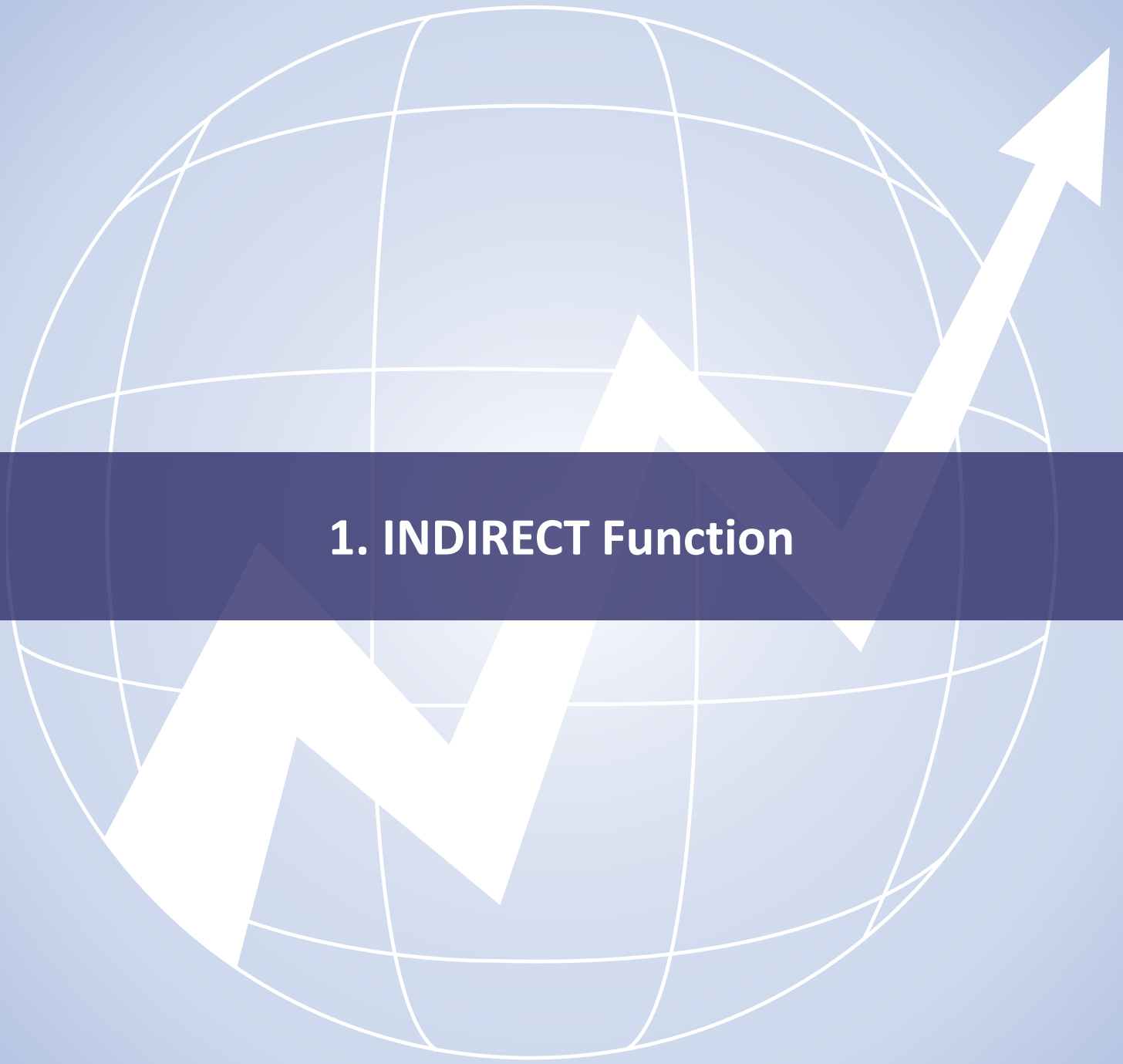
Microsoft Excel - 201

INDIRECT, INDEX, MATCH

TresVista
FINANCIAL SERVICES

Table of Contents



1. INDIRECT Function

INDIRECT Function

Explanation

Explanation

- The INDIRECT command returns the reference specified by a text string. References are immediately evaluated to display their contents
- Use INDIRECT when you want to change the reference to a cell within a formula without changing the formula itself

Formula

- The standard format for this formula is: ***"=INDIRECT(ref_text, [a1])"***

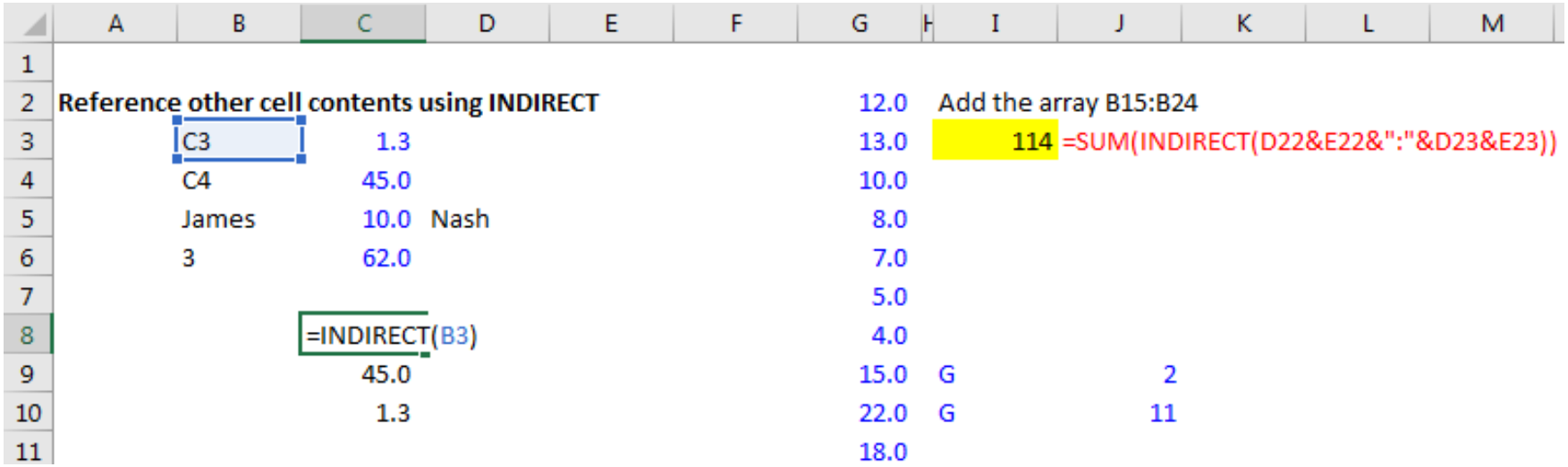
INDIRECT Function

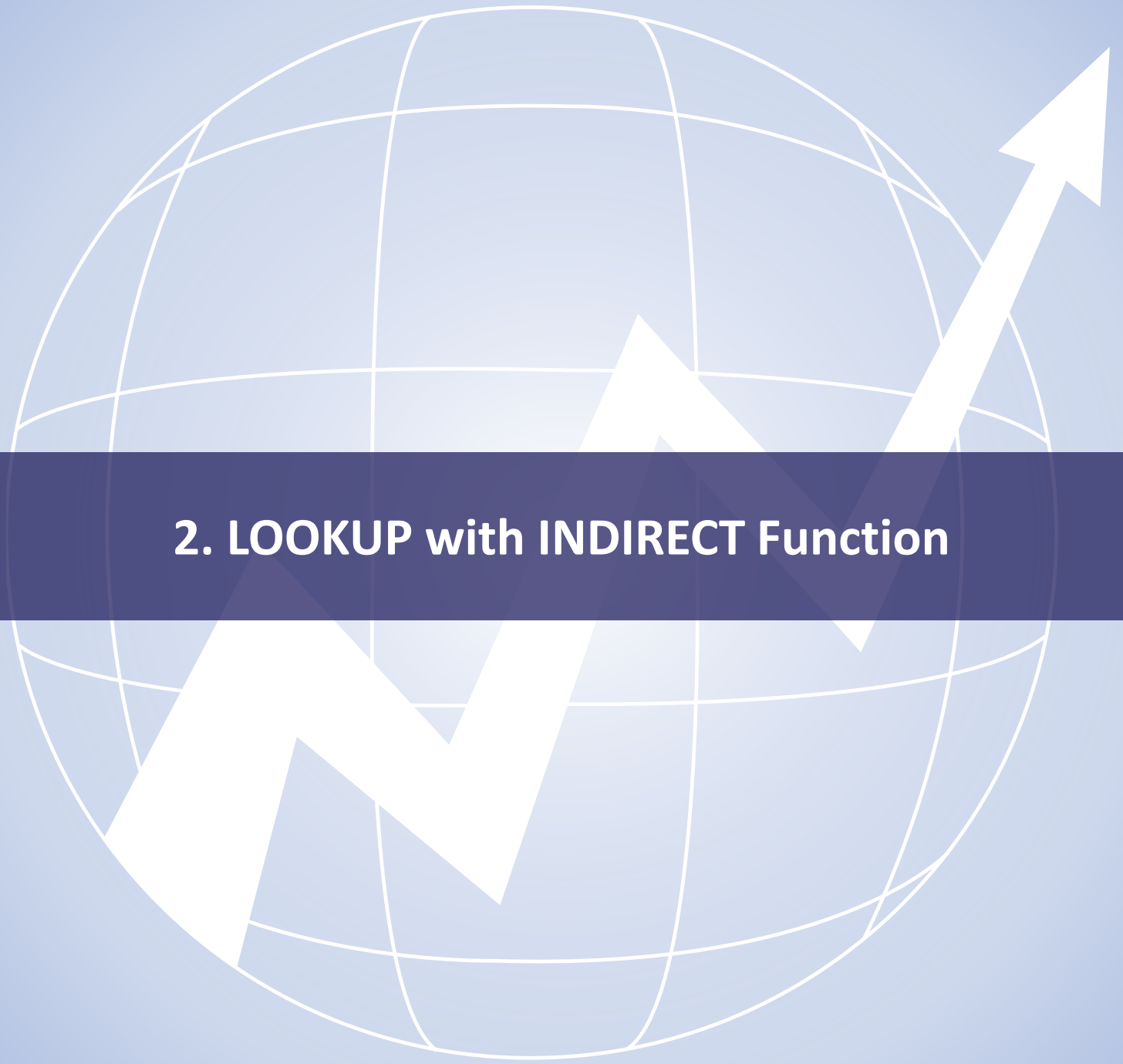
Examples

- Use INDIRECT when you want to change the reference to a cell within a formula without changing the formula itself
- For Example, in the 1st example you can reference other cell contents using INDIRECT
- INDIRECT command will not change if rows or columns are added, and are thus useful when performing operations on an array of values
- For Example, in the 2nd example even if you add rows or columns, the answer still will stay unaffected

Example 1

Example 2





2. LOOKUP with INDIRECT Function

LOOKUP With INDIRECT Function

Explanation, Formula & Example

Explanation

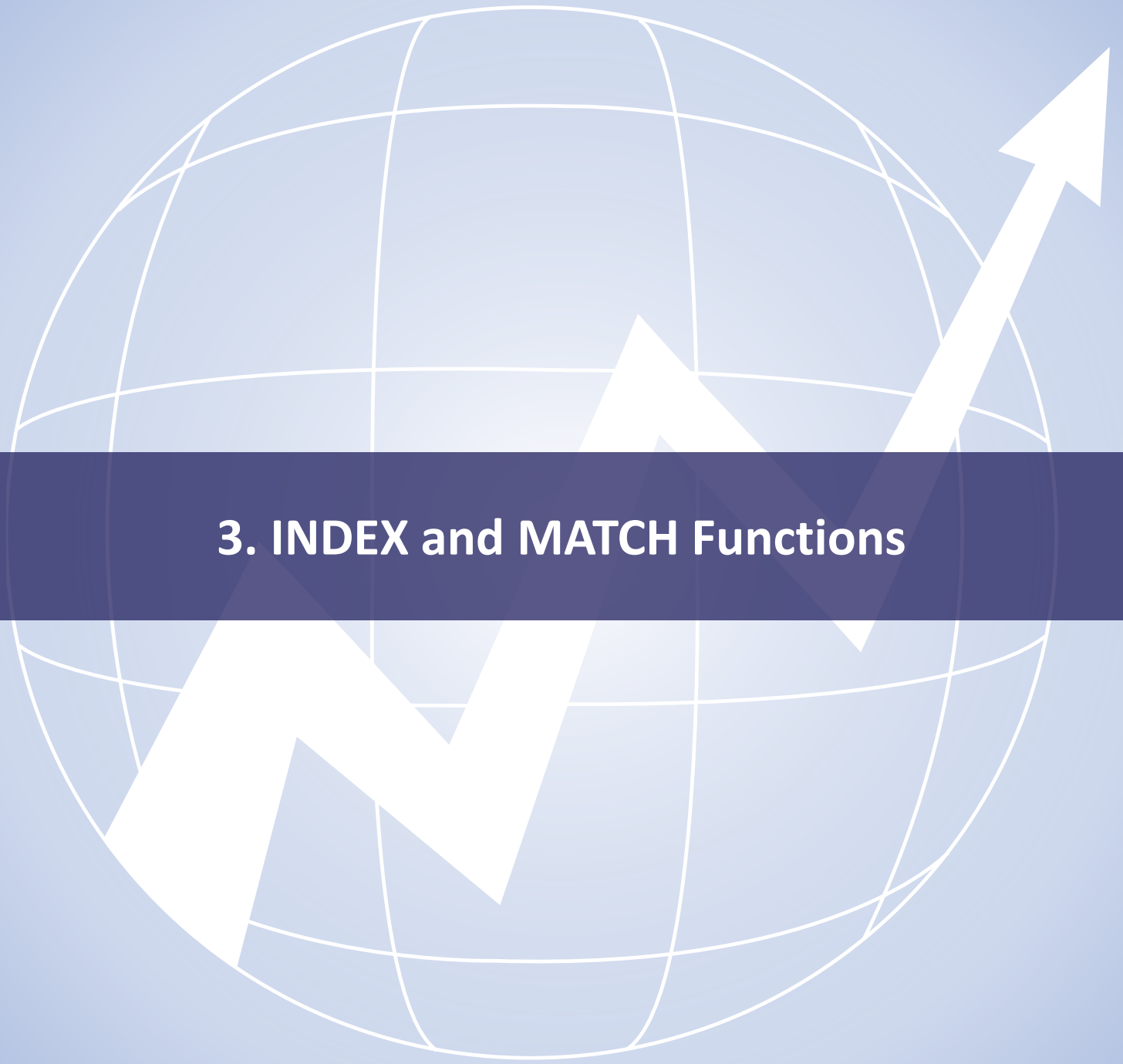
- VLOOKUP and HLOOKUP can be used with the INDIRECT function to source data across sheets. It is especially useful when you have a number of sheets (for e.g.: for different segments of a company) and you wish to pull specific numbers for each of the segments
- Use the INDIRECT function to source the array field in the VLOOKUP and HLOOKUP syntax

Formula

- The formula should be followed exactly as given & “”” is so that the formula still recognizes the values in the cell even if they have a space in the sheet names
- ***=VLOOKUP(lookup_value, indirect(“””&sheet name&”’!array”), col_index_num, [range_lookup])***
- ***=HLOOKUP(lookup_value, indirect(sheet name&”!array”), row_index_num, [range_lookup])***

Example

	A	B	C	D
1				
2			Sheet 2	Sheet 3
3		Revenue	=VLOOKUP($B3,INDIRECT("""&C$2&"'!B01:G100"),2,FALSE)	=VLOOKUP($B3,INDIRECT("""&D$2&"'!B01:G100"),2,FALSE)
4		EBITDA	=VLOOKUP($B4,INDIRECT("""&C$2&"'!B01:G100"),2,FALSE)	=VLOOKUP($B4,INDIRECT("""&D$2&"'!B01:G100"),2,FALSE)
5		Net Income	=VLOOKUP($B5,INDIRECT("""&C$2&"'!B01:G100"),2,FALSE)	=VLOOKUP($B5,INDIRECT("""&D$2&"'!B01:G100"),2,FALSE)
6				



3. INDEX and MATCH Functions

INDEX & MATCH Functions

Explanation, Formula & Example

Explanation

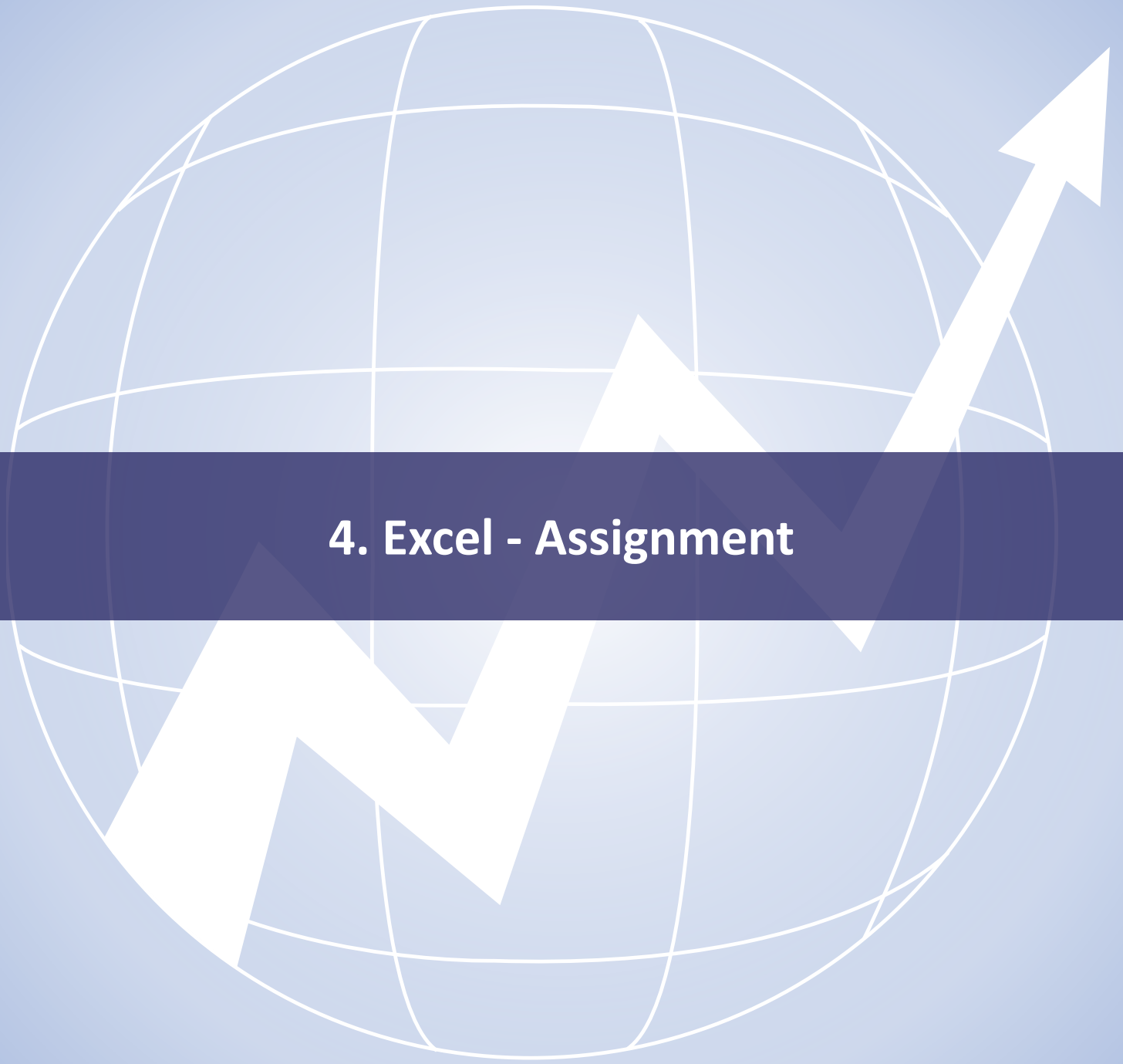
- INDEX and MATCH performs lookups that VLOOKUP can't, and runs much faster on large spreadsheets. INDEX MATCH works very well if your lookup data is not in the first column, or you want to look to the left of the lookup data, rather than to the right.
- These functions can be made more flexible by using them with other functions such as VLOOKUP and INDIRECT.

Formula

- The standard formula is:
  - ***"=INDEX(result_array,row_number)"***
  - ***"=INDEX(result_array,MATCH(lookup_value,lookup_array,0))"***

Example

	A	B	C	D	E	F	G	H	I	J
1		Lookup Field	Taxes							
3			($338.0)	=INDEX(D5:D10,MATCH(C1,B5:B10,0))						
5	1		JAN	FEB	MAR					
6	2	Sales	$1,500.0	$1,350.0	$1,580.0					
7	3	Expenses	(375.0)	(338.0)	(395.0)					
8	4	Operating Expenses	$1,125.0	$1,012.0	$1,185.0					
9	5	Taxes	(375.0)	(338.0)	(395.0)					
10	6	Net Income	$750.0	$674.0	$790.0					



4. Excel - Assignment