**1) What is MS word?**

**MS word**, also known as Microsoft Word is a widely used commercial word processor designed by Microsoft and is a component of the Microsoft Office suite of productivity software, but can also be purchased as a stand-alone product. It was initially launched in 1983 and has since been revised various times. It is available for both Windows and Macintosh operating systems. The most recent web-based version of Microsoft Word is Office 365, but the software version of Microsoft Office 2019 includes Word 2019.

**[2) What are the steps to create a macro in MS Word?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled2)**

Here are the steps to create a macro in MS Word:

* On the view tab select macros record macros and give the macro a name in the record macro dialog box.
* Click on the keyboard button to assign a keyboard shortcut to the macro.
* Type a keyboard shortcut combination ctrl+R and then click the assign button.
* Click the close button.
* To stop recording choose macros to stop recording.

**[3) How is cross-referencing created in MS Word?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled3)**

  To create word referencing in MS Word, the following steps are followed;

* After opening word documents, bring the cursor where cross-referencing is to be inserted.
* Click on “Reference tab”.
* From the caption group, click on “Cross reference”.
* A window will be visible asking for “Reference type- Heading, figure, and foot Note etc.
* Select any desired option and click insert.
* Bring the cursor where there is a reference link, press cntrl+click, users will be direct to the reference object.

**[4) How is editing restricted in MS Word?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled4)**

In order to restrict the editing, following points needs to be considered.

* Select the review tab, click on restrict editing.
* Automatically a pop up will appear on the right of the screen.
* Go to editing restriction, select the drop down from where restriction has to be made e.g. Comment, track changes, filling in the form, or read-only.
* A dialog box will appear, where users will be asked to set a password for the document to retain the access limit within control.

**[5) How is the indent amount customized?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled5)**

For customizing, select the text, which has to be intent. Under the head of the page layout in paragraph section, indent left or right can be selected.

**[6) How is watermark created in MS word?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled6)**

To create a watermark, Go on page layout tab in page background click on the watermark and select custom watermark. Select a picture watermark option and can be customized accordingly.

**[7) What is the shortcut key option to insert a page break?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled7)**

For the shortcut option to insert a page break, follow the step

**<Ctrl> + <Enter>**

**[8) How can the user accept or reject track changes in MS Word?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled8)**

 To accept or reject track changes in MS Word, the following steps need to be taken into consideration.

* Select track changes made in the documents.
* From the review tab, click ‘accept’ or ‘reject’ command, the markup will disappear and word will automatically go to the next change.

**[9) How can users spot the difference between two similar documents?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled9)**

 To spot the difference between two similar documents click on compare buttons and select compare from the review tab in compare group in the ribbon.

**[10) How can users add to label the values of individual chart elements?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled10)**

   Click on add “data labels” in order to label the values of individual chart elements.

**[11) How can users insert an online picture in word documents in MS Word?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled11)**

  To insert a picture from an online source like from Facebook or Google following steps need to be considered:

* Bring the cursor where the image has to be inserted.
* Under the Insert tab, click on the online picture option
* A dialog box with insert option will be appearing.
* Type the image name or insert the keyword.
* Click on the image, which has to be inserted.
* Right, Click and select insert from the drop-down menu.7

**[13) How is screenshot in MS Word taken?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled13)**

In the illustration option, go to the INSERT option. Click on the icon with camera click on screen clipping option. Select/ choose the area for which screenshot need to be taken. Copy and paste the picture.

**[14) How can a break be deleted in the column?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled14)**

If a column is not required then it can easily be removed or deleted from the documents. To delete such column below stated steps needs to be considered.

* Click on show /hide button on the home tab in a paragraph to display non-printing characters.
* Right-click on section break
* Press the delete button from keyboard. Hence column break will be removed.

**[15) How can hyperlink be created using a shortcut key?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled15)**

 In order to create a hyperlink, click Cntrl+K shortcut from the keyboard.

**[16) How to add footnote and endnote in a word?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled16)**

  In order to add footnote or endnote in word brings the cursor at the end of the page and then click on the reference option and click on insert footnotes. Similarly, endnote can be added by clicking on insert endnote.

**[17) How are PDF documents edited in a word?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled17)**

 To edit the PDF documents following steps need to be considered,

* Click on the menu file.
* Click on open icon.
* Select the PDF file from the local disk.
* Select the file and open it.
* A dialog box will appear on the screen that displays information click on ok.
* If the word is displayed on a protected view bar then click on enable editing.
* Now the PDF file can be edited with the word, once required changes are done file needs to be saved in word format.

**[18) Is it possible to insert video into a word document? If yes how can the users insert video into a word file?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled18)**

In order to insert video follow below-stated steps:

* Go to insert an online video media option.
* Add the keyword or name of the video to be inserted.
* Press enter click on the video, which is to be added.
* Or else download the video and click on the insert option.
* The video will appear in the word as an image and when the download is complete, click on the play button, the video will be enabled.

**[19) How can users collapse or expand parts of a document?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled19)**

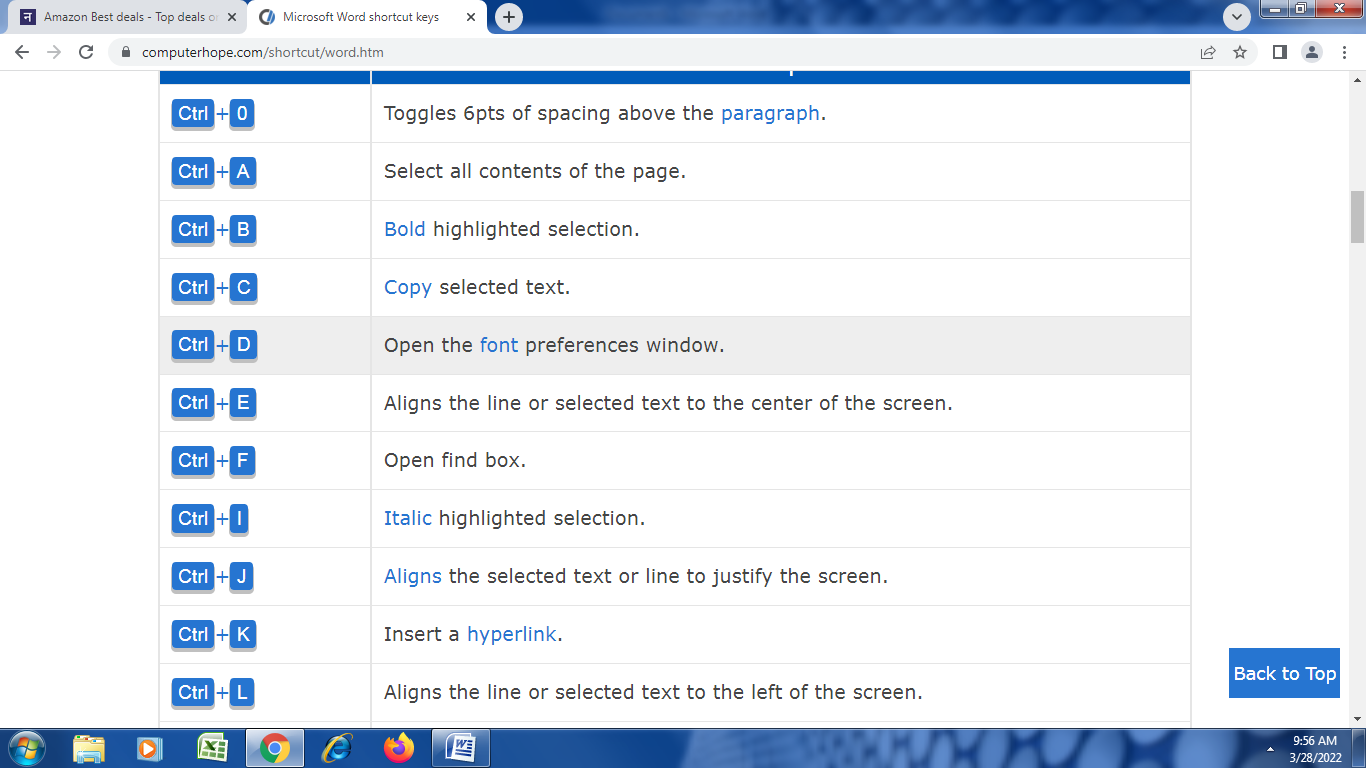
 In order to see only a part of the document required, this function can be used. For this, a heading has to be given like heading 1 or heading 2 from the main menu. After doing this, a small icon will appear on the corner of the heading. Once the icon is clicked it will merge the content and re-clicking on the same will expand the content back to the normal format.

**[20) What is the procedure for creating a hanging indent?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled20)**

 In order to create hanging indent open the Paragraph dialog box, select “special” list select hanging specify an amount in “by” box.

**[21) Is there any shortcut to move the insertion point to the beginning of the documents?](https://www.onlineinterviewquestions.com/microsoft-word-interview-questions/" \l "collapseUnfiled21)**

To move the insertion point to the beginning of the document the shortcut key used to <Ctrl> +<Home>



**Use mail merge for bulk email, letters, labels, and envelopes**

Mail merge lets you create a batch of documents that are personalized for each recipient. For example, a form letter might be personalized to address each recipient by name. A data source, like a list, spreadsheet, or database, is associated with the document. Placeholders--called merge fields--tell Word where in the document to include information from the data source.

You work on the main document in Word, inserting merge fields for the personalized content you want to include. When the mail merge is complete, the merge document will generate a personalized version of itself for each name in the data source.

**[Windows](javascript:)****[macOS](javascript:)****[Web](javascript:)**

Data sources

Your first step in setting up a mail merge is to pick the source of data you'll use for the personalized information. Excel spreadsheets and Outlook contact lists are the most common data sources, but any database that you can connect to Word will work. If you don't yet have a data source, you can even type it up in Word, as part of the mail merge process.

For details about data sources, see [Data sources you can use for a mail merge](https://support.microsoft.com/en-us/office/data-sources-you-can-use-for-a-mail-merge-9de322a6-f0f9-448d-a113-5fab317d9ef4).

**Excel or Outlook**

If you know you'll be using Excel or Outlook as the source of your data, see:

* [Mail merge using an Excel spreadsheet](https://support.microsoft.com/en-us/office/mail-merge-using-an-excel-spreadsheet-858c7d7f-5cc0-4ba1-9a7b-0a948fa3d7d3)
* [Use Outlook contacts as a data source for a mail merge](https://support.microsoft.com/en-us/office/use-outlook-contacts-as-a-data-source-for-a-mail-merge-4cfcf038-1bc4-4a73-b5e3-a3303302db13)

Document types

Word provides tools for incorporating your data into the following kinds of documents. Follow the links for details about each type:

* **Letters**that include a personalized greeting. Each letter prints on a separate sheet of paper.  
  [Create and print a batch of personalized letters](https://support.microsoft.com/en-us/office/use-mail-merge-to-personalize-letters-d7686bb1-3077-4af3-926b-8c825e9505a3)
* **Email**where each recipient's address is the only address on the To line. You'll be sending the email directly from Word.

[Create and send email messages](https://support.microsoft.com/en-us/office/use-mail-merge-to-send-bulk-email-messages-0f123521-20ce-4aa8-8b62-ac211dedefa4)

* **Envelopes** or **Labels**where names and addresses come from your data source.

[Create and print a batch of envelopes for mailing](https://support.microsoft.com/en-us/office/mail-merge-with-envelopes-654d563e-e9d6-47b5-b7bd-539064938b9d)

[Create and print sheets of mailing labels](https://support.microsoft.com/en-us/office/print-labels-for-your-mailing-list-276a2cd1-74d2-43d0-ab5a-b90460358ad5)

* **Directory** that lists a batch of information for each item in your data source. Use it to print out your contact list, or to list groups of information, like all of the students in each class. This type of document is also called a catalog merge.

**Excel**

**1) What is Microsoft Excel?**

Microsoft Excel is an electronic spreadsheet application that enables users to store, organize, calculate and manipulate the data with formulas using a spreadsheet system broken up by rows and columns. It also provides the flexibility to use an external database to do analysis, make reports, etc. thus saving lots of time.

**2) What is ribbon?**

Ribbon refers to the topmost area of the application that contains menu items and toolbars available in MS-Excel. Ribbon can be shown/hidden using CTRL+F1. The ribbon runs on the top of the application and is the replacement for the toolbars and menus. The ribbons have various tabs on the top, and each tab has its own group of commands.

**3) Explain Spreadsheet and its Basics.**

Spreadsheet can be compared to a paper ledger sheet. It consists of rows and columns and their intersection called cells.

**4) How many data formats are available in Excel? Name some of them.**

Eleven data formats are available in Microsoft Excel for data Storage. Example:

* Number – Stores data as a number
* Currency – Stores data in the form of currency
* Date – Data is stored as dates
* Percentage – Stores numbers as a percentage
* Text Formats – Stores data as string of texts

**5) Specify the order of operations used for evaluating formulas in Excel.**

The order of operations in Microsoft Excel is same as in standard mathematics. It’s defined by the term “PEMDAS” or “BEDMAS”.

* Parentheses or Brackets
* Exponent
* Multiplication
* Division
* Addition
* Subtraction

**6) How can you wrap the text within a cell?**

You must select the text you want to wrap, and then click wrap text from the home tab and you can wrap the text within a cell.

**7) Explain Macro in MS-Excel.**

Macros are used for iterating over a group of tasks. Users can create macros for their customized repetitive functions and instructions. Macros can be either written or recorded depending on the user.

**8)Which are the two macro languages in MS-Excel?**

XLM and VBA (Visual Basic Applications). Earlier versions of Excel used XLM. VBA was introduced in Excel 5 and mostly used now.

**9) Is it possible to prevent someone from copying the cell from your worksheet?**

Yes, it is possible. To protect your worksheet from getting copied, you need to go into Menu bar >Review > Protect Sheet > Password. By entering a password, you can secure your sheet from getting copied by others.

**10) What are charts in MS-Excel?**

To enable graphical representation of the data in Excel, charts are provided. A user can use any chart type, including column, bar, line, pie, scatter, etc. by selecting an option from Insert tab’s Chart group.

**11) How can you sum up the Rows and Column number quickly in the Excel sheet?**

By using SUM function, you can get the total sum of the rows and columns, in an Excel worksheet.

**12) Explain few useful functions in Excel.**

Following are the functions available in Excel for manipulating the data:

* Math and Financial Functions – SQRT, DEGREE, RAND(), GCD
* Logical Functions – IF, AND, FALSE, TRUE
* Date and Time functions – NOW(), DATEVALUE(), WEEKDAY(NOW())
* Index Match – VLOOKUP and INDEX MATCH
* Pivot tables

**13) What does a red triangle at the top right of a cell indicate?**

The red triangle indicates that some comment is associated with the cell. Hover the mouse over it, and you can read the full comment.

**14) How can you add a new Excel worksheet?**

To add a new Excel worksheet, you should insert worksheet tab at the bottom of the screen.

**15) What is the use of NameBox in MS-Excel?**

Name Box is used to return to a particular area of the worksheet by typing the range name or cell address in the name box.

**16) How can you resize the column?**

To resize the column, you should change the width of one column and then drag the boundary on the right side of the column heading till the width you want. The other way of doing it is to select the Format from the home tab, and in Format you have to select AUTOFIT COLUMN WIDTH under cell section. On clicking on this, the cell size will get formatted.

**17) Explain pivot tables and its uses.**

A pivot table is a tool that allows for quick summarization of large data. It automatically performs a sort, count, total or average of the data stored in the spreadsheet and displays result in another spreadsheet. It saves a lot of time. Allows to link external data sources to our Excel.

**18) What are three report formats that are available in Excel?**

Following are the types of report formats

* Compact
* Report
* Tabular

**19) How would you provide a Dynamic range in “Data Source” of Pivot Tables?**

To provide a dynamic range in “Data Source” of Pivot tables, first, create a named range using offset function and base the pivot table using a named range created in the first step.

**20) Is it possible to make Pivot table using multiple sources of data?**

If the multiple sources are different worksheets, from the same workbook, then it is possible to make Pivot table using multiple sources of data.

**21) Which event do you use to check whether the Pivot Table is modified or not?**

To check whether the pivot table is modified or not we use “PivotTableUpdate” in worksheet containing the pivot table.

**22) How can you disable automatic sorting in pivot tables?**

To disable automatic sorting in pivot tables:

Go To > More Sort Options > Right Click ‘Pivot tables’ > Select ‘sort menu’ > select ‘More Options’ > deselect ‘Sort automatically’.

**23) What is Freeze Panes in MS-Excel?**

To lock any row or column, freeze panes is used. The locked row or column will be visible on the screen even after we scroll the sheet vertically or horizontally.

**24) What could you do to stop the pivot table from loosing the column width upon refreshing?**

Format loss in a pivot table can be stopped simply by changing the pivot table options. Under the “Pivot Table Options” turn on the “Enable Preserve Formatting” and disable “Auto Format” option.

**25) Explain workbook protection types in Excel.**

Excel provides three ways to protect a workbook:

* Password protection for opening a workbook
* Protection for adding, deleting, hiding and unhiding sheets
* Protection from changing size or position of windows.

**26) Explain the difference between SUBSTITUTE and REPLACE function in MS-Excel?**

The SUBSTITUTE function substitutes one or more instances of old text with the new text in a string.

**Syntax:**SUBSTITUTE(text, oldText, newText, [instanceNumber])

**Example:**Let text at A2 be Guru99,Guru99

SUBSTITUTE(A2,”9″,”8″,1) =>Guru89,Guru99

SUBSTITUTE(A2,”9″,”8″,2) =>Guru88,Guru99

SUBSTITUTE(A2,”9″,”9″) =>Guru99,Guru99

The REPLACE function swaps part of the text string with another set of text.

**Syntax:**REPLACE(oldText, startNumber, NumberCharacters, newText)

**Example:**Let text at A2 be Guru99

REPLACE(A2,5,1,”00″) =>Guru009

**27) Difference between COUNT, COUNTA, COUNTIF and COUNTBLANK in Ms-Excel.**

COUNT is used to count cells containing numbers, dates, etc. any value stored as number excluding blanks.

COUNTA or Count All is used to count any cell value containing numbers, text, logical values, etc. any type of value excluding blanks.

COUNTBLANK count blank cells or cells with an empty string.

COUNTIF and COUNTIFS count cells matching a certain criteria.

**28) What is IF function in Excel?**

To perform the logic test IF function is performed. It checks whether certain conditions is true or false. If the condition is true, then it will give result accordingly if the condition is false then the result or out-put will be different.

Example: For example, you select the cell, and you want to display that cell as “Greater than five,” when value is true (=5 or 5) and “less than five” when value is false (<5). For that by using IF condition you can display result.

=IF (Logical test, value if true, value if false)

=IF (A1>5, “Greater than five, “Less than five”)

**29) Can we create shortcuts to Excel functions?**

Yes. ‘Quick Access Toolbar’ above the home button can be customized to display most frequently used shortcuts.

**30) What is the use of LOOKUP function in Excel?**

In Microsoft Excel, the LOOKUP function returns a value from a range or an array.

**31) How can you apply the same formatting to every sheet in a workbook in MS-Excel?**

Right Click ‘Worksheet tab’ > Choose ‘Select All Sheets’. Now any formatting done will be applied to the whole workbook. To apply to a particular group of sheets, select only those sheets that need formatting.

**32) What are left, right, fill and distributed alignments?**

Left /Right alignment align the text to left and right most of the cell.

Fill as the name suggests, fill the cell with same text repetitively.

Distributed, spread the text across the width of the cell.

|  |  |  |
| --- | --- | --- |
| **LEFT** | **FILL** | **DISTRIBUTED** |
| Ab | abababababababab | a b |
| A | aaaaaaaaaaaaaaaa | A |

**33) To move to the previous worksheet and next sheet, what keys will you press?**

To move to the previous worksheet, you will use the keys Ctrl + PgUp, and to move to the next sheet you will use keys Ctrl + PgDown.

**34) What filter will you use, if you want more than two conditions or if you want to analyze the list using database function?**

You will use Advanced Criteria Filter, to analyze the list or if more than two conditions should be tested.

**35) What is the quick way to return to a particular area of a worksheet?**

The quick way to return to a specific area of the worksheet is by using name box. You can type the cell address or range name in name box to return to a specific area of a worksheet.

**36) Which function is used to determine the day of the week for a date?**

WEEKDAY () returns the day of the week for a particular date counting from Sunday.

Example: Let date at A1 be 12/30/2016

WEEKDAY(A1,1) =>6

**37) What is the benefit of using formula in Excel sheet?**

Calculating the numbers in Excel sheet, not only help you to give the final ‘sum up’ of the number but, it also calculates automatically the number replaced by another number or digit. Through Excel sheet, the complex calculations become easy like payroll deduction or averaging the student’s result.

**38) What is the “What If” condition in Excel formulas?**

The “What If” condition is used to change the data in Microsoft Excel formulas to give different answers.

Example: You are buying a new car and want to calculate the exact amount of tax that will be levied on it then you can use the “What If” function. For instance, there are three cells A4,B4, and C4. First cell says about the amount, the second cell will tell about the percentage (7.5%) of tax and the final cell will calculate the exact amount of tax.

**39) How can you disable the automating sorting in pivot tables?**

To disable the automating sorting in pivot tables,

Go to > “More Sort Options”> Right Click “Pivot table” > Select “Sort” menu > Select “More Options” > Deselect the “Sort automatically when the report is created.”

**40) What is the AND function does in Excel?**

Like IF function, AND function also does the logical function. To check whether the output will be true or false the AND function will evaluate at least one mathematical expression located in another cell in the spreadsheet. If you want to see the output of more than one cells in a single cell, it is possible by using AND function.

Example: If you have two cells, A1 and A2, and the value you put in those two cells are >5 and you want result should display as ‘TRUE’ in cell B1 if value>5, and ‘False’ if any of those values<5. You can use AND function to do that.

**41) How cell reference is useful in the calculation?**

In order to avoid writing the data again and again for calculating purpose, cell reference is used. When you write any formula, for specific function, you need to direct Excel the specific location of that data. This location is referred as, cell reference. So, every time a new value added to the cell, the cell will calculate according to the reference cell formula.

## What is Function in Excel?

**FUNCTION IN EXCEL** is a predefined formula that is used for specific values in a particular order. Function is used for quick tasks like finding the sum, count, average, maximum value, and minimum values for a range of cells. For example, cell A3 below contains the SUM function which calculates the sum of the range A1:A2.

* **SUM** for summation of a range of numbers
* **AVERAGE** for calculating the average of a given range of numbers
* **COUNT** for counting the number of items in a given range

## The importance of functions

**Functions increase user productivity when working with excel**. Let’s say you would like to get the grand total for the above home supplies budget. To make it simpler, you can use a formula to get the grand total. Using a formula, you would have to reference the cells E4 through to E8 one by one. You would have to use the following formula.

= E4 + E5 + E6 + E7 + E8

With a function, you would write the above formula as

=SUM (E4:E8)

As you can see from the above function used to get the sum of a range of cells, it is much more efficient to use a function to get the sum than using the formula which will have to reference a lot of cells.

## Common functions

Let’s look at some of the most commonly used functions in ms excel formulas. We will start with statistical functions.

| **S/N** | **FUNCTION** | **CATEGORY** | **DESCRIPTION** | **USAGE** |
| --- | --- | --- | --- | --- |
| 01 | SUM | Math & Trig | Adds all the values in a range of cells | =SUM(E4:E8) |
| 02 | MIN | Statistical | Finds the minimum value in a range of cells | =MIN(E4:E8) |
| 03 | MAX | Statistical | Finds the maximum value in a range of cells | =MAX(E4:E8) |
| 04 | AVERAGE | Statistical | Calculates the average value in a range of cells | =AVERAGE(E4:E8) |
| 05 | COUNT | Statistical | Counts the number of cells in a range of cells | =COUNT(E4:E8) |
| 06 | LEN | Text | Returns the number of characters in a string text | =LEN(B7) |
| 07 | SUMIF | Math & Trig | Adds all the values in a range of cells that meet a specified criteria. =SUMIF(range,criteria,[sum\_range]) | =SUMIF(D4:D8,”>=1000″,C4:C8) |
| 08 | AVERAGEIF | Statistical | Calculates the average value in a range of cells that meet the specified criteria. =AVERAGEIF(range,criteria,[average\_range]) | =AVERAGEIF(F4:F8,”Yes”,E4:E8) |
| 09 | DAYS | Date & Time | Returns the number of days between two dates | =DAYS(D4,C4) |
| 10 | NOW | Date & Time | Returns the current system date and time | =NOW() |

## Numeric Functions

As the name suggests, these functions operate on numeric data. The following table shows some of the common numeric functions.

| **S/N** | **FUNCTION** | **CATEGORY** | **DESCRIPTION** | **USAGE** |
| --- | --- | --- | --- | --- |
| 1 | ISNUMBER | Information | Returns True if the supplied value is numeric and False if it is not numeric | =ISNUMBER(A3) |
| 2 | RAND | Math & Trig | Generates a random number between 0 and 1 | =RAND() |
| 3 | ROUND | Math & Trig | Rounds off a decimal value to the specified number of decimal points | =ROUND(3.14455,2) |
| 4 | MEDIAN | Statistical | Returns the number in the middle of the set of given numbers | =MEDIAN(3,4,5,2,5) |
| 5 | PI | Math & Trig | Returns the value of Math Function PI(π) | =PI() |
| 6 | POWER | Math & Trig | Returns the result of a number raised to a power. **POWER( number, power )** | =POWER(2,4) |
| 7 | MOD | Math & Trig | Returns the Remainder when you divide two numbers | =MOD(10,3) |
| 8 | ROMAN | Math & Trig | Converts a number to roman numerals | =ROMAN(1984) |

## String functions

These basic excel functions are used to manipulate text data. The following table shows some of the common string functions.

| **S/N** | **FUNCTION** | **CATEGORY** | **DESCRIPTION** | **USAGE** | **COMMENT** |
| --- | --- | --- | --- | --- | --- |
| 1 | LEFT | Text | Returns a number of specified characters from the start (left-hand side) of a string | =LEFT(“GURU99”,4) | Left 4 Characters of “GURU99” |
| 2 | RIGHT | Text | Returns a number of specified characters from the end (right-hand side) of a string | =RIGHT(“GURU99”,2) | Right 2 Characters of “GURU99” |
| 3 | MID | Text | Retrieves a number of characters from the middle of a string from a specified start position and length. **=MID (text, start\_num, num\_chars)** | =MID(“GURU99”,2,3) | Retrieving Characters 2 to 5 |
| 4 | ISTEXT | Information | Returns True if the supplied parameter is Text | =ISTEXT(value) | value – The value to check. |
| 5 | FIND | Text | Returns the starting position of a text string within another text string. This function is case-sensitive. **=FIND(find\_text, within\_text, [start\_num])** | =FIND(“oo”,”Roofing”,1) | Find oo in “Roofing”, Result is 2 |
| 6 | REPLACE | Text | Replaces part of a string with another specified string. **=REPLACE (old\_text, start\_num, num\_chars, new\_text)** | =REPLACE(“Roofing”,2,2,”xx”) | Replace “oo” with “xx” |

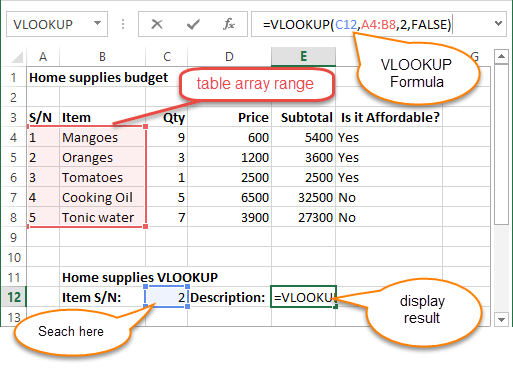
## Date Time Functions

These functions are used to manipulate date values. The following table shows some of the common date functions

| **S/N** | **FUNCTION** | **CATEGORY** | **DESCRIPTION** | **USAGE** |
| --- | --- | --- | --- | --- |
| 1 | DATE | Date & Time | Returns the number that represents the date in excel code | =DATE(2015,2,4) |
| 2 | DAYS | Date & Time | Find the number of days between two dates | =DAYS(D6,C6) |
| 3 | MONTH | Date & Time | Returns the month from a date value | =MONTH(“4/2/2015”) |
| 4 | MINUTE | Date & Time | Returns the minutes from a time value | =MINUTE(“12:31”) |
| 5 | YEAR | Date & Time | Returns the year from a date value | =YEAR(“04/02/2015”) |

## VLOOKUP function

The VLOOKUP function is used to perform a vertical look up in the left most column and return a value in the same row from a column that you specify. Let’s explain this in a layman’s language. The home supplies budget has a serial number column that uniquely identifies each item in the budget. Suppose you have the item serial number, and you would like to know the item description, you can use the VLOOKUP function. Here is how the VLOOKUP function would work.

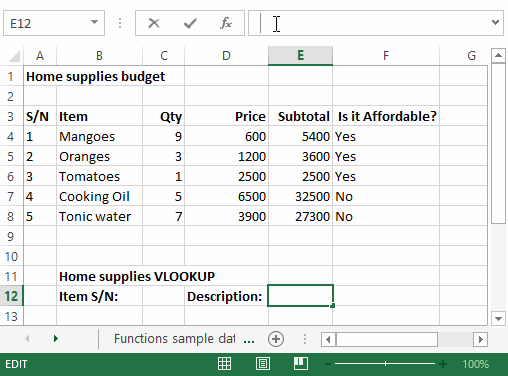


=VLOOKUP (C12, A4:B8, 2, FALSE)

**HERE,**

* "=VLOOKUP" calls the vertical lookup function
* "C12" specifies the value to be looked up in the left most column
* "A4:B8" specifies the table array with the data
* "2" specifies the column number with the row value to be returned by the VLOOKUP function
* "FALSE," tells the VLOOKUP function that we are looking for an exact match of the supplied look up value

The animated image below shows this in action



[**Download the above Excel Code**](https://docs.google.com/spreadsheets/d/1DyNw7uLpQcOVLF9SVjwKYozGyymWB4XZ/export?format=xlsx)

## Summary

Excel allows you to manipulate the data using formulas and/or functions. Functions are generally more productive compared to writing formulas. Functions are also more accurate compared to formulas because the margin of making mistakes is very minimum.

## Here is a list of important Excel Formula and Function

* SUM function = =SUM(E4:E8)
* MIN function = =MIN(E4:E8)
* MAX function = =MAX(E4:E8)
* AVERAGE function = =AVERAGE(E4:E8)
* COUNT function = =COUNT(E4:E8)
* DAYS function = =DAYS(D4,C4)
* VLOOKUP function = =VLOOKUP (C12, A4:B8, 2, FALSE)
* DATE function = =DATE(2020,2,4)