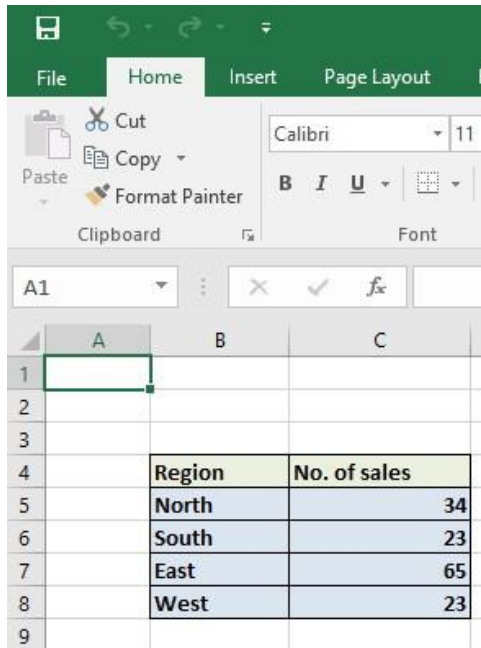


Excel 2016 Charts

Inserting a column chart

- Open a workbook called **Chart**.



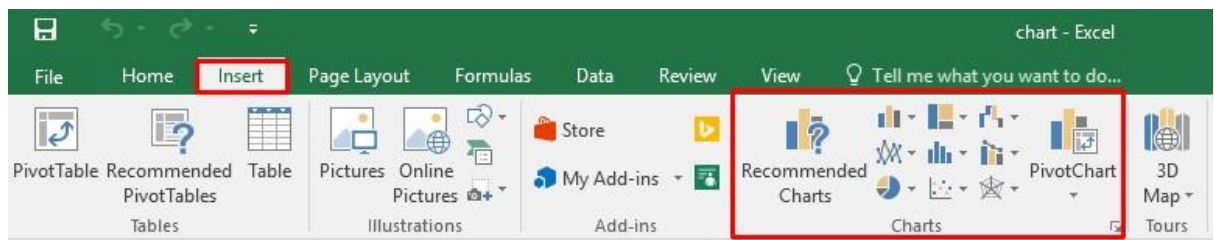
The screenshot shows the Excel 2016 ribbon with the 'Home' tab selected. The ribbon includes the 'Clipboard' group (Paste, Cut, Copy, Format Painter) and the 'Font' group (Calibri font, size 11, Bold, Italic, Underline, Text Color, Background Color). The active cell is A1. Below the ribbon is a data table with the following content:

	A	B	C
1			
2			
3			
4		Region	No. of sales
5		North	34
6		South	23
7		East	65
8		West	23
9			

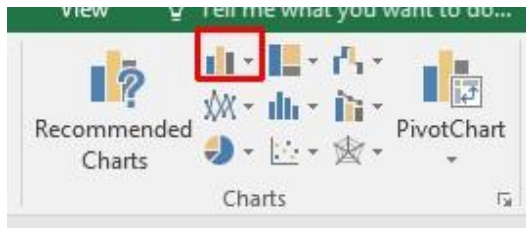
- If necessary, click on the **Column Chart** worksheet tab (at the bottom-left of your screen).



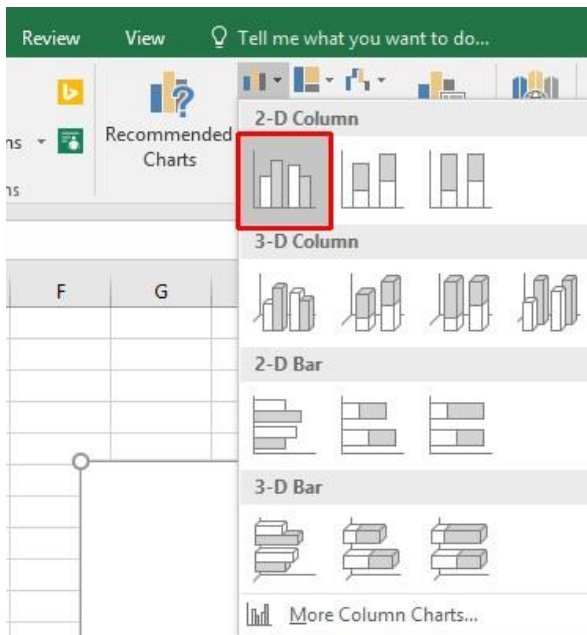
- Click within the table of data.
- Click on the **Insert** tab and you will see the **Charts** group displayed within the Ribbon.



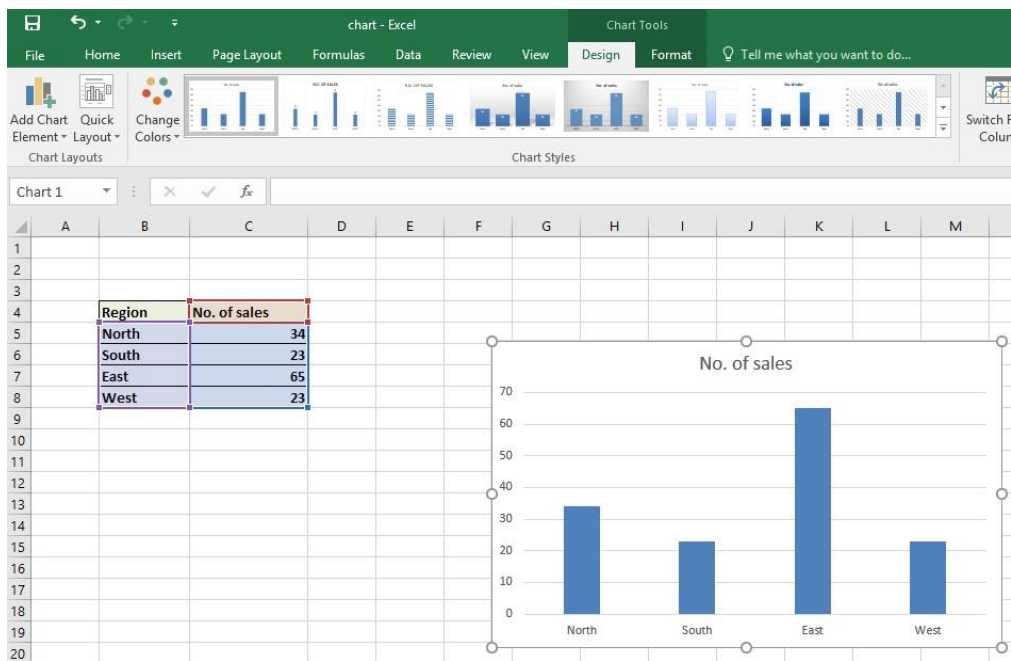
- Click on the **Column** icon



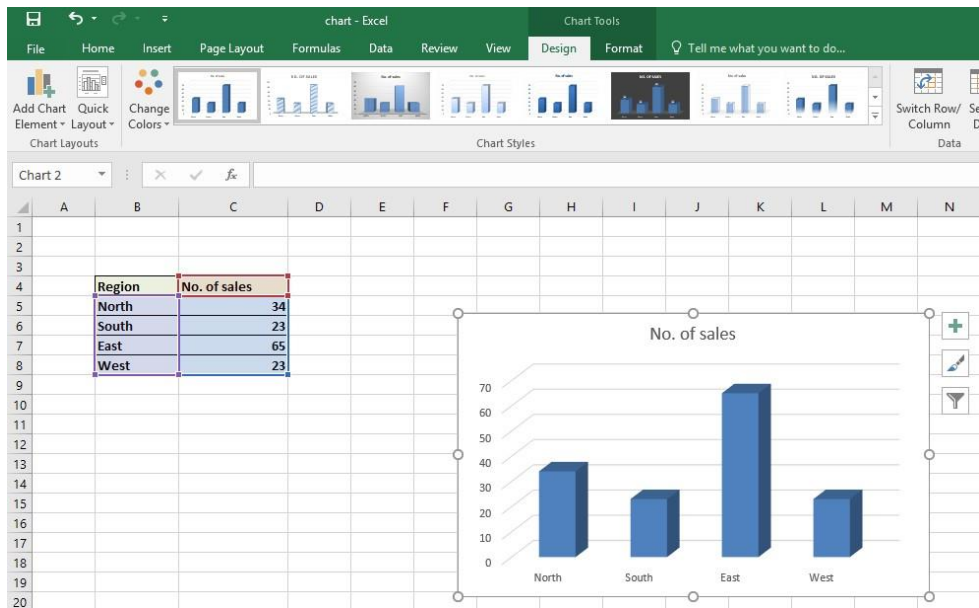
- You will see a drop down displaying a range of column chart options.



- Click on the first option, the **2-D Clustered** format, as illustrated and you will see the following chart inserted into your worksheet.



- Click on the **Undo** icon (top-left of your screen), and experiment with inserting other types of column chart such as a **3-D chart**, as illustrated below.

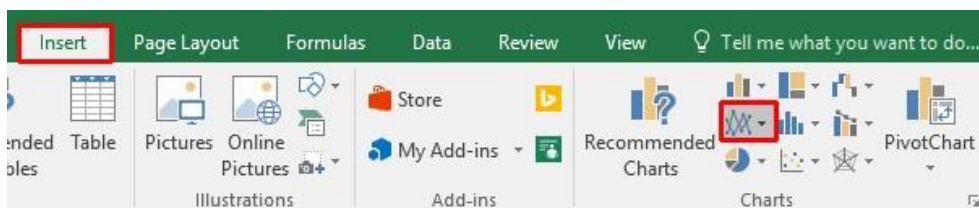


Inserting a line chart

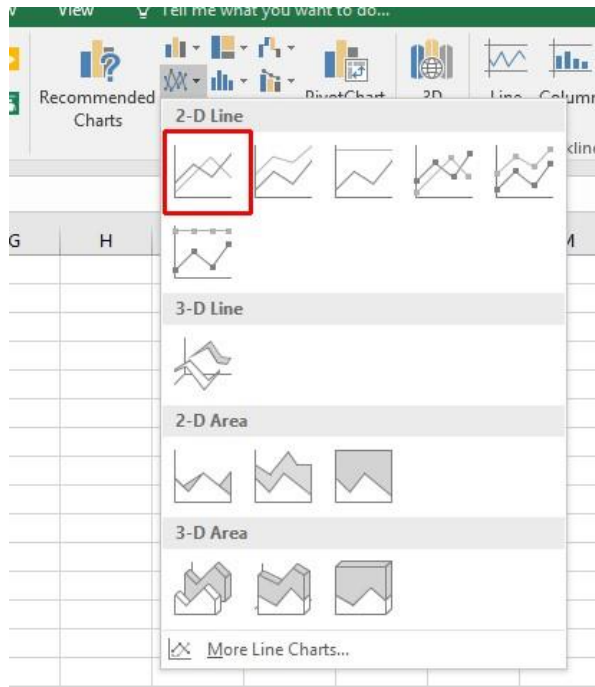
- Click on the **Line Chart** worksheet tab at the bottom of your screen.



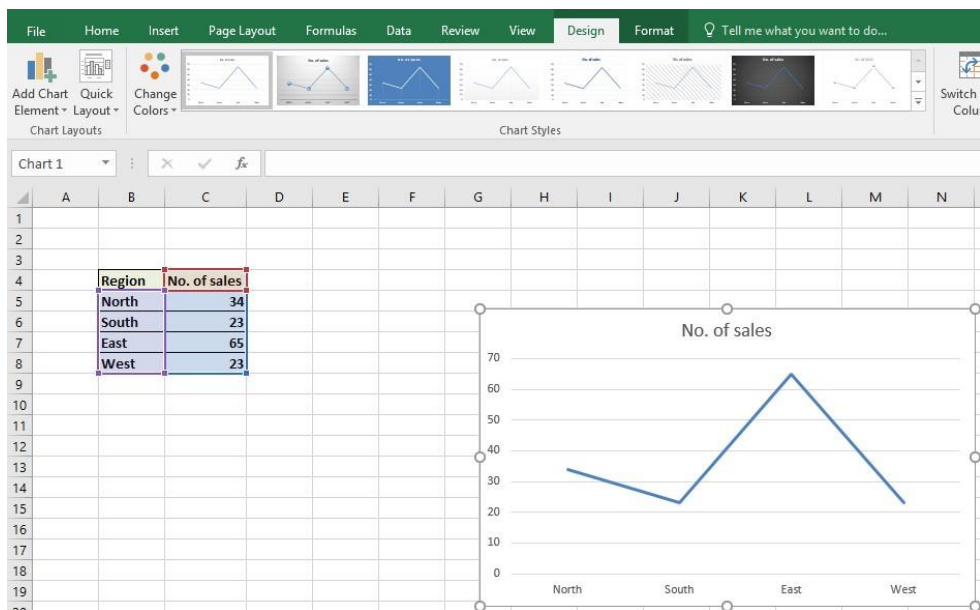
- Click within the data and then click on the **Insert** tab. Experiment with inserting different types of line chart, by clicking on the **Line** button.




- Select from the drop down displayed.

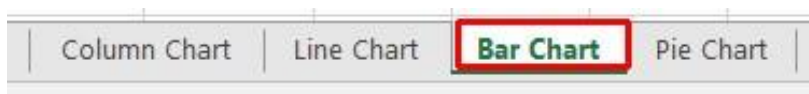


- An example is illustrated below.

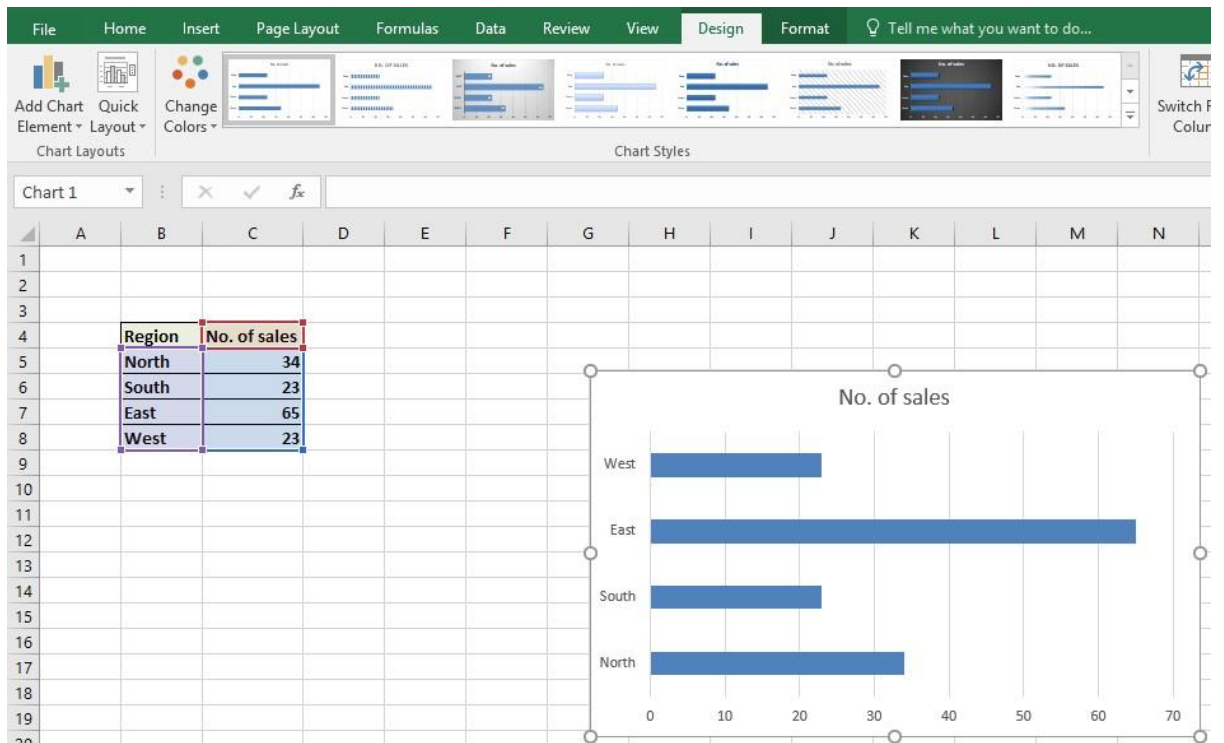


Inserting a bar chart

- Click on the **Bar Chart** worksheet tab at the bottom of your screen. 

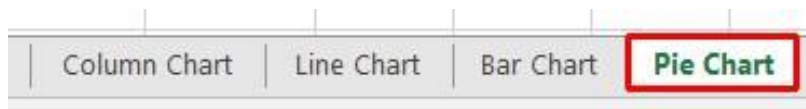


- Click within the data and experiment with inserting different types of bar chart, by clicking on the **Bar** button (under the **Insert** tab).

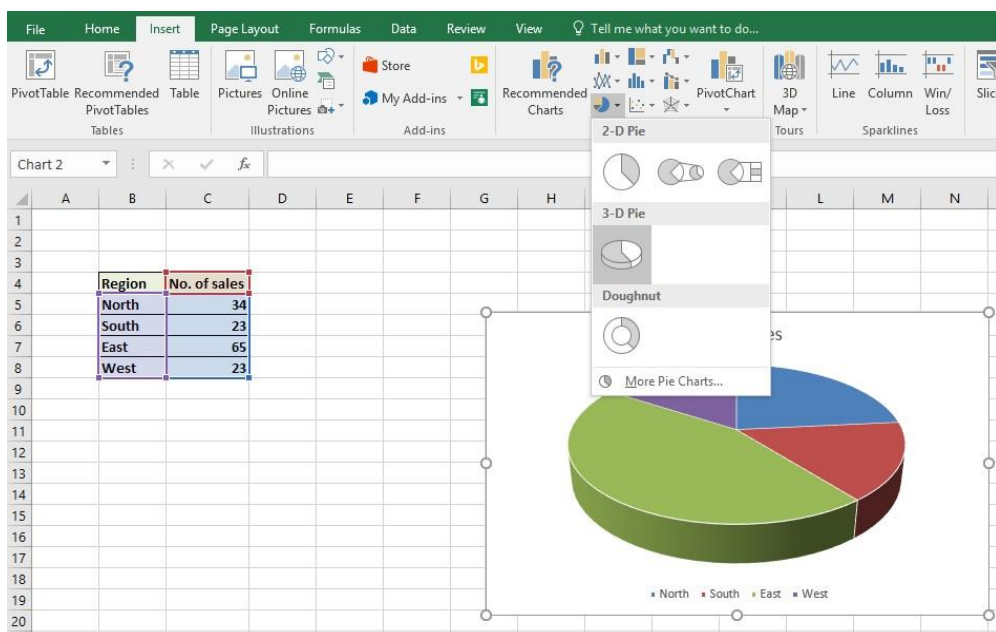


Inserting a pie chart

- Click on the **Pie Chart** worksheet tab at the bottom of your screen.



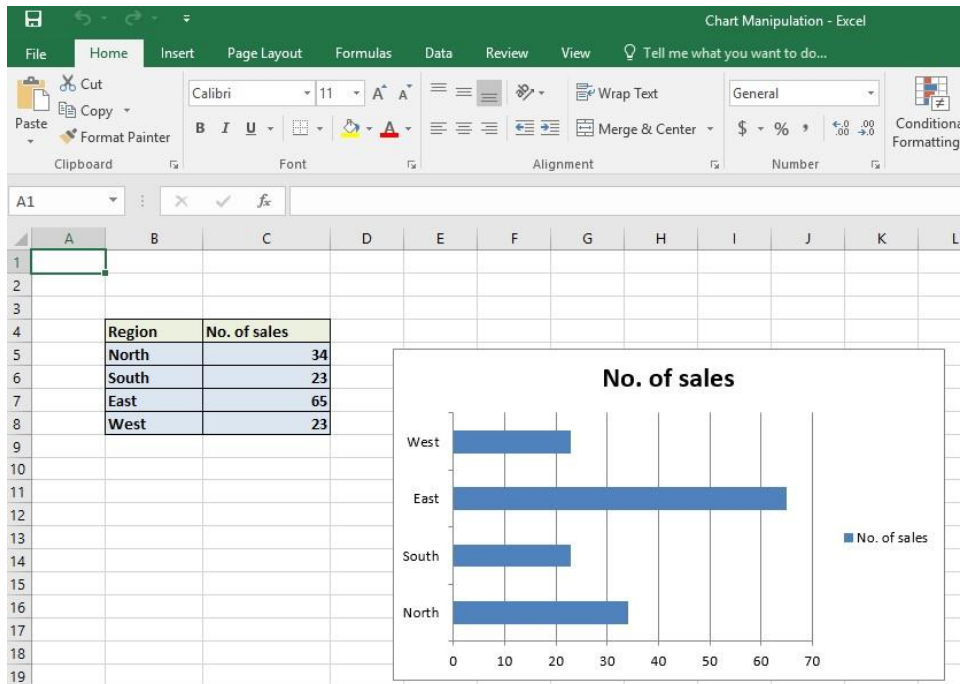
- Click within the table of data.
- Experiment with inserting different types of pie chart.



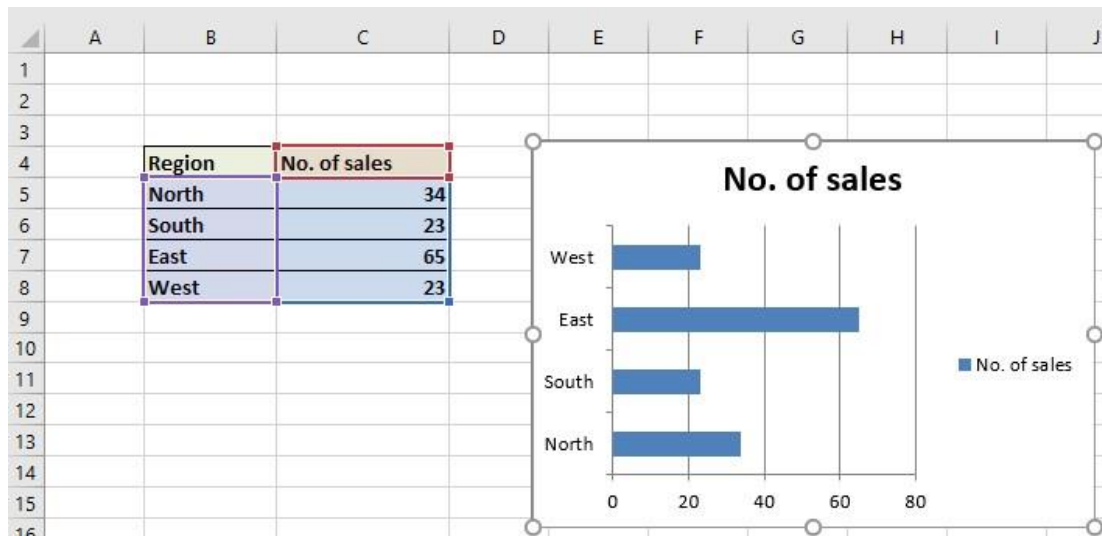
- Save your changes and close the workbook.

Resizing a chart

- Open a workbook called **Chart Manipulation**.



- To resize a chart click on it to select it.
- Move the mouse pointer to one of the four corners of the chart. You will notice that the mouse pointer changes to the shape of a diagonal line with an arrow at each end. When you see the mouse pointer change, press the mouse button and while keeping the button pressed move diagonally across the screen. Move away from the centre of the chart to make the chart larger and toward the centre of the chart to make the chart smaller. When you release the mouse button the chart will be resized.



Deleting a chart

- Select the chart and press the **Del** key.
- Save your changes and close the workbook.

Chart title or labels

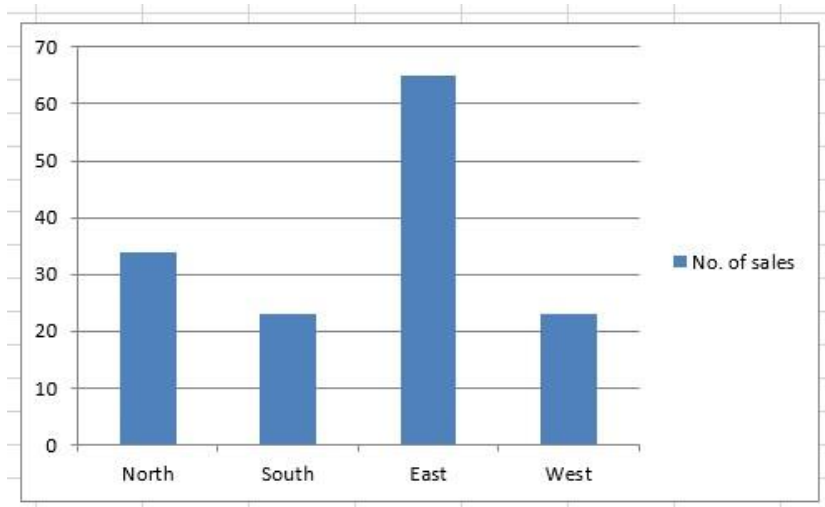
- Open a workbook called **Modifying charts**.
- If necessary, click on the **Modifying a Chart** worksheet tab (at the bottom-left of your screen).



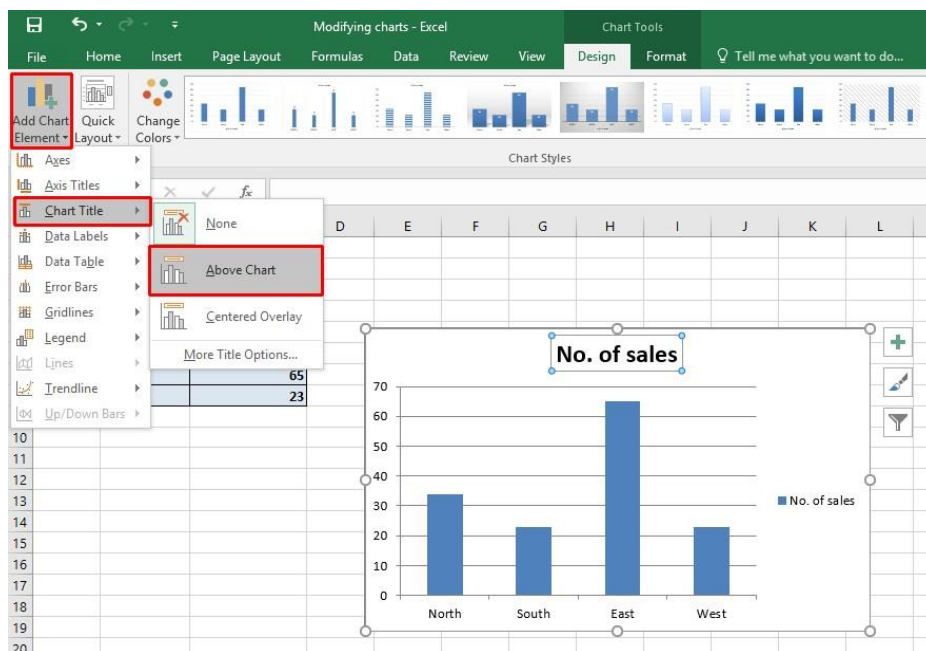
- You can see a column chart displayed within the workbook. Select the chart title, as illustrated.



- Press the **Del** key to remove the chart title. Your chart will now look like this.

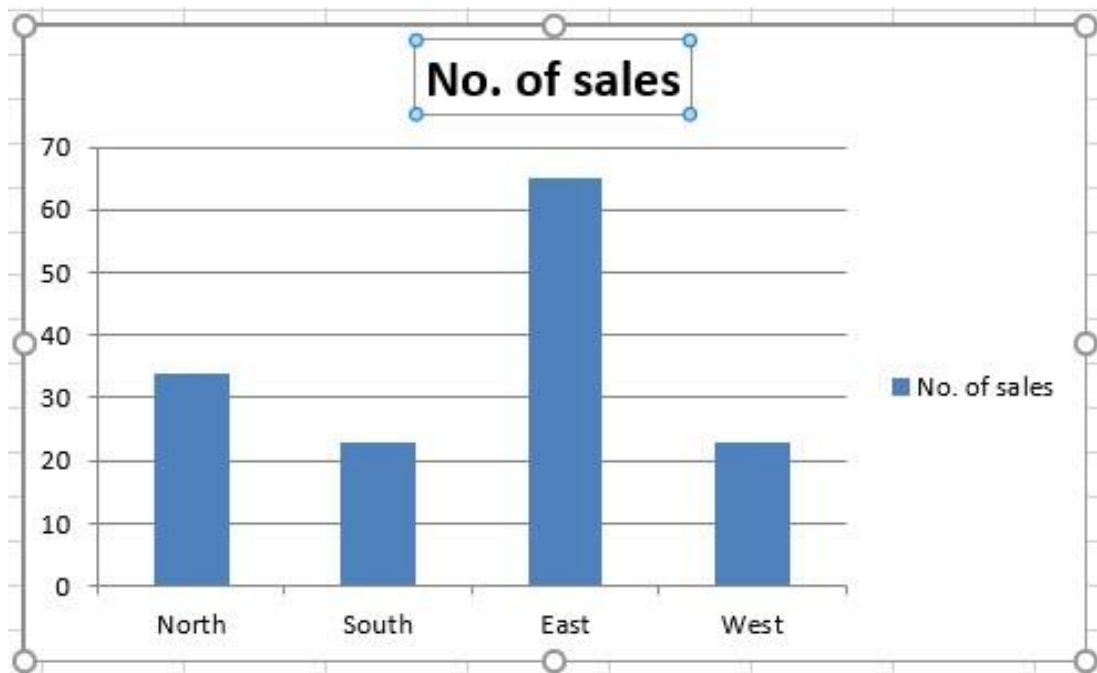


- To insert a chart title, click on chart and then click on the **Design** tab. Click on the **Add Chart Element** button. From the drop down displayed, select **Chart Type**, and from the sub-menu displayed select **Above Chart**.



- Select the required option from the drop down list displayed, such as **Above Chart**. Your chart title is once again displayed.

TIP: To modify the chart title text, click within the **Chart Title** and simply edit the text in the normal way. You can also apply text formatting to the Chart Title as required. An example is shown below.

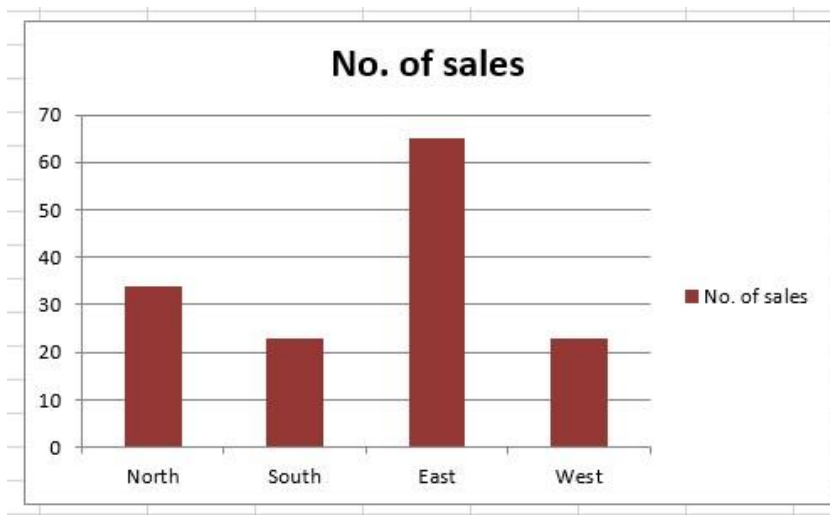


Changing the column, bar, line or pie slice colours in a chart

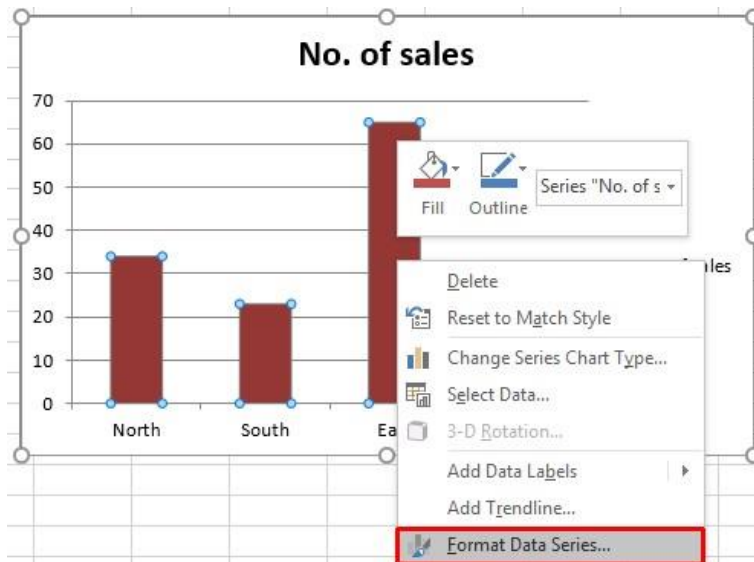
- Click on the second worksheet tab, called **Column Chart**.



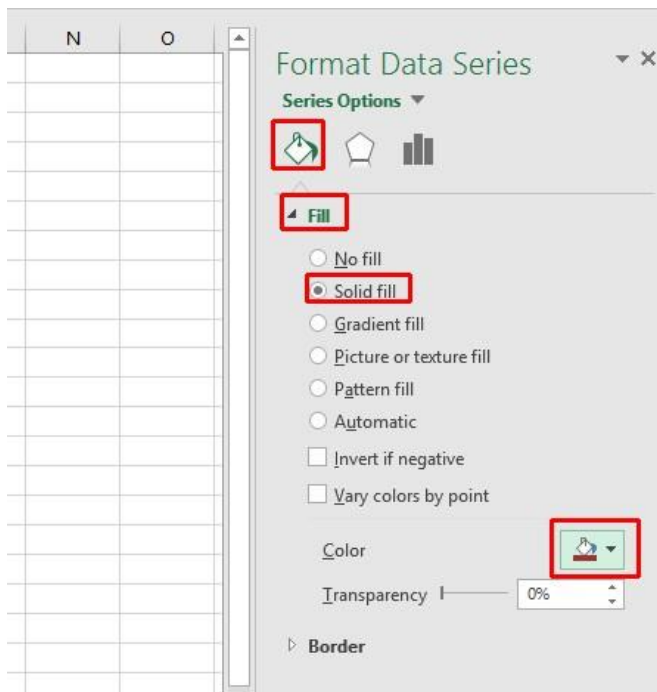
- Click on one of the columns within the chart. You should see all the columns are selected, as illustrated.



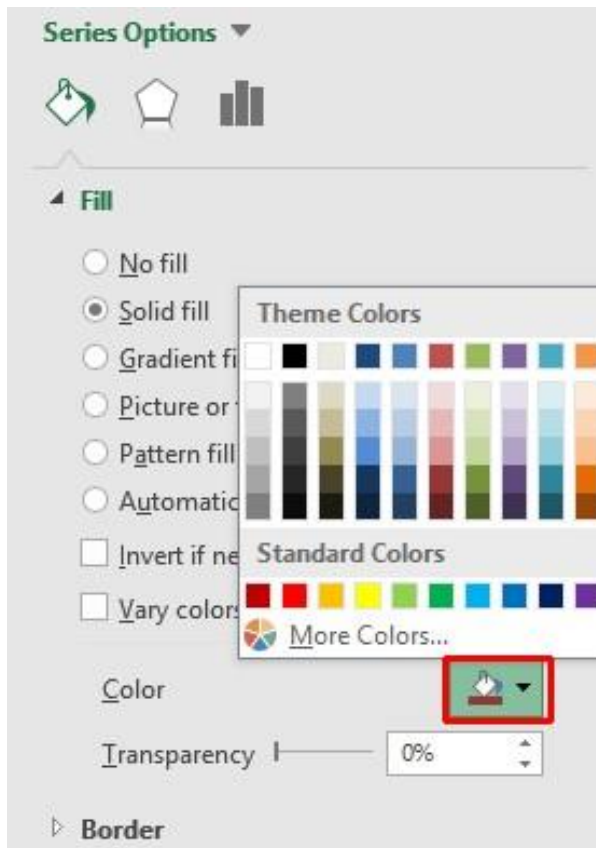
- Right click over one of the selected columns and from the popup menu displayed select the **Format Data Series** command.



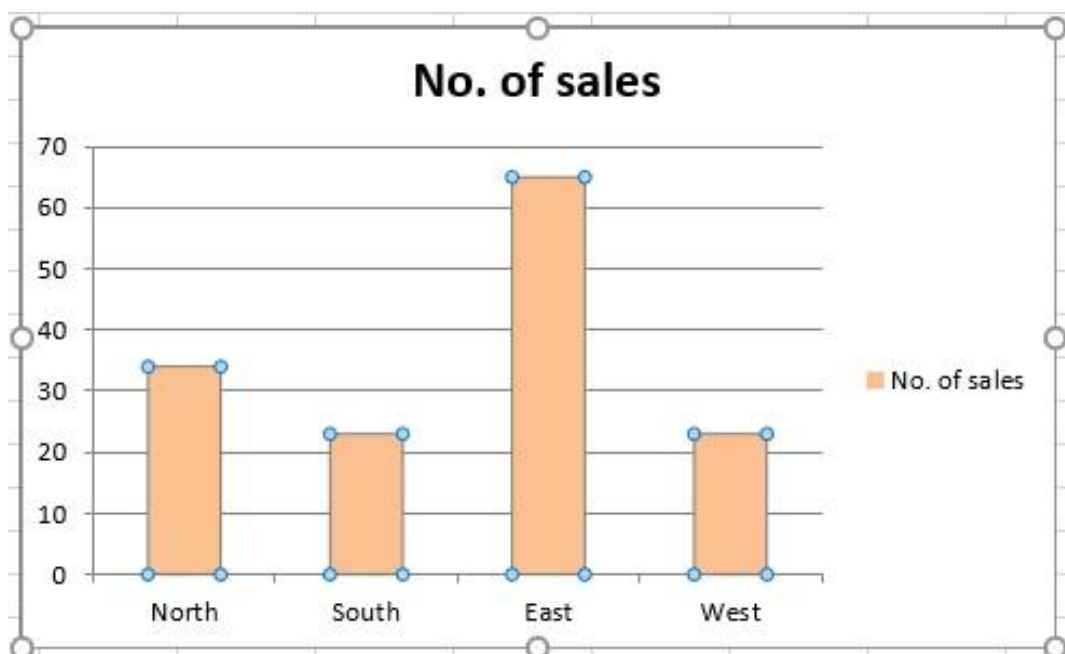
- This will display the **Format Data Series** side pane.
- Click on the **Fill & Line** button, click on **Fill** and make sure that **Solid Color** is selected, as illustrated.



- Click on the **down arrow** in the **Color** section and select a colour for your columns.

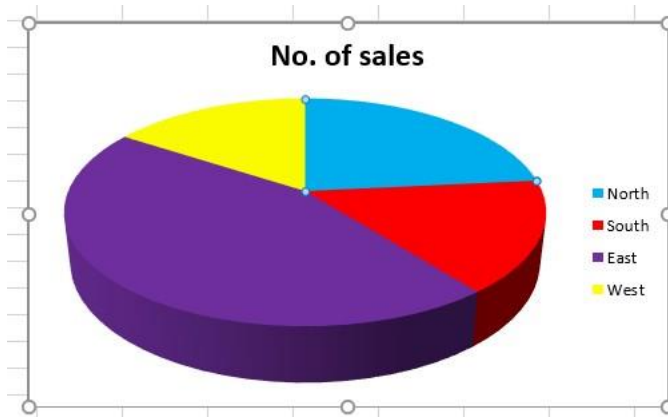


- When you click on the **Close** icon the selected colour will be applied, as illustrated.



- Click on the **Line Chart** worksheet tab and change the colour of the line.
- Click on the **Bar Chart** worksheet tab and change the colour of the bars.

- Click on the **Pie Chart** worksheet tab to display the pie chart. The whole point of a pie chart is that each segment of the pie chart should be a different colour. Bearing this in mind click once on the pie chart to select all the segments within the pie chart. Then click again on a particular segment to select just that segment. At this point you can then right click and change the colour of just that segment. An example is illustrated below.



- Save your changes and close the workbook.

Modifying the legend fill colour

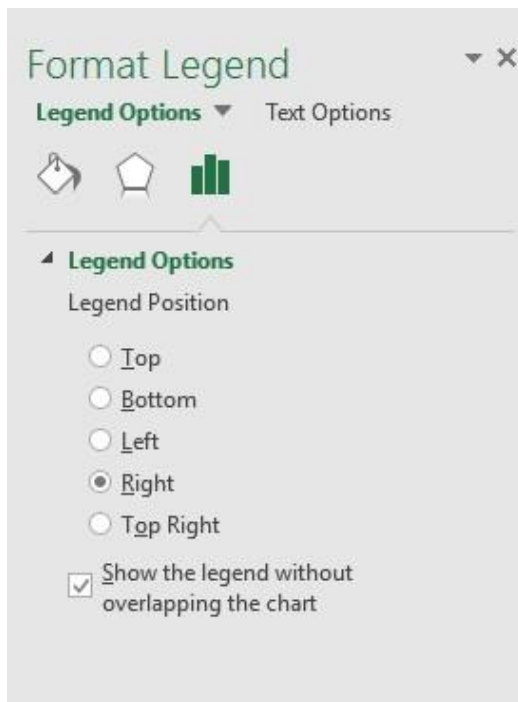
- Open a workbook called **Legend**.
- Select the legend within the chart, as illustrated.



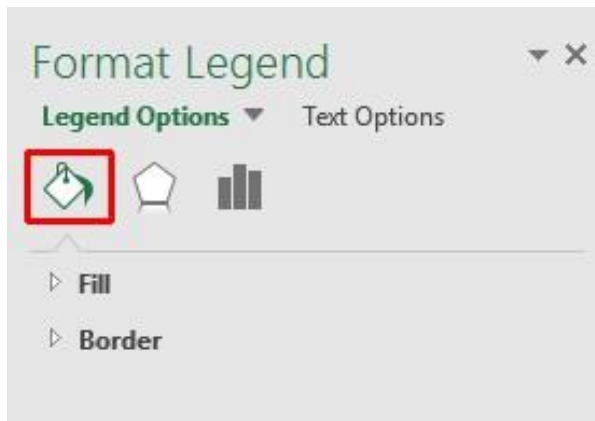
- Right click over the selected legend and from the popup menu displayed select the **Format Legend** command.



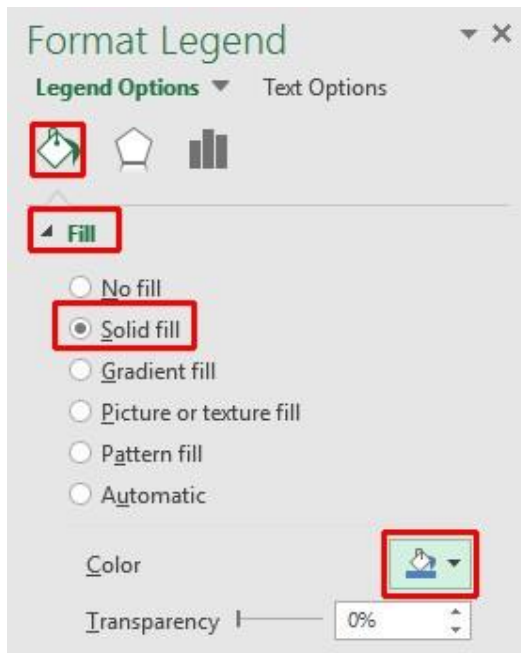
- This will display the **Format Legend** side panel, as illustrated.



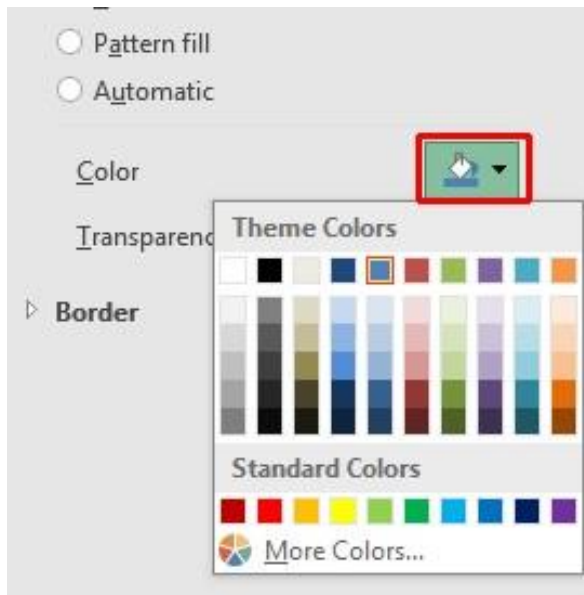
- Select the **Fill & Line** button.



- Select the **Fill** item and then click on the **Solid fill** button and you will see the following.



- Click on the **down arrow** in the **Color** control and select a colour as illustrated below.



- Click on the **Close** button to apply the formatting and close the dialog box.
- If you have time try experimenting with some of the other options within the **Fill** section of the **Format Legend** dialog box, such as **Gradient Fills** or adjusting the fill transparency.



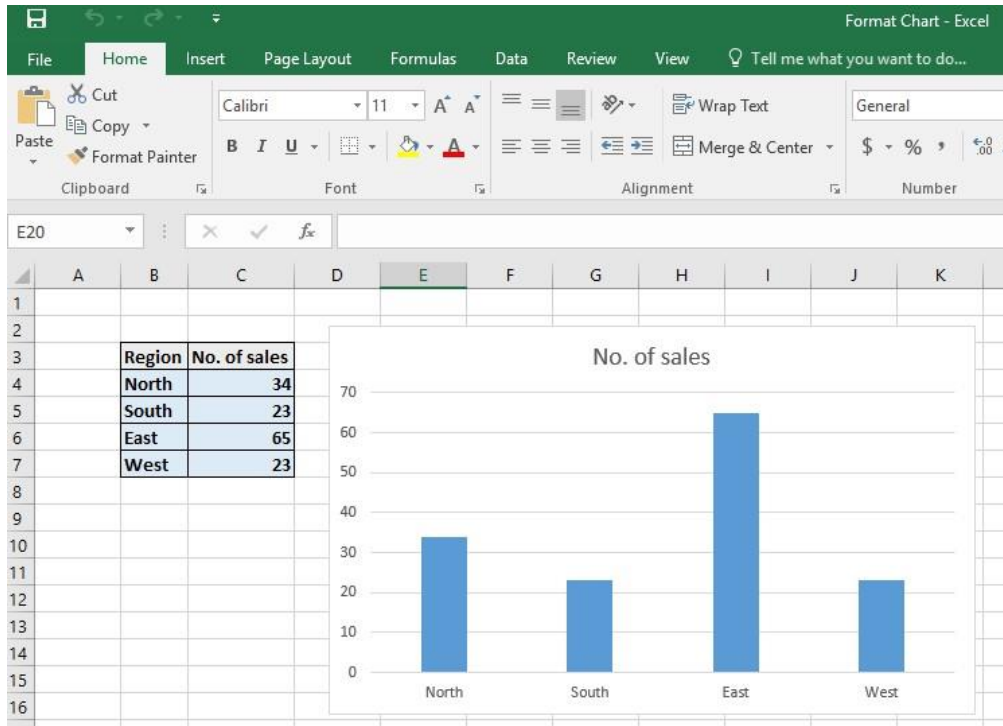
- Save your changes and close the workbook.

Changing the chart type

- Open a workbook called **Changing charts**. 

Modifying charts using the Design tab

- Open a workbook called **Format Chart**.

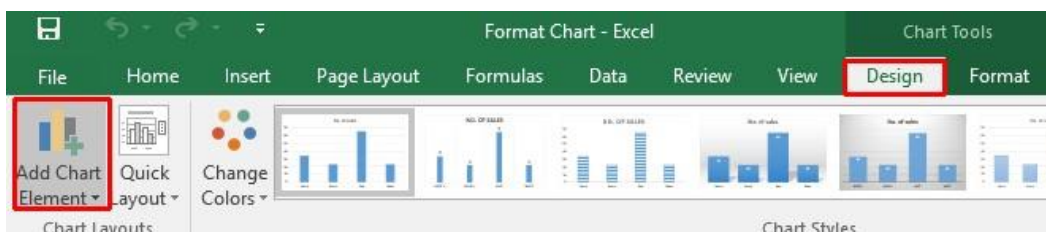


- Select the chart and then click on the **Design** tab. The **Design** tab includes many options for controlling how the various chart elements are displayed. Experiment with using the **Design** tab.

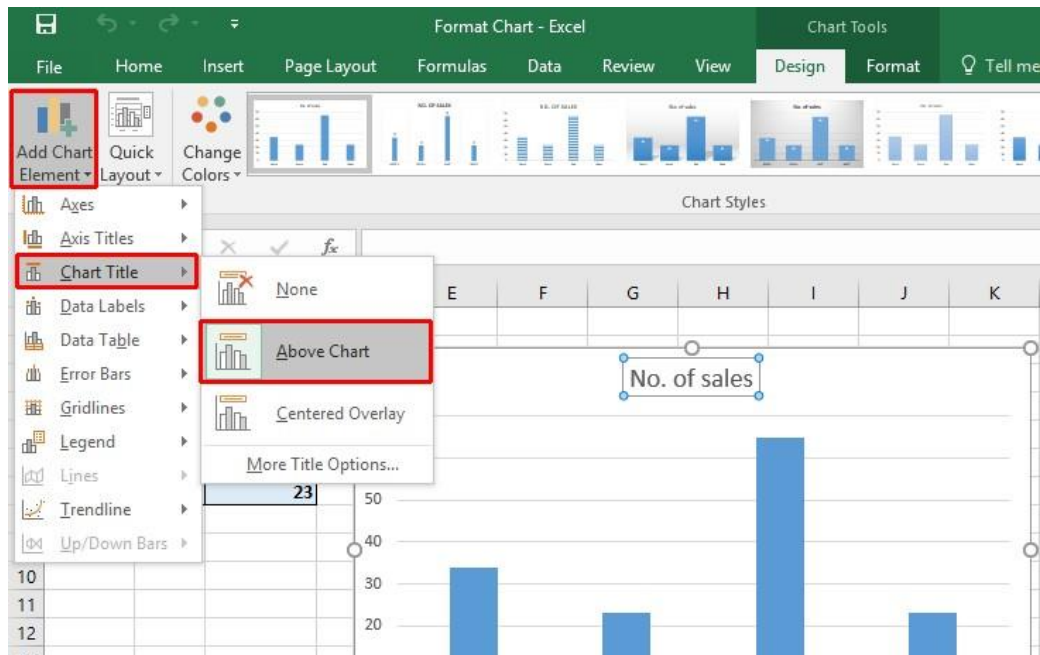


Modifying the chart title

- Click on the **Add Chart Elements** button in the **Chart Layouts** group.

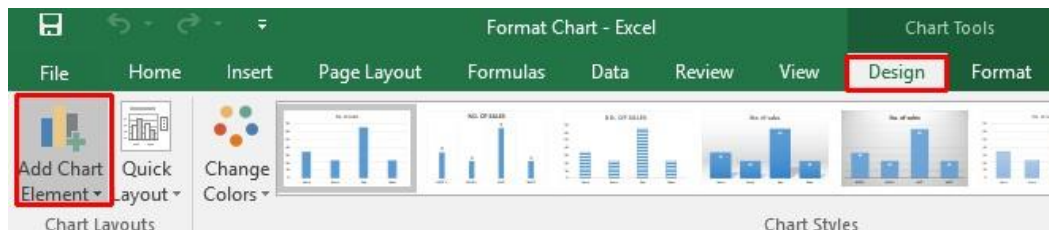


- From the drop down list displayed, click on **Chart Type**. The default is **Above Chart**, try selecting the other options and observe the effect on the chart.

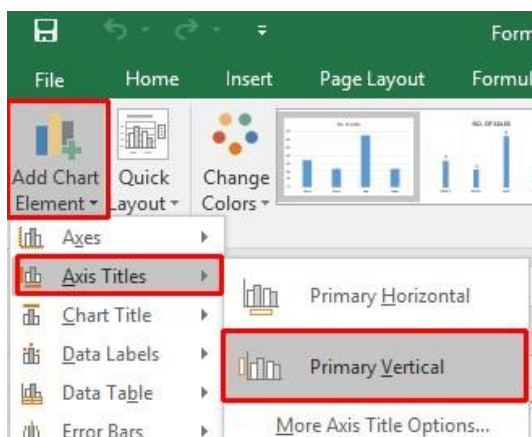


Modifying the chart axis

- Click on the **Add Chart Elements** button in the **Chart Layouts** group.

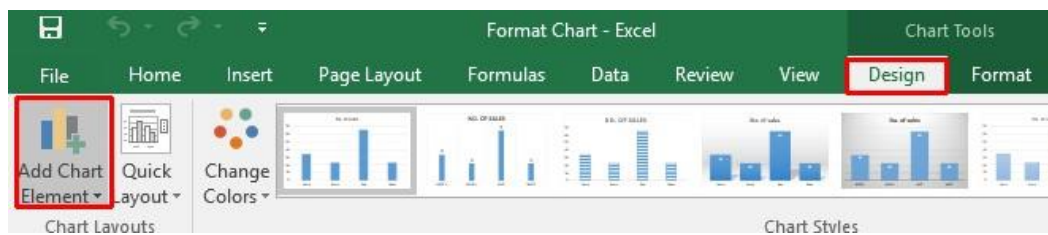


- Click on **Axis Titles**. A sub-menu will be displayed allowing you to control how the labels for each axis are displayed. Experiment with some of the available options and view their effect on the chart.

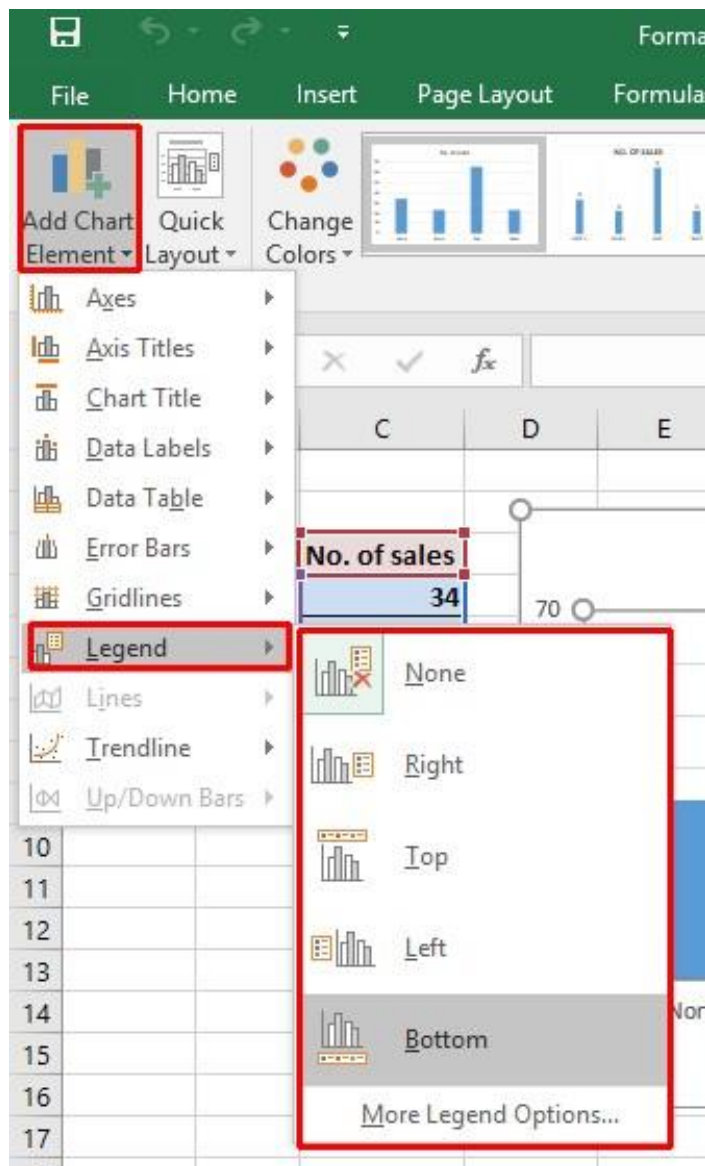


Modifying the chart legend

- Click on the **Add Chart Elements** button in the **Chart Layouts** group.

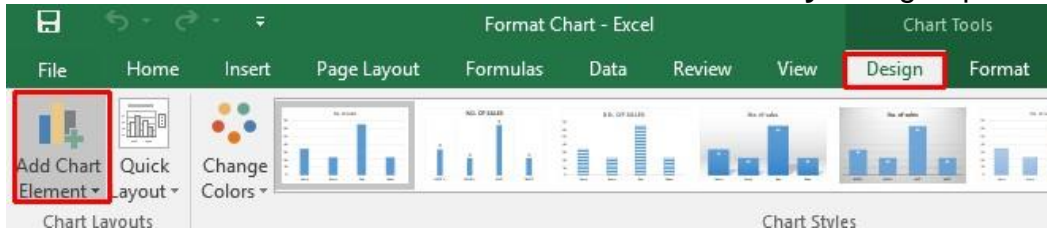


- Click on **Legend**. A sub-menu will be displayed allowing you to control where the chart legend is displayed. Experiment with some of the available options and view their effect on the chart.

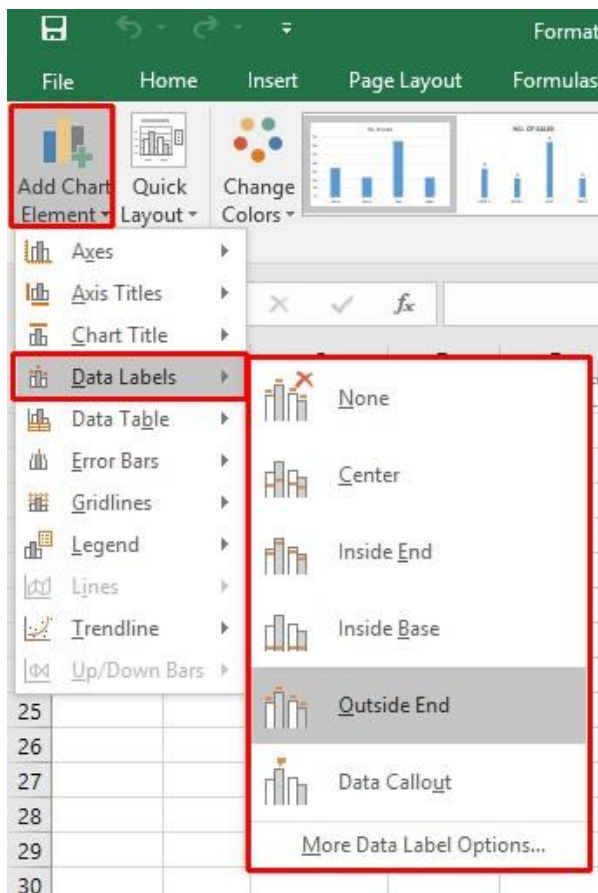


Modifying chart data labels

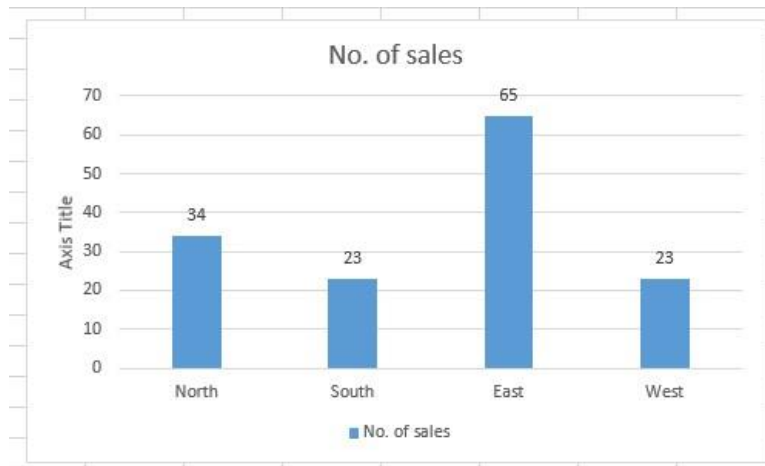
- Click on the **Add Chart Elements** button in the **Chart Layouts** group.



- Click on **Data Labels**. A sub-menu will be displayed allowing you to choose where labels should be applied to data in the chart. Click on the **Outside End** option.



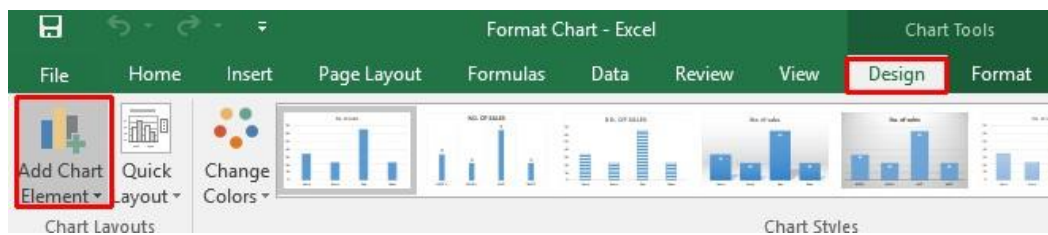
- The chart should now look something like this.



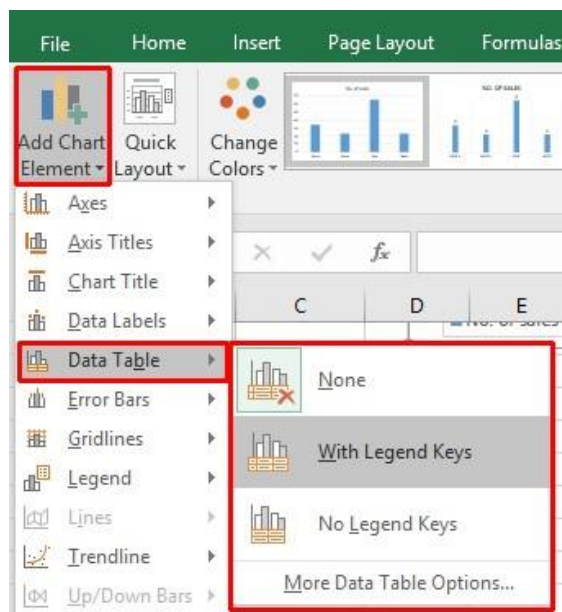
Notice that each column is now labelled with its value.

Displaying chart data tables

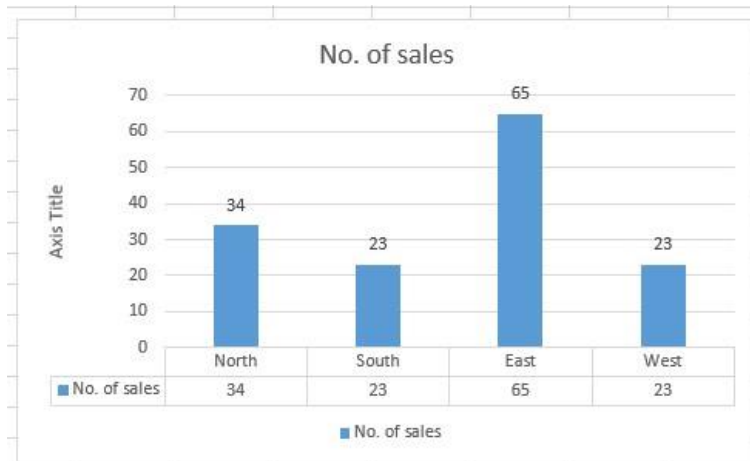
- Click on the **Add Chart Elements** button in the **Chart Layouts** group.



- Click on **Data Table**. A sub-menu will be displayed allowing you to show the data used to create the chart. Click on the **Show Data Table with Legend Keys** option.

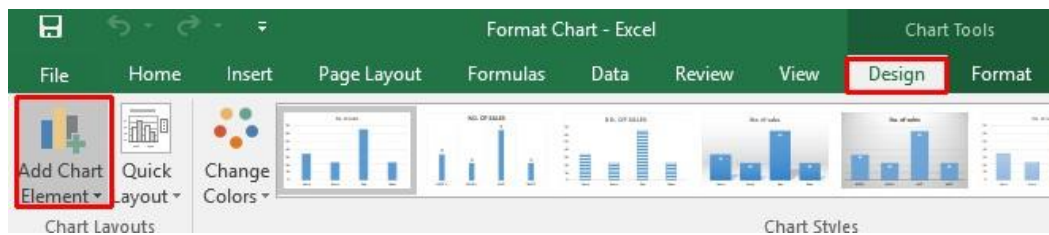


- A small table will be displayed below the chart containing the relevant data.



Modifying chart gridlines

- Click on the **Add Chart Elements** button in the **Chart Layouts** group 



- Click on **Gridlines**. A sub-menu will be displayed allowing you to control how the gridlines for each axis are displayed. Experiment with some of the available options and view their effect on the chart.