Using a 3 Dimensional INDEX Function

The course module video demonstrates how to create a two dimensional INDEX function that will find an intersecting row and column in a range to return a value. It looks like this:

INDEX(ARRAY,ROW NUMBER, COLUMN NUMBER)

INDEX(Range_Name,2,3)

A three dimensional INDEX function helps to identify the correct table array in a group of similar tables before looking for the row and column intersection.

The formula looks like this: INDEX((reference),row_num, column_num, area_num) where “reference” is a list of named ranges.

Notice the function has “area_num” which points to the area to scan for matching row and column values. If area_num =2 then the second array or named range in the reference section of the formula will be scanned by the algorithm.

INDEX(ARRAY,ARRAY,ARRAY),ROW NUMBER,COLUMN NUMBER,AREA NUMBER))

INDEX((RANGEX,RANGEY,RANGEZ),2,3,2)

Note: The ranges in the reference section are assigned values base on what order they are added and not because they end in a 1, 2 or 3. In the above example, RangeY is assigned area_num2. If entered as (Range2, Range3, Range1), Range2 is assigned place value 1 for area_num because it appears first.