Addition and Subtraction
8. Concatenation
9. Logical operators

Note: If a formula contains multiple operators with the same priority (e.g. multiplication and division, or addition and subtraction), Excel will evaluate the operators from left to right.

B5	✕	✓	<i>fx</i>	1		
	A	B	C	D	E	F
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
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16						

Order of Operations				
Order	Symbols	Operation	Example	
1	()	Parentheses	=(5-2)*4 = 12	
2	:,	Reference operators	=SUM(A1:A5)	
3	-	Negation	=-3^2 = 9	
4	%	Percent	=5%*100 = 5	
5	^	Exponentiation	=5^2*2 = 50	
6	*/	Multiplication and Division	=7-6/2 = 4	
7	+ -	Addition and Subtraction	=6/2+1 = 4	
8	&	Concatenation	="score: "&5+1 = score: 6	
9	> < <=	Logical comparisons	=3^2>5+3 = TRUE	

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4. What, according to you, are the top 5 functions in excel and write a basic syntax for any of two?

->These are the 5 basic Excel functions that everyone should know:

1. [The VLookup Function](#)
2. [The Concatenate Function](#)
3. [Text to Columns](#)
4. [Remove Duplicates](#)
5. [Pivot Tables](#)

VLookup Formula-> =VLOOKUP(lookup_value,table_array,col_index_num,[range_lookup])

Concatenate Formula-> =CONCATENATE(text1,text2,...)

5. When would you use the subtotal function?

->The SUBTOTAL Function in Excel allows users to create groups and then perform various other Excel functions such as SUM, COUNT, AVERAGE, PRODUCT, MAX, etc. Thus, the SUBTOTAL function in Excel helps in analyzing the data provided.

6. What is the syntax of the vlookup function? Explain the terms in it?

-> Formula -> =VLOOKUP(lookup_value,table_array,col_index_num,[range_lookup])

lookup_value: The cell where the formula can find the information that it needs to look up in your primary table.

table_array: The table the formula should search and pull information from.

col_index_num: This is your way of telling the formula what information you want it to bring back for you.

[range_lookup]: This is a logical section of the formula, where the options are *TRUE* or *FALSE*. If you put *TRUE*, the formula will return a value based on the closest match to your lookup value, even if it's not the exact one. If you put *FALSE*, then it'll only return a value if it finds the exact lookup value you referenced.