

Advance Excel Assignment 2

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

In Excel, a dollar sign can denote a currency format, but it has another common use: indicating absolute cell references in formulas.

There are three types of references in Excel:

In **relative references**, you don't use a dollar (\$) sign in the references at all.

In **absolute reference**, you use the dollar sign in twice in a reference (such as \$C\$3).

In **mixed references**, you use the dollar sign (\$) only once (such as \$C3 or C\$3)

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

Spreadsheet formulas are defaulted as a relative cell reference. When a formula in a cell is copied to another cell, it changes to match the new cell. In some situations, you may need to have the formula stay the same and not change, which is known as an absolute cell reference.

- Relative reference

=SUM(A1:A3)

Changing a cell from a relative to an absolute reference can be done by following the steps below:

- Highlight the cell containing the formula you want to have changed to an absolute or relative reference.
- Click the formula box (shown below) or highlight the formula and press the F4 key to switch between an absolute and relative cell reference.

- Absolute reference

=SUM(\$A\$1:\$A\$3)

If you want to write manually or create an absolute reference, use the "\$" symbol in your formula. Below is a basic example demonstrating the difference between a basic relative and absolute reference.

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(**P**arentheses, **E**xponents, **M**ultiplication, **D**ivision, **A**ddition, **S**ubtraction) Or BODMAS(**b**rackets, **o**rders, **d**ivision, **m**ultiplication, **a**ddition, **s**ubtraction)but with some customization to handle the formula syntax in a spreadsheet.

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

Top 5 Functions:

SUM, MIN, MAX, AVERAGE, COUNT

Basic syntax of SUM:




This basic Excel formula is used to get the sum of the value in one or more cells or ranges.

=SUM(




SUM(number1, [number2], ...)

Example

=SUM(A1:A5)

B1		:				=SUM(A1:A5)
	A	B	C	D		
1	10	=SUM(A1:A5)				
2	5					
3	7					
4	9					
5	10					
6						

Result = 41 (See Image below)

B1		:				=SUM(A1:A5)
	A	B	C	D		
1	10	41				
2	5					
3	7					
4	9					
5	10					
6						

Basic syntax of COUNT:

This basic Excel function counts the numeric value in one or more cells or ranges.

=COUNT(
 COUNT(value1, [value2], ...)

Example:

=COUNT(A1:A5)

SUM				
✕ ✓ <i>fx</i> =COUNT(A1:A5)				
	A	B	C	D
1	10	=COUNT(A1:A5)		
2	5			
3	A			
4	9			
5	10			
6				

Result = 4 (This will exclude cell A3 since this formula calculates the only numeric value. Please see the image below).

5. When would you use the subtotal function?

Subtotals are calculated with a summary function, such as Sum or Average, by using the SUBTOTAL function. You can display more than one type of summary function for each column. Grand totals are derived from detail data, not from the values in the subtotals.

- The SUBTOTAL function ignores any rows that are not included in the result of a filter, no matter which function_num value you use.
- The SUBTOTAL function is designed for columns of data, or vertical ranges. It is not designed for rows of data, or horizontal ranges

SUBTOTAL(function_num,ref1,[ref2],...)

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

Syntax

The syntax for the VLOOKUP function in Microsoft Excel is:

=VLOOKUP(**lookup_value**, **table_array**, **col_index_num**, [range_lookup])

Parameters or Arguments

Lookup_value: Select the cell where search values will be entered.

Table_array: The table range, including all cells in the table.

Col_index_num: The data which is being looked up. The input is the number of the column, counted from the left

Range_lookup: TRUE if numbers (1) or FALSE if text (0).