1. The dollar sign ($) is used in cell references to specify the type of reference. There are two types of cell references in Excel: relative and absolute.

* A relative cell reference changes when you copy or move a formula to a different cell. For example, if you have a formula in cell A1 that references cell B1, and you copy that formula to cell A2, the reference in the formula will change to B2.
* An absolute cell reference, on the other hand, stays the same, no matter where the formula is copied or moved. An absolute cell reference is created by adding a dollar sign ($), before the column letter and the row number. For example, the absolute cell reference for cell B1 would be written as $B$1.

1. We can change the reference type of a cell in Microsoft Excel by adding or removing the dollar sign ($).
2. Order of operations is:

* Parentheses
* Exponents
* Multiplication and Division
* Addition and Subtraction

1. The top 5 functions are:

* SUM: Syntax: =SUM(range of cells)
* IF: Syntax: =IF(logical test, value if true, value if false)
* AVERAGE: Syntax: =AVERAGE(range of cells)
* VLOOKUP: Syntax: =VLOOKUP(value to be searched, range that contains the table, column number in the table to return the value from, [exact match or approximate match])
* INDEX-MATCH: Syntax: =INDEX(range to return the value from, MATCH(value to be searched, range that contains the values, [exact match or approximate match]))

1. The SUBTOTAL function is used to perform calculations on a filtered range of data. It is often used in conjunction with the filtering tools such as AutoFilter or Advanced Filter, to perform calculations on a portion of the data in a worksheet.
2. The syntax of the VLOOKUP function is:

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

Where:

* lookup\_value: This is the value that you want to search for in the first column of the table\_array.
* table\_array: This is the range of cells that contains the data table. The lookup\_value must be found in the first column of the table\_array.
* col\_index\_num: This is the column number in the table\_array that contains the value that you want to return. For example, if you want to return the value from the third column in the table\_array, you would specify 3.
* range\_lookup: This is an optional argument that specifies whether you want an exact match or an approximate match. If you specify "TRUE" or omit this argument, Excel will perform an approximate match. If you specify "FALSE", Excel will perform an exact match.