Spreadsheet Program-2

1. Formulas and Functions

Using cell references instead of entering numbers in formulas

➤ Formulas perform calculations or perform other actions on the data in your worksheet. A formula always begins with an equal sign (=), followed by cell references (such as A1), math operations.

➤ For example, the formula = A1 + A2 is used to sum the value in cell A1 and the value in cell A2.

Recognizing the standard error values for formulas: #NAME ?, # DIV / 0 !, #REF !.

➢ #AD in your formula or #NAME?: The most important reason for showing error is a typo in the formula name.

➢ # DIV / 0! or # DIV / 0!: The reason for the error message is to divide a numerical value in a cell or a numeric value produced as a result of a formula by the number 0 (zero) during arithmetic operations.

➢ #REF! or #REF!: The error message occurs when references to a cell are not valid. The cell to which formulas or functions refer to, or cells may have been deleted or the addresses of the cell or cells have been changed

Using absolute and bound cell references in formulas

➢ A formula with a linked cell reference changes from one cell to another without copying it.

➢ For example, if you copy the formula = A2 + B2 in cell C2 to C3, the formula references to C3 set one row down, and it becomes = A3 + B3.

➢ When you copy this, you can lock the row and column references by placing dollar signs ($) before them if you want to keep the original cell reference. "For example, when you copy the formula, the formula = $ A $ 2 + $ B $ 2 remains exactly the same for C2 and C3. This is the absolute reference.

Functions

➢ You can add functions such as sum, minimum, maximum to your worksheet by choosing "Add Function" from the Formulas tab.

➢ For example, with the function = SUM (B2: B5), you will find the sum of the cells between B2 and B5.

Using the If function with numeric operators: =,>, <.

➢For example, you can use the If function to determine the pass status of students with a grade above 70 as Pass, and for students with a grade below 70 as Failed. For this, the formula should be written in the cell related to Status = IF (F2> = 70; "Pass"; "Failed")

2. Formatting

Setting cells to show decimals, thousands separators and not

➤ You can make adjustments to the number of decimal places for existing numbers in the cell. To do this, right click on the cell and select "Format Cells" and set Number and decimal places.
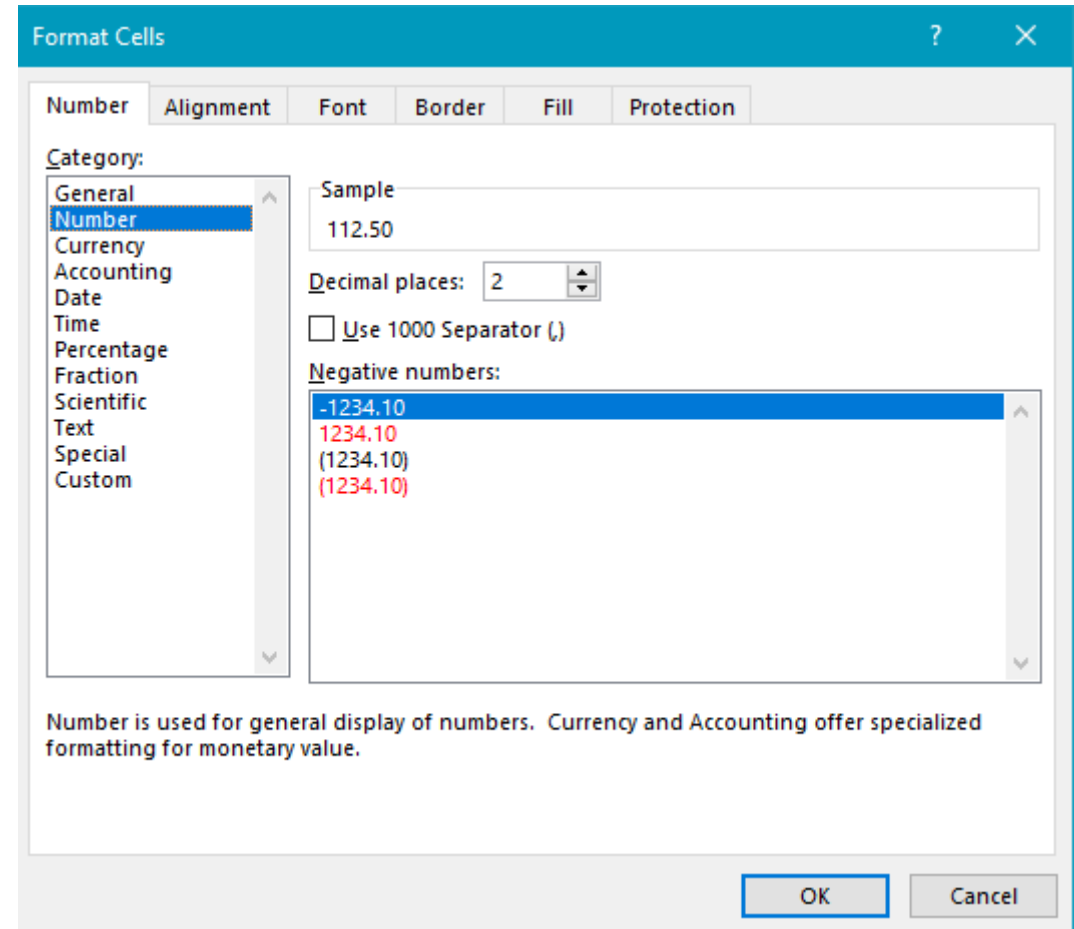
Setting cells to show date and money symbols
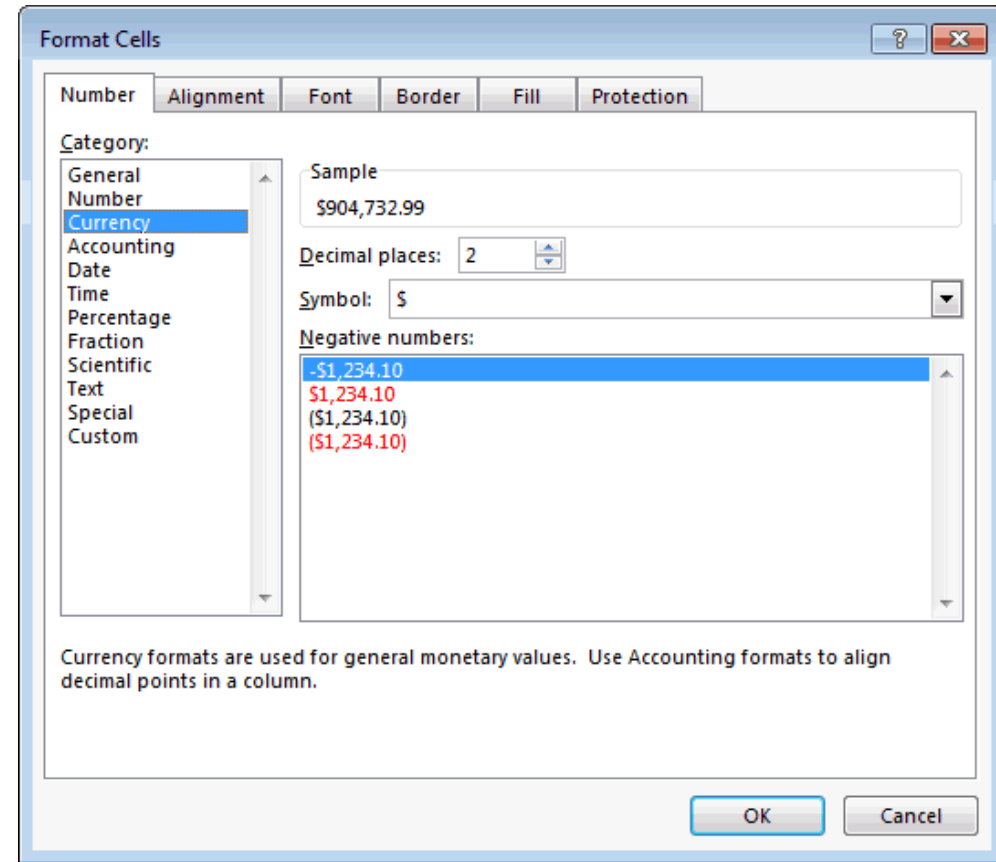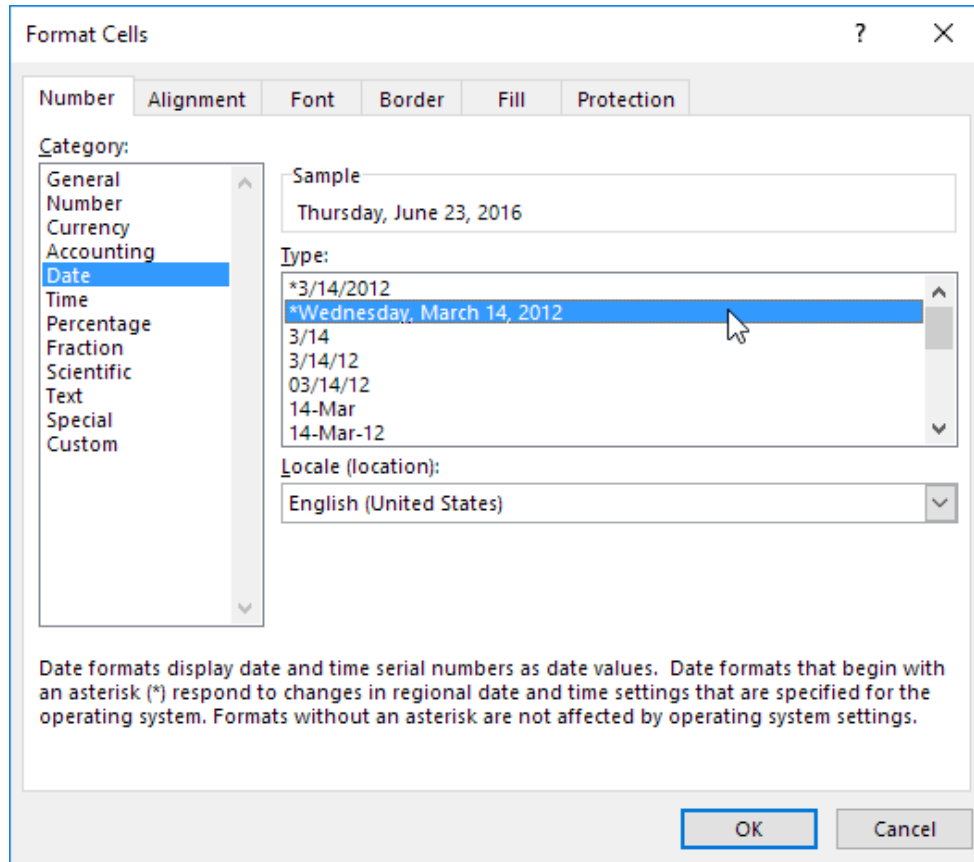
Setting the cells so that the numbers show percentage

➢You can show percentages for numbers that exist in the cell. For this, you need to right click on the cell and select "Percentage" from the "Format Cells" selection.
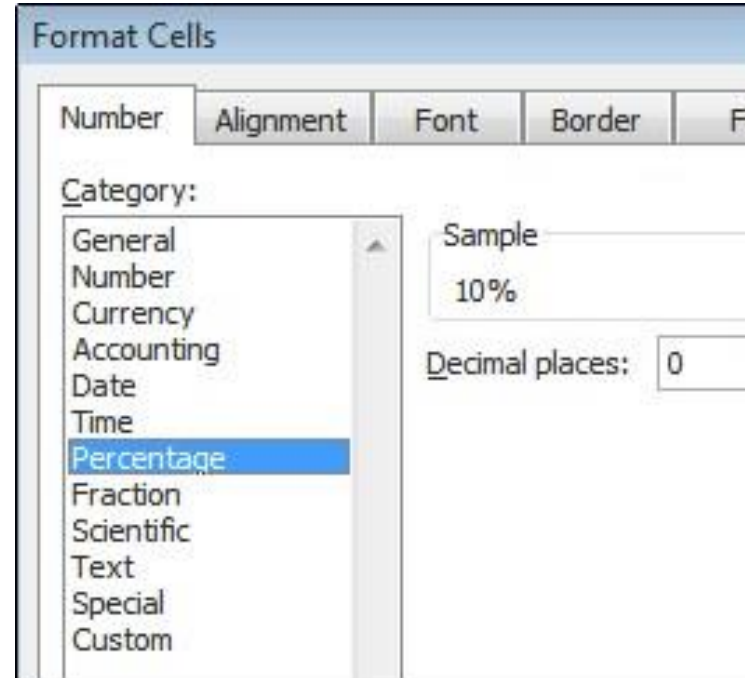
Cell content view: font sizes, font types

➢ You need to make the font size settings for the text in the cell content from the "Input" tab "Font Size" option, and the font settings from the "Font" option.
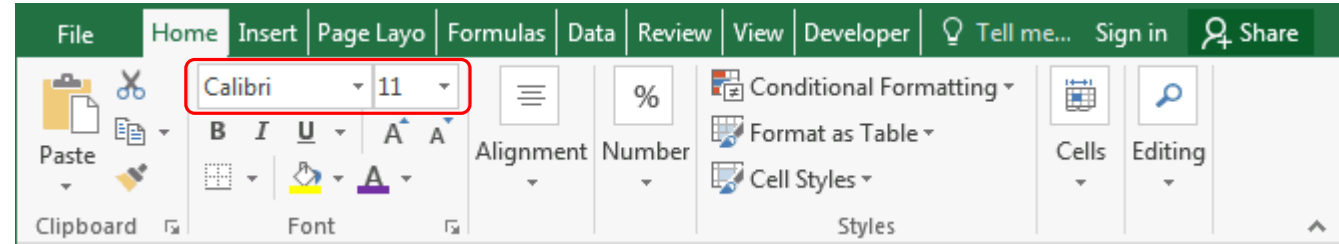
Apply formatting to cell contents: bold, italic, underline

➤You can edit the text in bold, italic, underline, by changing the "Font" settings on the "Home" tab for the format settings for text in the cell content.
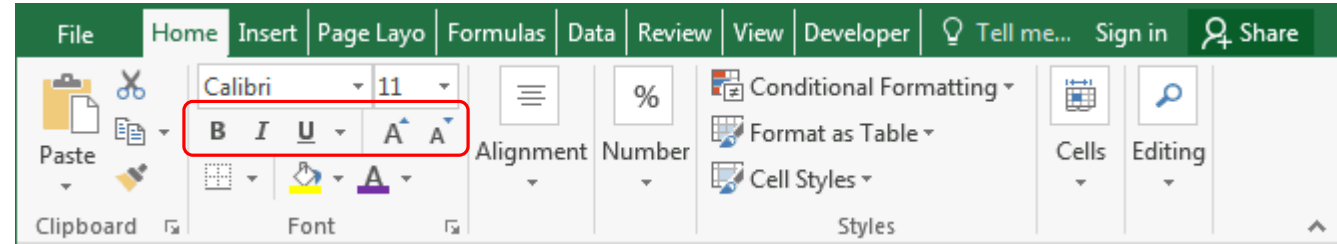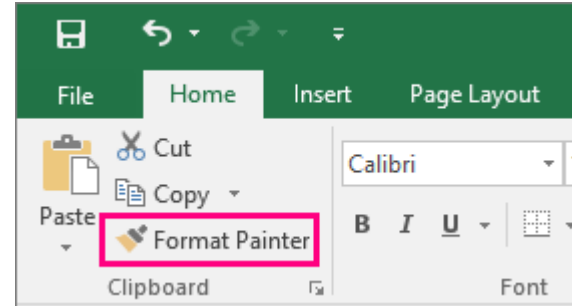
Apply different background colors to cell content and background

➢You need to change the "Fill Color" setting in the "Font" field in the "Home" tab to apply a background color to the cell contents.
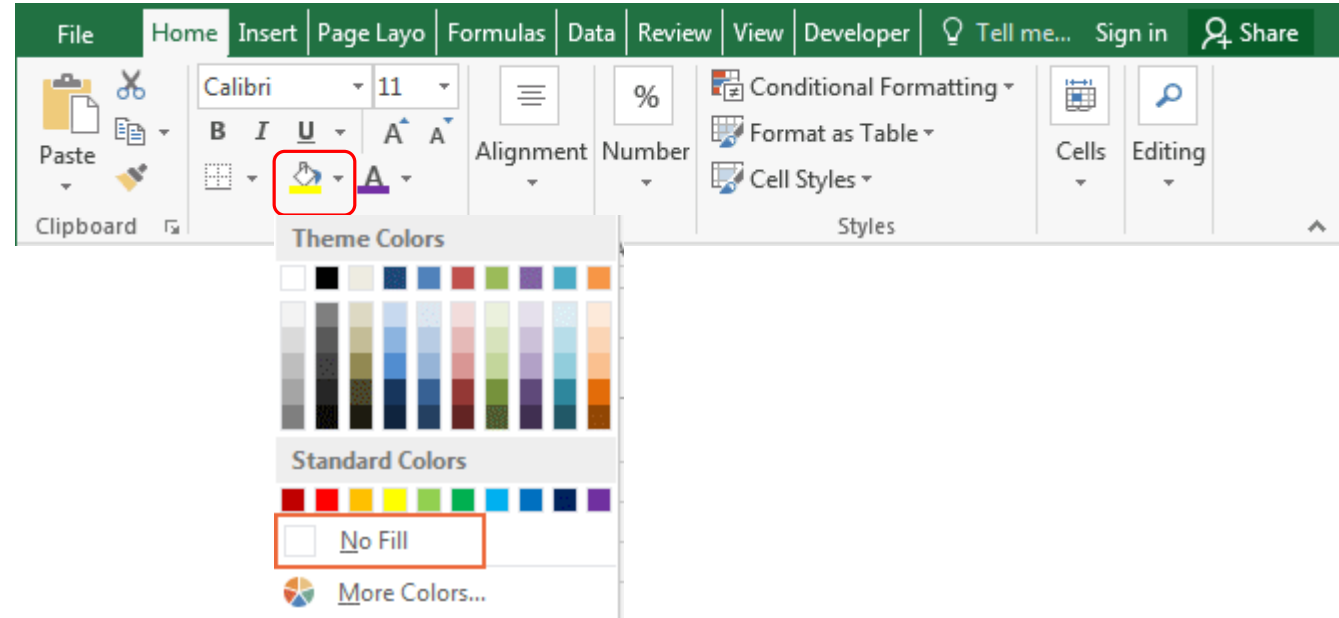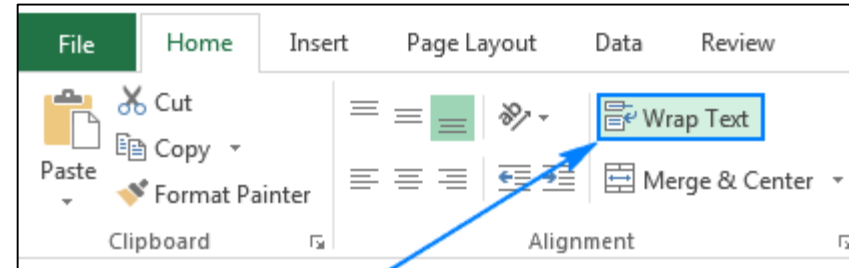
Copying a format from one cell to another

➢To copy a format from one cell to another, you must use the "Format Painter" on the "Home" tab.

Apply the Wrap Text option to the text in the cell

➢The "Wrap Text" option on the "Home" tab should be used to adjust the text in the cell to fit the column width.

Aligning cell contents

➢You can align the text in the cell right, center, or right using the "Align" options on the "Home" tab.
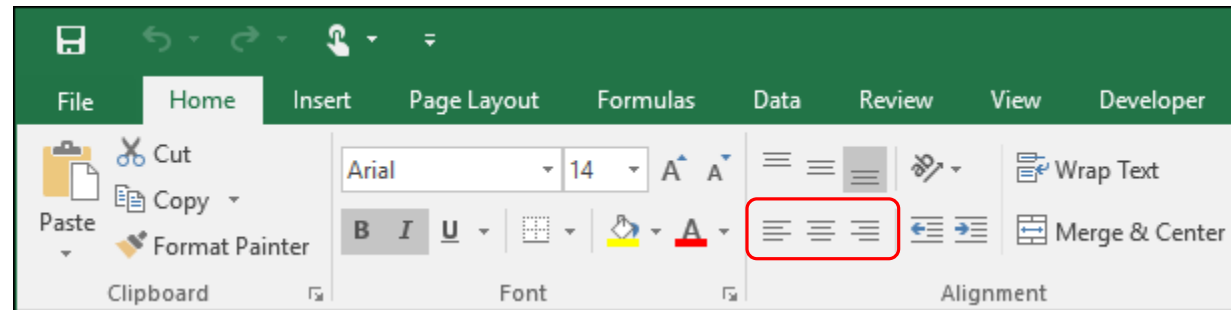
Combining cells under a title

When you merge two or more adjacent horizontal or vertical cells, the cells are converted into a single large cell displayed in multiple columns or rows. For this oper the "Merge and Center" option in the " tab should be used.

Adding a frame effect to cells: lines, colors

➤You can quickly add a frame around cells or a range of cells using predefined border styles.
To do this, first select the cells and then use the Borders option on the Home tab.
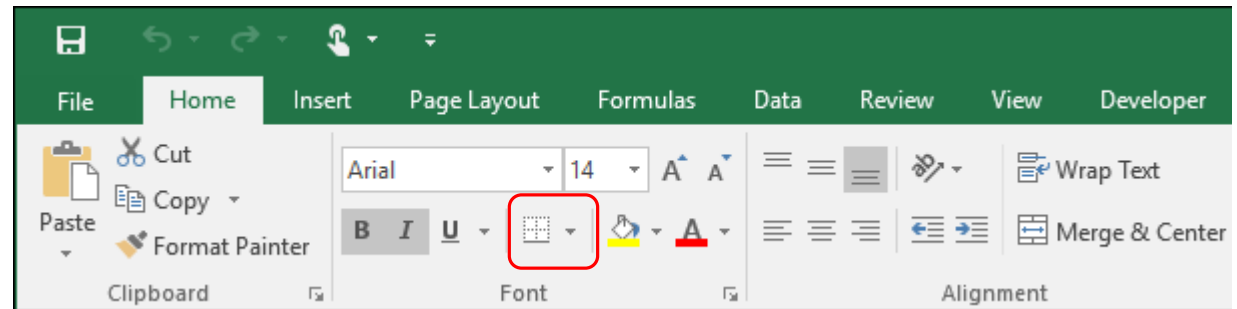
3. Charts

Creating different charts from worksheet data

➢After selecting the data you want to create a chart, you can choose from the chart types from the insert tab: column, bar, line and pie chart.
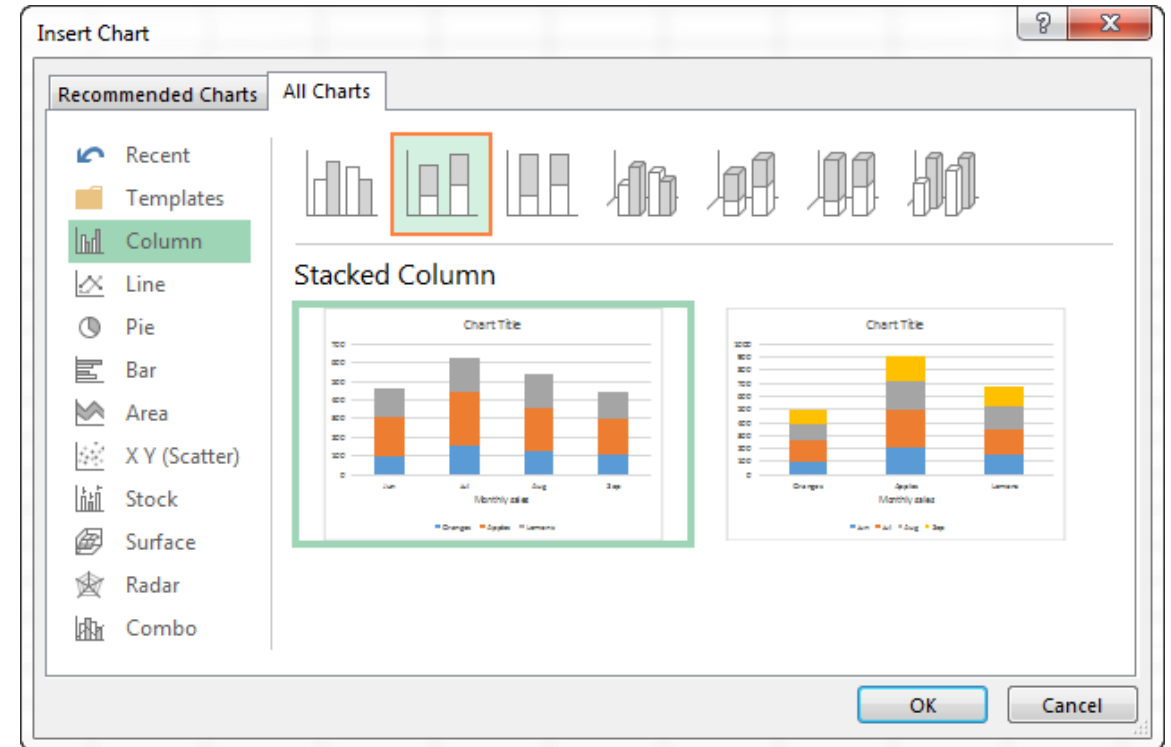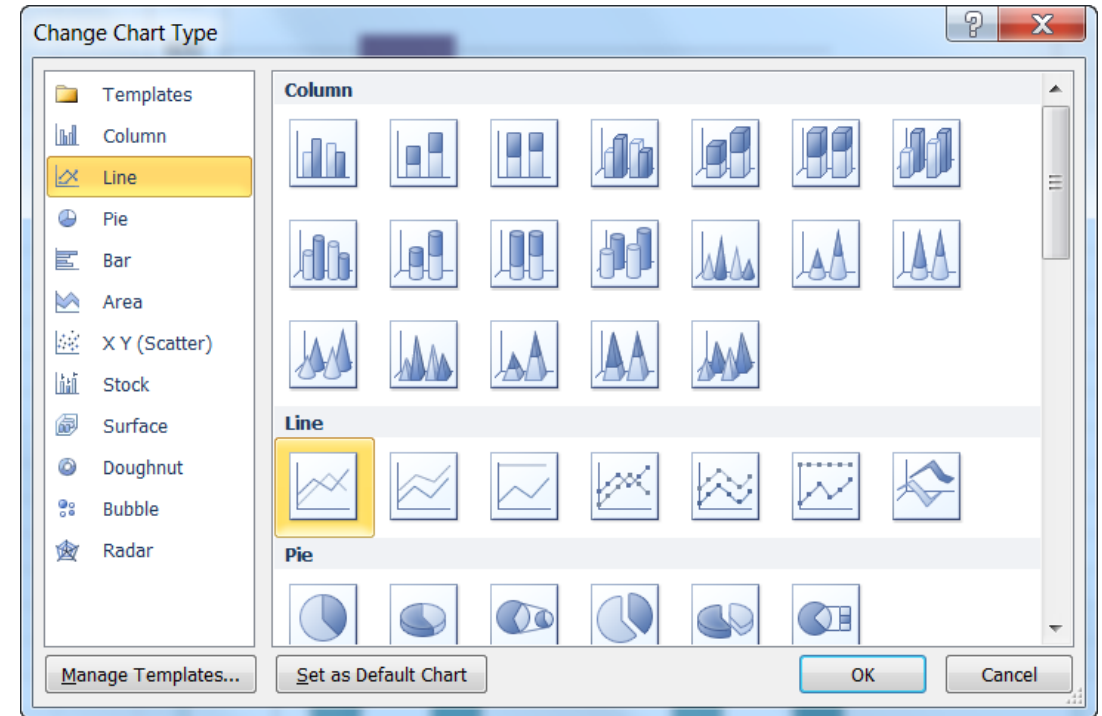
Choosing a chart

➢To select the chart, simply click on it.

➢When you make a selection, you will be able to see the Design and Layout settings related to the graphic on the tabs.

Changing Chart Type

When you select the graphic, in order to change its type, the "Change Graphic Type" option should be used in the "Design" tab.

Move, resize and delete the graphic

➢After selecting the chart, you can move it by dragging and dropping.

➢After selecting the graphic, you can resize it by dragging the sizing handles to the desired size.

➢To delete a graphic, right click on the graphic and select "Delete".

Add, remove and edit chart titles

➤When you want to add a title to your chart, select "Chart Title" from the options under "Add graphic" in the "Design" tab while the graphic is selected.

➤To remove the title, right click the title and select "Delete".

➤For title-related edits, double click on the title text.
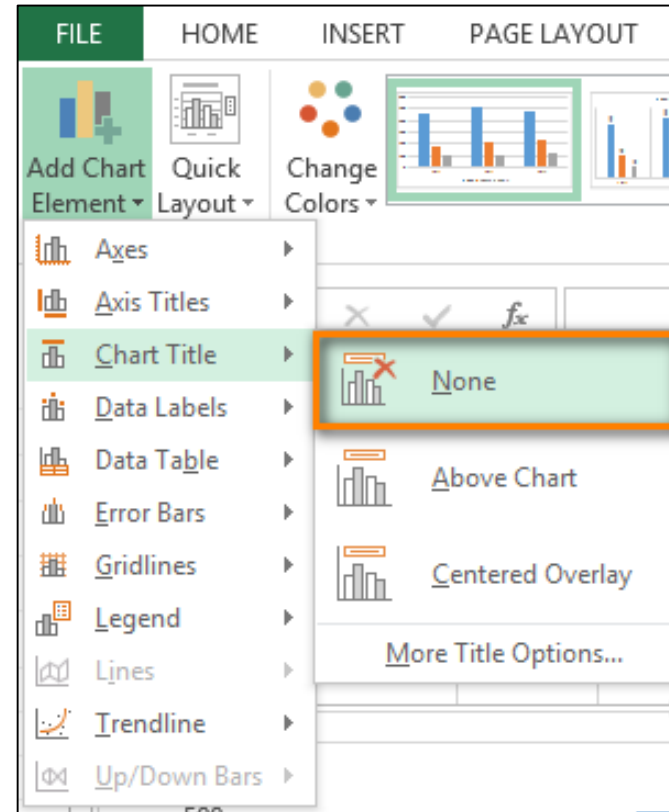
Adding data labels to the chart

➢When you want to add data labels to your chart, select "Data Labels" from the options under "Add graphic" in the "Design" tab while the graphic is selected.
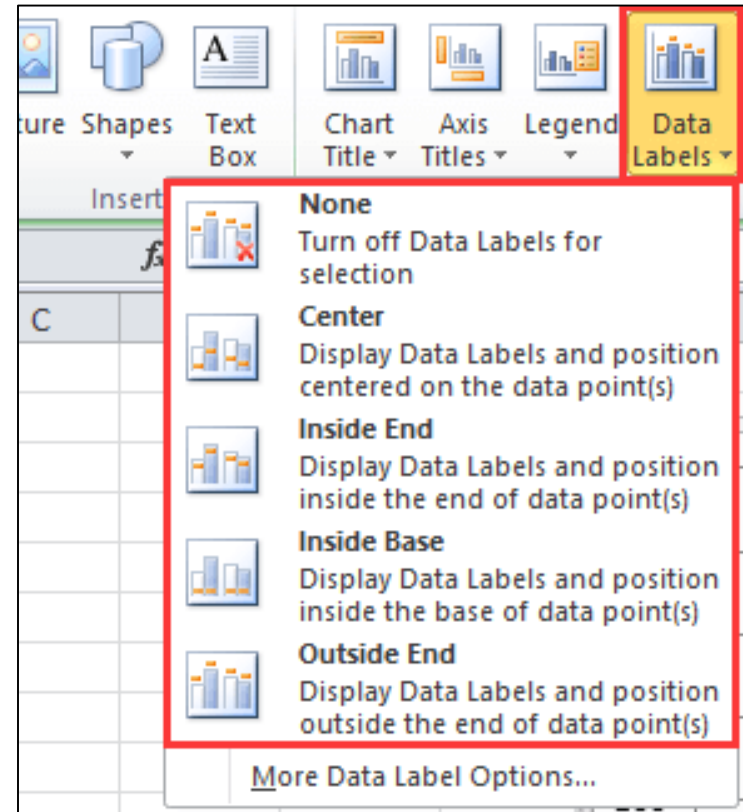
Change the background color of the graphics area

➢To change the background color of the graphics area, the color of the "Shape Fill" must be changed from the "Format" tab while the graphic is selected.

Changing bar, line, column colors in chart

➢In order to change the color of bar, line and column in the chart, "Change Colors" should be used from the "Design" tab while the chart is selected.

Changing the font size, color and text of the chart

➢ Select the text area you want to make changes in the graphic and use the "Font" field in the "Home" tab.

4. Preparing for Print

Change worksheet margins

➢To change the boundaries of the worksheet, you can update the values of the top, bottom, right and left margins by clicking the "Margins" icon in the "Page Layout" tab.
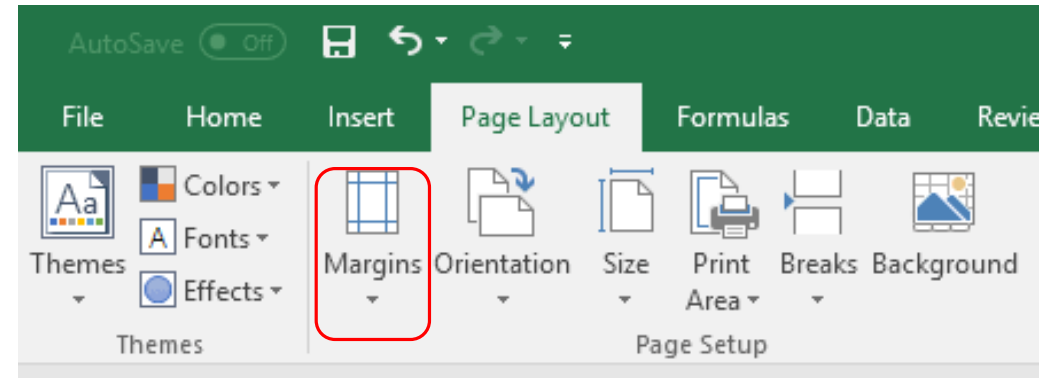
Change the orientation of the worksheet and page size

➢To change the orientation of the worksheet, select the "Orientation" icon from the "Page Layout" tab, and you can set the page vertically or horizontally.

➢For page size settings, make the appropriate selection from the "Size" menu.
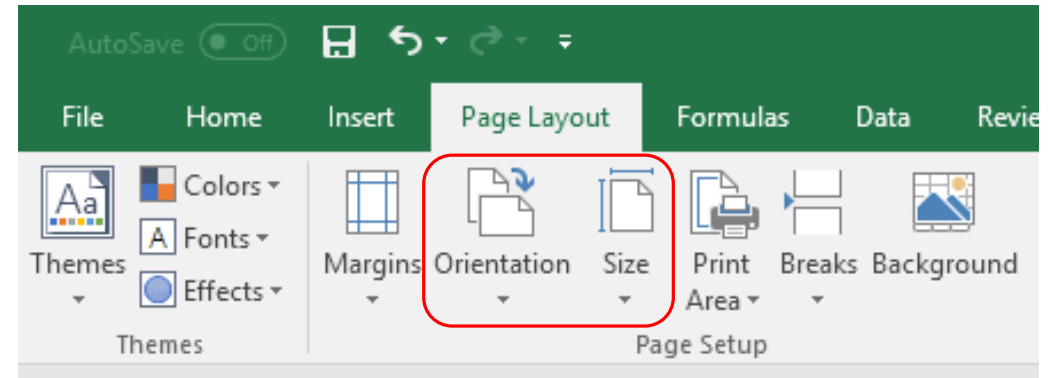
Adjusting the structure of the content of the worksheet

After selecting "Header and Footer" from the «Insert» tab, you must select the "Page Number" feature.
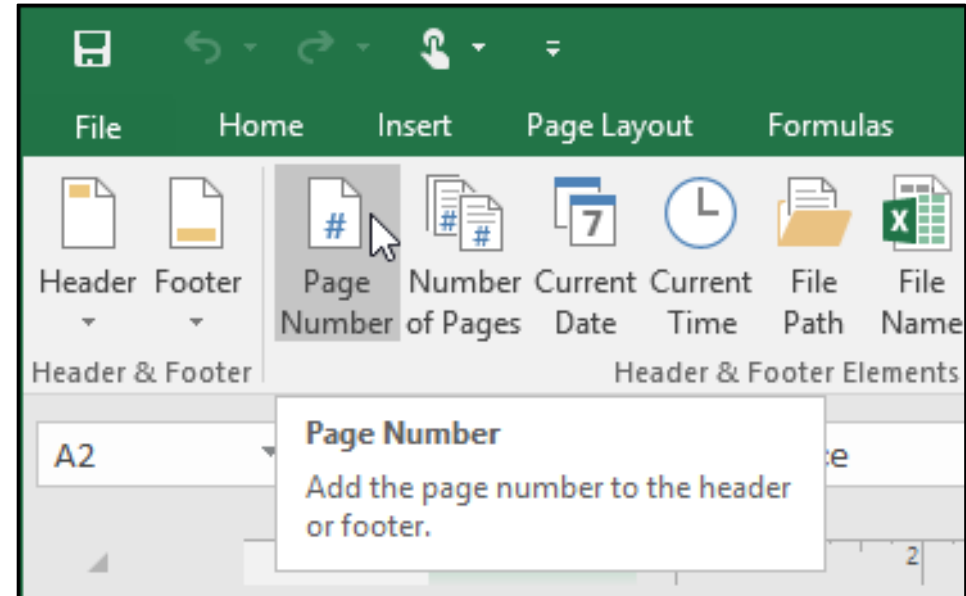
Adding, editing, deleting subtitles, top titles to the worksheet

After selecting "Header and Footer" from the «Insert» tab, you can add, edit or delete a title.

Check and correct spreadsheet calculations and text

Before printing, you should check the calculations and text in the spreadsheet and correct any incorrect appearance.

Showing and hiding row and column lines while printing

If you want the row and column lines to appear in the printout, select the Gridlines-Print option in the Page Layout tab. Deselect this if you don't want it to appear.
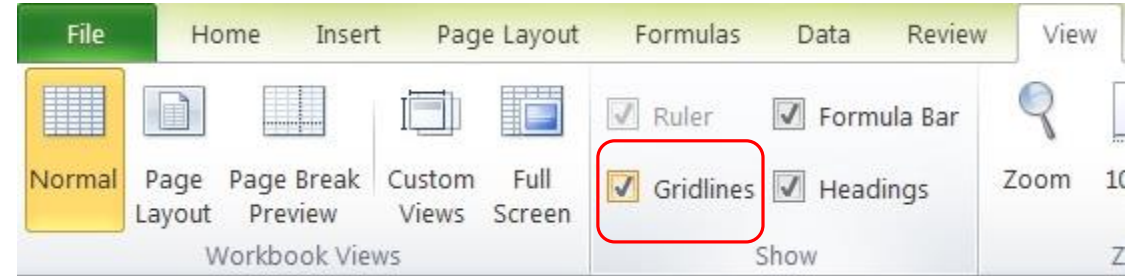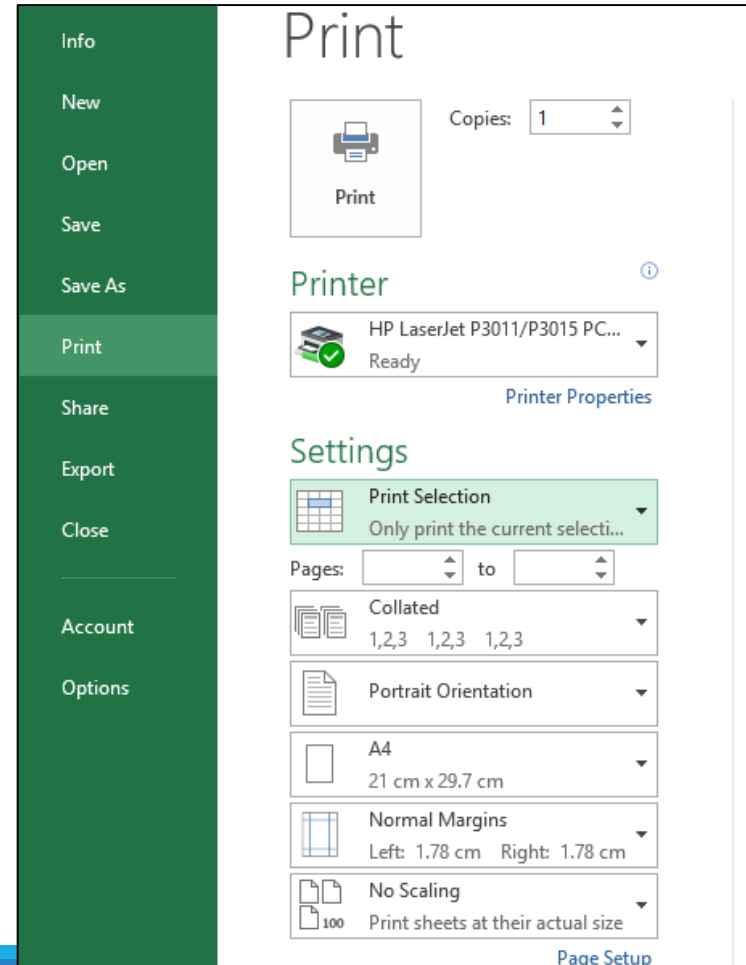
Auto add title row to worksheet when outputting

If you want the title line to appear on the printout, choose Headings-Print on the Page Layout tab.
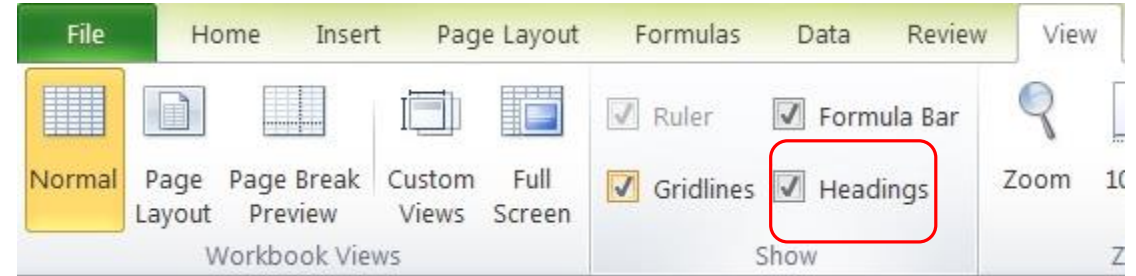
Preview the worksheet

Select the worksheet (s) you want to preview.
Click "File" and then click Print to view the
preview window and print options.

Selecting a range of cells in the worksheet, determining the number of copies

When you want to output a specific range of cells in the worksheet, select "Print" from the File tab after selecting that cell range, then select "Print Selection from Settings".