



BOOST YOUR SKILLS IN **Microsoft Excel 365/2021**

Excel Chapter 2: Calculating Student Grades
Using Formulas

Learning Objectives

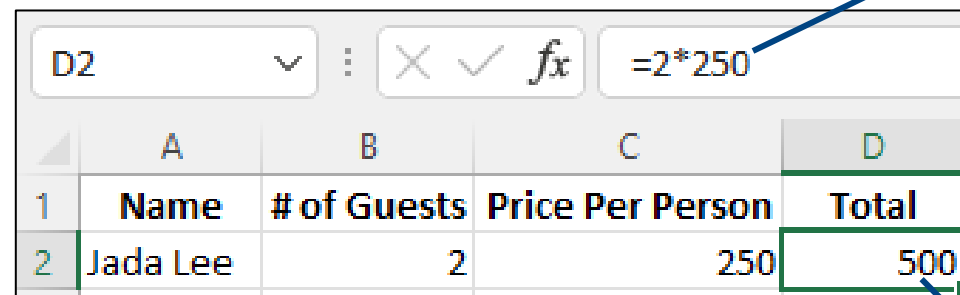
After studying this chapter, you will be able to:

- Use formulas to perform calculations
- Rearrange data on a worksheet
- Manage multiple worksheets

Creating Formulas

- Use formulas to perform calculations.
 - Formulas are written as mathematical problems.
 - Formulas always begin by typing an “=” sign.

The Formula Bar displays the formula.



	A	B	C	D
1	Name	# of Guests	Price Per Person	Total
2	Jada Lee	2	250	500

The formula cell displays the result.

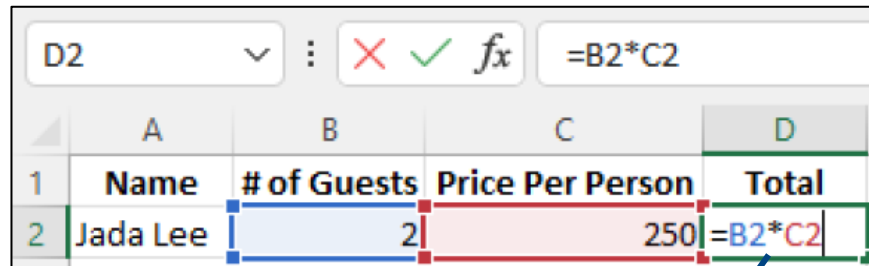
Perform Worksheet Calculations

Mathematical operator keystrokes

KEYSTROKES FOR USING OPERATIONS IN FORMULAS			
Operation	Keystroke	Example	Result
Addition	+	=3+2	5
Subtraction	-	=3-2	1
Multiplication	*	=3*2	6
Division	/	=3/2	1.5
Exponent	^	=3^2	9

Cell References

- They take the place of a number in a formula.



The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D
1	Name	# of Guests	Price Per Person	Total
2	Jada Lee	2	250	=B2*C2

The formula bar at the top shows the formula `=B2*C2` for cell D2. A blue arrow points from the text below to the formula in cell D2.

Cell D2 references cells B2 and C2,
multiplying them together.

- They make it easier to copy formulas.
- Excel automatically recalculates if the value in the cell reference changes.

Order of Operations

- Excel follows a standard order of operations:
 - Parentheses
 - Exponents
 - Multiplication
 - Division
 - Addition
 - Subtraction

**PEMDAS is often remembered
with the phrase, “Please
Excuse My Dear Aunt Sally.”**

Importance of PEMDAS

If you don't apply the order of operations properly, it can significantly change the outcome of your formula.

$$=5+7*10-9$$

Results in:

$$=5+70-9$$

$$=75-9$$

$$=66$$

$$=(5+7)*(10-9)$$

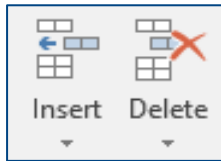
Results in:

$$=(12)*(1)$$

$$=12$$

Rearrange Data on a Worksheet

- You can insert and delete rows, columns, and cells.

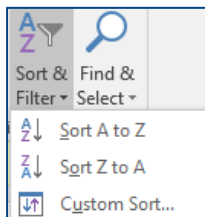


- You can hide and unhide rows and columns.

	A	C
1		
3		

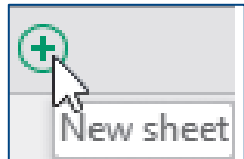
In this example, column B and row 2 are hidden.

- You can sort data by column.

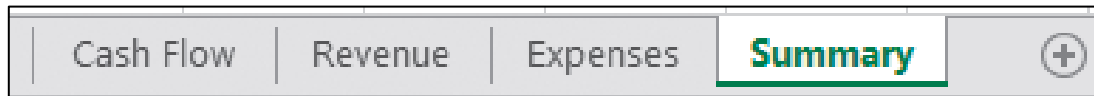


Managing Multiple Worksheets

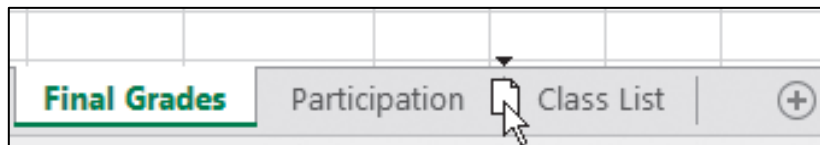
- You can insert and delete worksheets.



- You can rename worksheets.

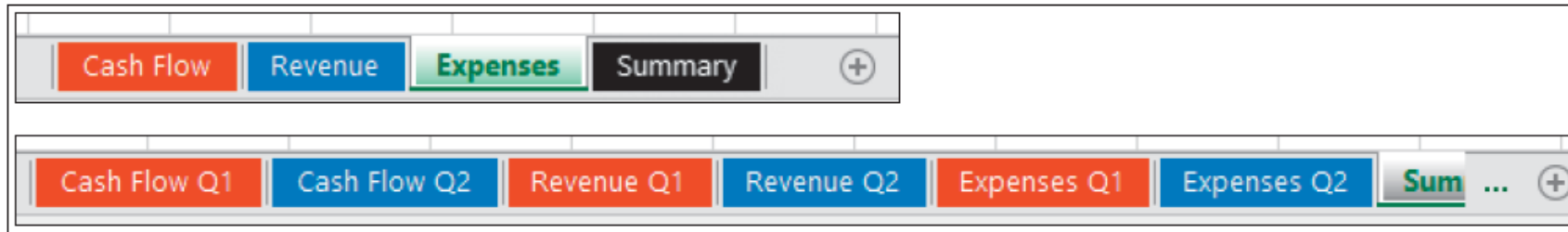


- You can move a worksheet.

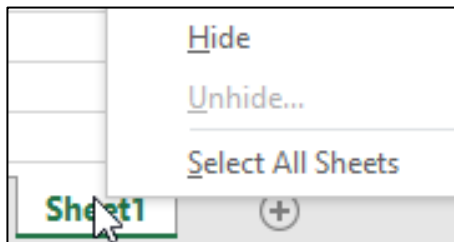


Managing Multiple Worksheets (cont.)

- You can change the worksheet tab color.



- You can hide a worksheet.



Managing Multiple Worksheets (cont.)

- You can create a cell reference to another worksheet.

`=[2015Financial.xlsx]Revenue!A3`

Different workbook name **Worksheet name in different workbook**

- You can create a copy of a worksheet.
- You can edit multiple sheets at one time.



The Participation and Exam worksheets are grouped and can now be edited simultaneously.

