**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.

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

[Spreadsheet](https://www.computerhope.com/jargon/s/spreadsheet.htm) [formulas](https://www.computerhope.com/jargon/f/formula.htm) are defaulted as a relative [cell](https://www.computerhope.com/jargon/c/cell.htm) 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.

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

1. Open Microsoft Excel.
2. Highlight the cell containing the formula you want to have changed to an absolute or relative reference.
3. Click the formula box (shown below) or highlight the formula and press the F4 key to switch between an absolute and relative cell 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 (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](https://exceljet.net/glossary/array) 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](https://exceljet.net/glossary/concatenation). Finally, Excel will evaluate [logical operators](https://exceljet.net/glossary/logical-operators).

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

## **The SUM Function**

The sum function is the most used function when it comes to computing data on Excel. This function works to sum a group of numbers in a specific set of cells. This means you don’t need to type a long cumbrous formula just to calculate the sum of all the data you need. Because of its popularity, newer versions of Microsoft Excel have a button specifically for this function.

## **The TEXT Function**

Text function is a useful tool that helps convert a date (or number) into a text string in a particular format. It falls in the category of string formulas that converts numerical values to a string. It is handy when users need to view numeric data in a readable format. Take note that the “TEXT” formula only works to convert numeric values to text. Therefore, its results cannot be calculated.

## **3. The VLOOKUP Function**

VLookup is powerful Excel function that is often overlooked. Users will find it useful when they need to find specific data on a large table. You can also use VLookup to search for names, phone number, or specific data on your sheet. Instead of manually looking for the names and wasting time scrolling through hundreds of data, the [VLookup function](http://spreadsheeto.com/vlookup/) makes this process faster and more efficient.

**Syntax:**The syntax formula for the average function is “AVERAGE” (number1, number2, etc.).

* “Number 1” refers to the first number in the range where you want the average.
* “Number 2” is the additional reference of the average range. You can get an average of up to a maximum of 255 cells.

## **4.The AVERAGE Function**

The average function is an extremely useful tool for getting the average value in a range of cells. Like the sum function, it is frequently used in computing and analyzing data on spreadsheet. Basically, the average function works to find the “arithmetic mean” for a group of cells. Aside from the average function, Excel also has the median and mode function.

## **5. The CONCATENATE Function**

This function is a good time saver when you need to combine data from 2 or more cells. Unlike the merge tool which physically merges two or more cells into a single cell, the concatenate function only combines the contents of the combined cells. In the latest version of Excel ( 2016), the concatenate function has been replaced with concat function and will be incorporated in more future versions of Excel.

**Syntax:**The syntax formula for the concatenate function is “CONCATENATE” (text1, [text2…text\_n]),

* “Text1, Text2…text\_n” are the data you want to combine.

**5.When would you use the subtotal function?**

Sometimes, we need data based on different categories. SUBTOTALS help us to get the totals of several columns of data broken down into various categories.

For example, let’s consider garment products of different sizes manufactured. The SUBTOTAL function will help you to get a count of different sizes in your warehouse.

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

The ****VLOOKUP**** function is a premade function in Excel, which allows searches across columns.

It is typed =VLOOKUP and has the following parts:

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

****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).