

Unit 2 Using Microsoft Excel

The following video and activity provide an introduction on

- how to format data,
- how to use cell references,
- how to hide columns, and
- how to use common functions to perform calculations.

Watch

Click [here](#) or use the QR code provided to watch the Unit 2 video.



Now You Try It!


Open the Excel file named **Q1_Sales_Data** and follow along with the following instructions.

Formatting Cells

Notice that the values in columns B and C are formatted as currency, but the values in column D are not. On the Home tab, locate the Number section and the drop-down menu within it. The drop-down menu (which is set to “General” by default) can be used to adjust the cell type.

1. Select the values in column D and use the drop-down menu to format the values as currency.

Select cell B9. Notice that the value is negative (look at the value in the formula bar). Cell formatting can be used to have negative values display in parentheses and red font color to easily identify them. Let’s do the same for cell D9.

2. Select the values in column D again. In the Number section, click on the small arrow () to open the Format Cells menu. Select the option that shows the negative value within parentheses and red font. Cell D9 will now resemble cell B9.

Understanding Cell Referencing

A cell reference in Excel is the unique identifier of a cell, defined by its column letter and row number (like A1), used to locate or use the cell's value in formulas.

Relative references change when copied (e.g., A1), while absolute references stay fixed (e.g., \$A\$1).

3. Let's explore relative references.
 - a. In cell E2, type “=B2 + C2 + D2” and press enter. What is the value shown in cell E2?
 - b. Copy cell E2 and paste into cell E3. Notice that the cell references changed to add the values in row 3. What is the value shown in E3?
4. Now let's explore absolute references.
 - a. In cell E4, type “=\$B\$4 + \$C\$4 + \$D\$4” and press enter. What is the value shown in cell E4?
 - b. Copy cell E4 and paste into cell E5. Notice that the cell references did not change and still are adding values in row 4. What is the value shown in E5?
 - c. Delete the contents of cells E4 and E5.
5. Copy and paste the formula from cell E2 to the remaining cells in column E. All rows should have their Quarter 1 Total calculated.
6. Ensure the values in column E are formatted as currency.
7. Explain why relative references were ideal in this situation.
8. Describe a scenario where absolute references would be ideal.

Hiding Columns

Columns can be hidden to temporarily remove unneeded information from the display without deleting it. This can keep your Excel sheet clean and focused. To hide a column, select it, right click, and choose Hide. To unhide a column, select the columns on both sides of it, right click, and choose Unhide.

9. Hide columns B, C, and D.
10. Explain why we are still able to analyze total sales over months January, February, and March with columns B, C, and D hidden.

Using Common Functions

Excel formulas start with the equal sign, =. Basic functions like SUM, AVERAGE, MIN, and MAX can be used to calculate values from a range of cells.

- SUM: Adds all the numbers in a range of cells
- AVERAGE: Calculates the average of all the numbers in a range of cells
- MIN: Determines the minimum (smallest) of all the numbers in a range of cells
- MAX: Determines the maximum (largest) of all the numbers in a range of cells.

Note: the SUM function could have been used to calculate the Quarter 1 Totals in column E.

These functions require input. The input can be values (=SUM(0.124, 0.135)) or cell references, separated by commas (=SUM(A1, A2)). You can also reference a range of cells (=SUM(A1:A10)).

11. In cell E12, type “Average Total:”.

12. In cell F12, use the AVERAGE function to calculate the average of all Quarter 1 Totals in column E. State the formula as it appears in Excel. What is the average total?

13. In cell E13, type “Max Total:”.

14. In cell F13, use the MAX function to determine the greatest Quarter 1 Total. State the formula as it appears in Excel. What is the greatest total?

Save Your File

Go to File > Save As to save your file. Change the name of the file to contain your name, so change the file name to **Q1_Sales_Data_[Your_Name]**.