

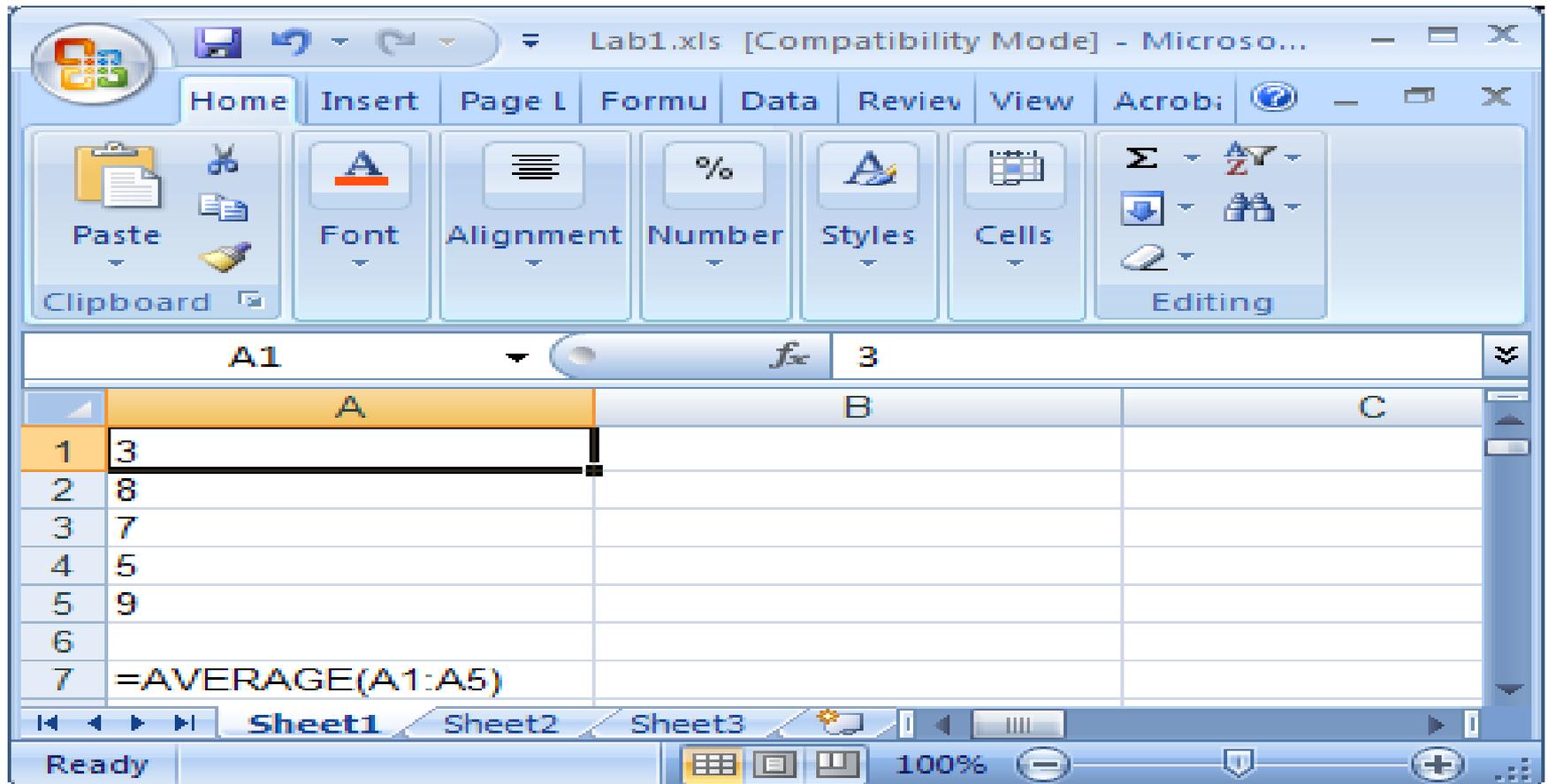
Using Excel - 1

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Control/Tilde (Ctrl/~)

- The control / tilde key combination causes cells with formulas to change their mode of display from calculated values to formulas and back again.

Control/Tilde (Ctrl/~)



Trace Precedents

(Formulas / Formula Auditing / Trace Precedents)

- The Trace Precedents option allows a user to view the cells that are referenced by a given cell
- The Trace Dependents option allows a user to view cells that reference a given cell

Trace Precedents

(Formulas / Formula Auditing / Trace Precedents)

The screenshot shows the Microsoft Excel interface with the 'Formulas' ribbon selected. The 'Formula Auditing' group is active, and the 'Trace Precedents' feature is applied to cell C3. The formula bar shows the formula `=SUM(A2,A3,A4)`. The spreadsheet grid shows the following data:

	A	B	C	D	E
2	3				
3	4		16		
4	9				
5					
6					
7					
8					

Blue arrows indicate the flow of data from the precedent cells (A2, A3, A4) to the dependent cell (C3). The status bar at the bottom shows 'Ready' and '100%' zoom.

Named Ranges

- Ranges of names can be given names by selecting the range, then typing a name in the name box

Named Ranges

The screenshot displays the Microsoft Excel interface with a named range 'data' defined over the cells A1:A5. The formula bar shows the value '3', indicating that the named range is currently displaying the value of the cell in the active position (A7). The status bar at the bottom provides summary statistics for the named range: Average: 6.4, Count: 5, and Sum: 32.

	A	B	C	D	E	F
1	3					
2	8					
3	7					
4	5					
5	9					
6						
7	6.4					

Using Named Ranges

The screenshot shows the Microsoft Excel interface with the following details:

- Title Bar:** Lab1.xls [Compatibility Mode] - Microso...
- Formulas Bar:** A7 fx =AVERAGE(data)
- Worksheet Grid:**

	A	B	C	D	E	F
1	3					
2	8					
3	7					
4	5					
5	9					
6						
7	6.4					
- Bottom Bar:** Ready 100%

Multiple Ranges in Formula

- A formula may contain multiple named ranges

Multiple Ranges in Formula

The screenshot displays the Microsoft Excel interface. The title bar shows the file name "Lab1.xls [Compatibility Mode] - Microso...". The ribbon is set to "Formulas", and the "Editing" group is active. The formula bar contains the formula `=AVERAGE(data, data2)`. The spreadsheet grid shows columns A, B, C, and D, and rows 2 through 8. Column A contains the values 8, 7, 5, and 9 in rows 2, 3, 4, and 5 respectively. Cell C2 contains the value 5. Cell A7 is selected and contains the formula `=AVERAGE(data, data2)`. The status bar at the bottom shows "Edit" and "100%".

	A	B	C	D
2	8		5	
3	7			
4	5			
5	9			
6				
7	<code>=AVERAGE(data, data2)</code>			
8				

Absolute and Relative Addressing

- Relative addresses are adjusted when copied and pasted or dragged.
- Absolute addresses are not adjusted when copied and pasted or dragged.
- Named ranges are always absolutely addressed.
- Cell address are absolute if they are in the form `A1`

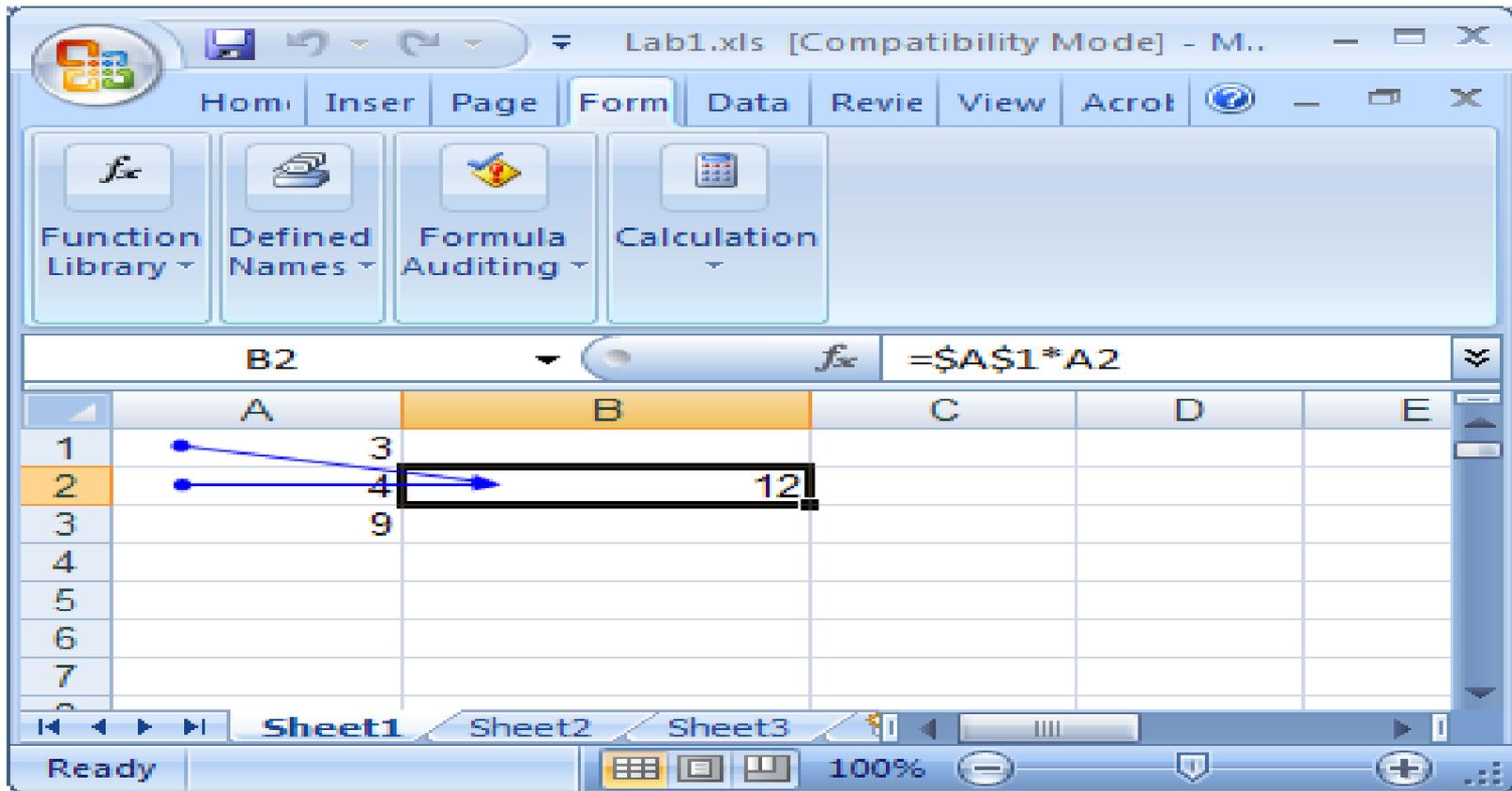
Absolute and Relative Addressing

The screenshot displays the Microsoft Excel interface. The title bar shows the file name "Lab1.xls [Compatibility Mode] - M...". The ribbon is set to the "Formulas" tab, with the "Calculation" group selected. The formula bar shows the formula $=\$A\$1*A2$ for cell B2. The spreadsheet grid shows the following data:

	A	B	C	D	E
1		3			
2		4			
3		9			
4					
5					
6					
7					

The status bar at the bottom indicates "Ready" and "100%".

Absolute and Relative Addressing



Absolute and Relative Addressing

The screenshot shows the Microsoft Excel interface with the following details:

- Title Bar:** Lab1.xls [Compatibility Mode] - M..
- Ribbon:** Home, Insert, Page Layout, Formulas, Data, Review, View, Acrobat.
- Formulas Tab:** Function Library, Defined Names, Formula Auditing, Calculation.
- Formula Bar:** B3, fx, =\$A\$1*A3
- Worksheet Grid:**

	A	B	C	D	E
1		3			
2		4	12		
3		9	27		
4					
5					
6					
7					
- Sheet Tabs:** Sheet1, Sheet2, Sheet3.
- Status Bar:** Ready, 100%.

Absolute and Relative Addressing

The screenshot shows the Microsoft Excel interface with the following data and annotations:

	A	B	C	D	E
1	3				
2	4	12			
3	9	27			
4					
5					
6					
7					

Annotations in the spreadsheet:

- Blue arrows point from cell A1 to B1, A2 to B2, and A3 to B3, illustrating relative addressing.
- Blue arrows point from cell A2 to C2 and A3 to C3, illustrating relative addressing.
- Cell C5 is selected and highlighted with a thick black border, representing an absolute reference.

The status bar at the bottom indicates the spreadsheet is in 'Ready' mode at 100% zoom.

F4

- The F4 key will change a relative address to an absolute address
- Further presses of the F4 key will change parts of the address, i.e. either the row or the column, until the address is relative again.