How to use the MATH Formula

Sticking with the same example as above, let's use MATCH to figure out what row Kevin is on.

Follow these steps:

Type "= MATCH (" and link to the cell containing "Height"... the criteria we want to look up.

① select all the cells across the top row of the table.

③ Type zero "0" for an exact match.

(9) The result is that Height is in column "2".

Height = match (B14, C3, 0)

How to combine INDEX and MATCH.

Now we can take the two MATCH formulas and use them to replace the "4" and the "2" in the original INDEX formula. The result is an INDEX MATCH formula.

Follow these steps:

1 Cut the MATCH formula for Kevin and replace the "4" with it.

2 Cut the MATCH formula for Height and replace the "2" with it.

3 The result is Kelvin's Height is "5.8".

Congratulations,

=INDEX (C3:E9, MATCH (B13, C3:C9, 0),
          MATCH (B14, C3:E3, 0))

Kelvin
Height

Difference Between VLOOKUP vs HLOOKUP

VLOOKUP or Vertical-LOOKUP and HLOOKUP or Horizontal-LOOKUP are referencing functions in Excel that reference data to match a table array or a group of data and display the output. The difference between these referencing functions is that VLOOKUP referencing with columns while HLOOKUP

references with rows.

For example, when we apply the VLOOKUP and the HLOOKUP formulas on the dataset we will have the same output displayed column-wise and row-wise, respectively.

⊙ The VLOOKUP vs HLOOKUP helps users retrieve the required data using the lookup value.

⊙ VLOOKUP or Vertical LOOKUP is used to retrieve column-wise data.

⊙ HLOOKUP or Horizontal LOOKUP is used to retrieve row-wise data.

⊙ Both functions have the same arguments. On difference is the col_index_num for VLOOKUP and the row_index_num for HLOOKUP.

⊙ If we do not provide the range lookup values 0 or 1, as it is an optional value, Excel takes 1 or TRUE as the default input Input to return the approximate match.

What IS VLOOKUP?

The VLOOKUP function is used when we have a set of vertical data. It allows us to search a range of data references with columns, and retrieves the right information we are looking for.

The syntax of the VLOOKUP formula is,

= VLOOKUP (
VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])

The arguments of the VLOOKUP formula are

① lookup value: The value for which we are trying to retrieve the result from the table-array (2nd argument). It is a mandatory argument.

② table-array: It will be either range or table-array where we search for the lookup value. It is a mandatory argument.

③ col-index-num: In a given table-array, it is the column we are looking for the result. It is a mandatory argument.

④ [range-lookup]: In this optional argument, we need to specify the kind of match we need:

└→ 0 or False - It will search for the exact match of the lookup-value in the table-array. If nothing is specified, 1 or TRUE will be the default mode.

└→ 1 or True - It will search for the approximate match for the lookup value in the table-array.

What IS HLOOKUP?

The HLOOKUP function is used when we have a set of horizontal data. It allows us to search a range of data references with rows, and retrieves the right information we are looking for.

= HLOOKUP (

HLOOKUP (lookup-value, table-array, row-index-num, [range-lookup])

row-index-num: In a given table-array, it is the row we are looking for the result. It is a mandatory argument.