

# Advance Excel Assignment 2

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

**Ans-** Dollar(\$) is used to create absolute references in a formula which refers to a fixed cell or a range that does not change when the formula is copied or filled to other cells.

There are 2 types of references-

a) Absolute Column Reference- when dollar sign is put before column then column remains static but row changes. E.g.- \$B1

b) Absolute row reference- when a dollar sign is put before a row then row remains static but a column changes. E.g.- B\$1.

To fix both rows and columns dollar sign can be put before both of them respectively.

Annual Salary	Monthly Salary	Medical per	Loan per month
=B3	=B14/12	=C14*\$C\$6	=D14*\$C\$7
=B14+\$C\$10	=B15/12	=C15*\$C\$6	=D15*\$C\$7
=B15+\$C\$10	=B16/12	=C16*\$C\$6	=D16*\$C\$7

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

**Ans-** Dollar(\$) sign is used to change reference from relative to absolute or mixed.

### Steps to change relative to absolute reference

>Select cell range containing formula>place dollar sign before row and column >Click enter

## Cell Reference in Excel

I2      fx      =G2*H2					G2      fx      =SUMIFS(\$C\$2:\$C\$17,\$A\$2:\$A\$17,\$F2,\$B\$2:\$B\$17,G\$1)				
1	Product	Unit Price	Units Sold	\$	1	Sales Manager	Jan	Feb	Mar
2	Product-1	2,956.00	20	3	2	Manisha	9,965.00	53,728.00	
3	Product-2	3,956.00	21	10	3	Shalu	4,994.00	76,055.00	
4	Product-3	4,956.00	22	6	4	Neelika	3,145.00	63,099.00	
5	Product-4	2,956.00	22	6	5	Ruchi	89,685.00	15,164.00	31,152.00
6	Product-5	5,956.00	23	13					
7	Product-6	6,956.00	24	16					
8	Product-7	7,956.00	1						
9	Product-8	8,956.00	7	6					
10	Product-9	9,956.00	10	9					
11	Product-10	1,056.00	11	1					
12									

**Relative Cell Reference**: Points to the formula `=G2*H2` in the formula bar.

**Mixed Cell Reference**: Points to the formula `=SUMIFS($C$2:$C$17,$A$2:$A$17,$F2,$B$2:$B$17,G$1)` in the formula bar.

**Absolute Cell Reference**: Points to the formula `=A$1` in the formula bar.

3. Explain the order of operations in excel?

**Ans-** Order of operations determines the sequence in which operations are performed within a formula. Its is as follows

a)Parenthesis()- they are calculated first

b)Exponent- to perform exponential calculations, denoted by ^

c)Multiplication and division- denoted by \* and /

d)Addition and subtraction- denoted by + and -

e)Concatenation

f)Logical operators

B5

1

A

B

C

D

E

F

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

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

EXCELJET

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

**Ans-** Excel offers several functions that perform calculations by using specific values. Top 5 functions in excel are

a)Count- to count number of cells in a range

b)Sum- adds up range of cells

c)Average- calculates average of range of cells

d)If- performs logical tests and returns different values based on result

e)VLOOKUP- allows to search across columns

Basic syntax of any 2 functions

a)Sum- to add values in 4 cells B1, B2, B3, B4 the formula would be  
= sum(B1,B2,B3,B4)

b) Count- to count values in cell range A1 to A32, the formula would be  
= count(A1:A32)

# Basic Excel Formulas

The screenshot displays the Microsoft Excel ribbon with the 'Formulas' tab selected. The 'Statistical' group is expanded, showing a list of functions. Several function callouts are visible, each showing the function name and its arguments in parentheses. The callouts are: '=AVERAGE(AVERAGE(number1, [number2], ...))', '=SUM(SUM(number1,number2,))', '=MIN(MIN(number1, [number2], ...))', '=MAX(MAX(number1, [number2], ...))', '=COUNT(value1,value2,)', '=COUNTA(value1,value2,)', '=COUNTBLANK(range)', '=LEN(LEN(text))', and '=TRIM(TRIM(text))'. The 'Formulas' tab is highlighted in yellow.

5. When would you use the subtotal function?

**Ans-** Useful to perform calculations on a range of data while ignoring any sub

Totals while ignoring any nested subtotals in a range. It is used when

a)Dynamic Calculations- when underlying data changes

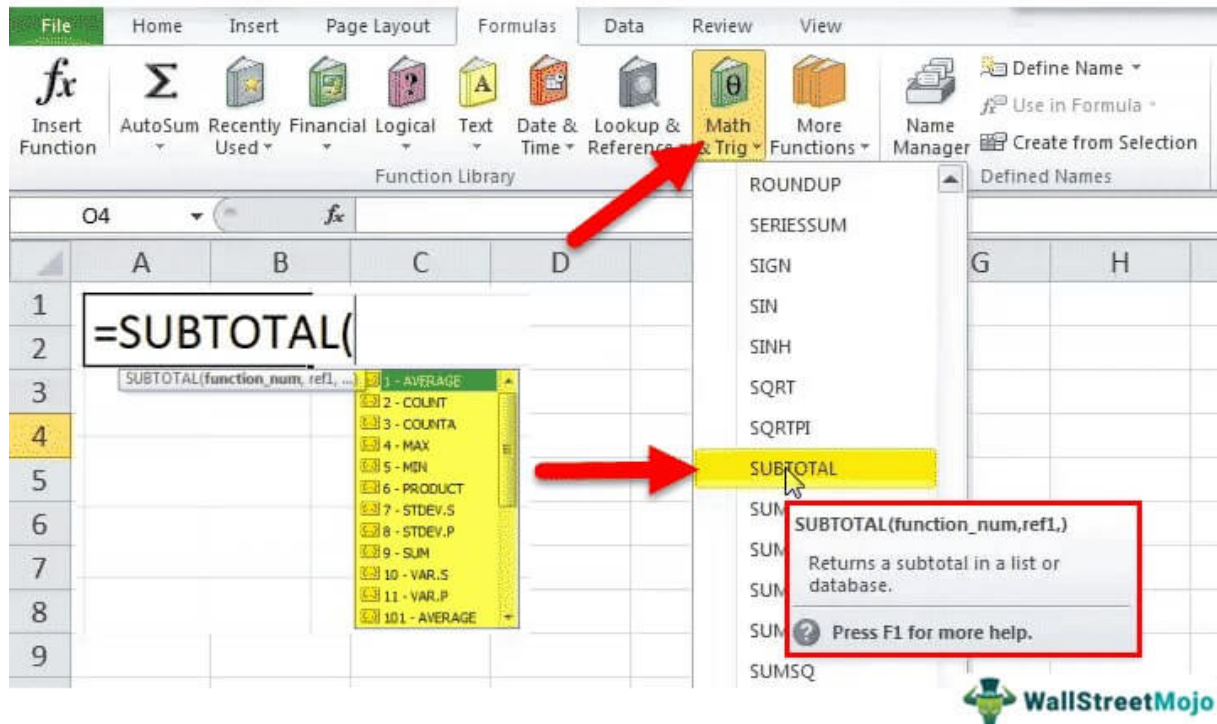
b)Multiple calculations- multiple calculations on same range of data

c)Filtered data- subtotal function automatically adjusts its calculations based

on visible rows after applying filter

d)Grouped data- data grouped in hierarchical structure

# SUBTOTAL in Excel





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

**Ans-** VLOOKUP or Vertical lookup is a function in excel which helps in

searching a value in leftmost column of a cell in vertical manner. Syntax of

VLOOKUP is

**=VLOOKUP(lookup\_value, table\_array, col\_index\_num, [range\_lookup])**

**Terms in syntax**

a)Lookup\_value: Select the cell where search values will be entered.

b)Table\_array: The table range, including all cells in the table.

c)Col\_index\_num: The data which is being looked up. The input is the number of the column, counted from the left:

d)Range\_lookup: TRUE if numbers (1) or FALSE if text (0).

## VLOOKUP Examples in Excel

**Example 1:**

Find the price of the dress that is Medium in size and is a Trouser.

**Solution:**

Step 1: Select the cell where you want to display the result. In this case, it is cell F2.

Step 2: Type the formula `=VLOOKUP(E2,B1:C9,2,FALSE)` in the formula bar. Here, E2 is the lookup value (Medium), B1:C9 is the table array, 2 is the column index number (Price), and FALSE is the range lookup option.

Step 3: Press the Enter key. The result 7465 will be displayed in cell F2.

**Example 2:**

Find the marks of the student whose name is Extra Large and is wearing a 3XL shirt.

**Solution:**

Step 1: Select the cell where you want to display the result. In this case, it is cell G2.

Step 2: Type the formula `=VLOOKUP(F2,A1:D7,4,FALSE)` in the formula bar. Here, F2 is the lookup value (Extra Large), A1:D7 is the table array, 4 is the column index number (Marks), and FALSE is the range lookup option.

Step 3: Press the Enter key. The result 56 will be displayed in cell G2.



