

## Basic Excel Formulas and Functions

**Excel Functions:** A formula is a mathematical expression that computes the value of a cell. Functions are predefined formulas that are already in Excel. Functions carry out specific calculations in a specific order based on the values specified as arguments or parameters. For example, =SUM (A1:A10). This function adds up all the values in cells A1 through A10.

### Basic Excel Formulas and Functions:

#### 1. SUM:

The SUM formula in Excel is one of the most fundamental formulas you can use in a spreadsheet, allowing you to calculate the sum (or total) of two or more values. To use the SUM formula, enter the values you want to add together in the following format: =SUM(value 1, value 2,.....).

**Example:** In the below example to calculate the sum of price of all the fruits, in B9 cell type =SUM(B3:B8). this will calculate the sum of B3, B4, B5, B6, B7, B8 Press "Enter," and the cell will produce the sum: 430.

#### 2. SUBTRACTION:

To use the subtraction formula in Excel, enter the cells you want to subtract in the format =SUM (A1, -B1). This will subtract a cell from the SUM formula by appending a negative sign before the cell being subtracted.

For example, if A3 was 300 and B3 was 225, =SUM(A1, -B1) would perform  $300 + -225$ , returning a value of 75 in D3 cell.

#### 3. MULTIPLICATION:

In Excel, enter the cells to be multiplied in the format =A3\*B3 to perform the multiplication formula. An asterisk is used in this formula to multiply cell A3 by cell B3.

For example, if A3 was 300 and B3 was 225, =A1\*B1 would return a value of 67500.

#### 4. DIVISION:

To use the division formula in Excel, enter the dividing cells in the format =A3/B3. This formula divides cell A3 by cell B3 with a forward slash, "/"

For example, if A3 was 300 and B3 was 225, =A3/B3 would return a decimal value of 1.333333333.

Division in Excel is one of the most basic functions available. To do so, highlight an empty cell, enter an equals sign, "=", and then the two (or more) values you want to divide, separated by a forward slash, "/" The output should look like this: =A3/B3, as shown in the screenshot above.

#### 5. AVERAGE:

The AVERAGE function finds an average or arithmetic mean of numbers. to find the average of the numbers type = AVERAGE(A3.B3,C3....) and press 'Enter' it will produce average of the numbers in the cell.

For example, if A3 was 300, B3 was 225, C3 was 180, D3 was 350, E3 is 400 then =AVERAGE(A3,B3,C3,D3,E3) will produce 291.

## **6. IF formula:**

In Excel, the IF formula is denoted as =IF(logical test, value if true, value if false). This lets you enter a text value into a cell "if" something else in your spreadsheet is true or false.

## **7. PERCENTAGE:**

To use the percentage formula in Excel, enter the cells you want to calculate the percentage for in the format =A1/B1. To convert the decimal value to a percentage, select the cell, click the Home tab, and then select "Percentage" from the numbers dropdown.

There isn't a specific Excel "formula" for percentages, but Excel makes it simple to convert the value of any cell into a percentage so you don't have to calculate and reenter the numbers yourself.

## **8. CONCATENATE:**

CONCATENATE is a useful formula that combines values from multiple cells into the same cell.

For example, =CONCATENATE(A3,B3) will combine Red and Apple to produce RedApple.

## **9. DATE:**

DATE is the Excel DATE formula =DATE(year, month, day). This formula will return a date corresponding to the values entered in the parentheses, including values referred to from other cells. For example, if A2 was 2019, B2 was 8, and C1 was 15, =DATE(A1,B1,C1) would return 15-08-2019.

## **10. TRIM:**

The TRIM formula in Excel is denoted =TRIM(text). This formula will remove any spaces that have been entered before and after the text in the cell. For example, if A2 includes the name "Virat Kohli" with unwanted spaces before the first name, =TRIM(A2) would return "Virat Kohli" with no spaces in a new cell.

## **11. LEN:**

LEN is the function to count the number of characters in a specific cell when you want to know the number of characters in that cell. =LEN(text) is the formula for this. Please keep in mind that the LEN function in Excel counts all characters, including spaces:

For example, =LEN(A2), returns the total length of the character in cell A2 including spaces.