File Tab: It provides file management commands.

Quick Access Toolbar: Used for frequent commands. It is customizable.

Ribbon: Contains tabs, on which items are organized in groups of related tools.

Ribbon Group: Contains sets of related controls.

Formula Bar: Enter and edit values, formulas, and text.

Worksheet: Consists of rows and columns that intersect to form cells.

Status Bar: Provides information for the active worksheet. Switch view options or zoom in/out.
Microsoft Excel 2016 Charts and Graphics

Column Charts

Creating a Column Chart
1. Highlight the range of cells.
2. Click the INSERT tab.
3. In the Charts group, click the Insert Column Chart drop-down menu.
4. Click the desired column chart.

Choosing a Different Layout
1. Click the chart.
2. Click the DESIGN tab.
3. In the Chart Layouts group, click the Quick Layout drop-down menu.
4. Select the desired layout.

Changing the Chart Subtype
1. Click the chart.
2. Click the DESIGN tab.
3. In the Type group, click Change Chart Type.
4. Click the desired chart type > OK.

Displaying a Data Table
1. Click the chart.
2. Click the Plus sign that appears to the right.
3. In the Chart Elements window, check Data Table.

Pie Charts

Creating a Pie Chart
1. Highlight the range of cells.
2. Click the INSERT tab.
3. In the Charts group, click the Pie drop-down menu.
4. Click the desired pie chart.

Adding a Chart Title
1. Click the title placeholder.
   a. To link the title to a cell:
   i. Click the formula bar and type the equals sign (=).
   ii. Click the cell.
   iii. Press the Enter key.
   b. Or simply type the title in the formula bar and press the Enter key.

Adding Data Labels
1. Click the chart.
2. Click the Plus sign that appears to the right.
3. Place the pointer over Data Labels and click the arrow that appears to the right.
4. Click More Options.
5. The Format Data Labels window will open to the right of the screen, modify the desired settings.

Removing the Legend
1. Click the chart.
2. Click the Plus sign that appears to the right.
3. Uncheck the Legend option.

Exploding a Piece of Pie
1. Click the pie chart.
2. Click the piece of pie that will be exploded.
3. Click and hold the cursor on the piece of pie.
   a. To put the slice back simply drag it back into the pie.

Adding a Secondary Bar Chart to a Pie Chart
1. Right-click the chart.
2. Click Change Chart Type.
3. Click the Bar of Pie type chart > OK.
Adding a Chart Title
1. Select the chart.
2. Click the Plus sign that appears to the right.
3. In the Chart Elements window, check Chart Title.

Adding Sparklines to a Worksheet
1. Highlight the range of cells.
2. Click the INSERT tab.
3. In the Sparklines group there are three different options, click the desired option.
   - The Create Sparklines dialog box appears.
4. Click the icon to the right of the Location Range: field.
5. Highlight the range of cells.
6. Click the icon to the right of the field.
7. Click OK.

Line Charts
Creating a Line Chart
1. Highlight the range of cells.
2. Click the INSERT tab.
3. In the Charts group, click the Line drop-down menu.
4. Click the desired line chart.

Add a Data Series to a Line Chart
1. Click the chart.
2. Click the DESIGN tab.
3. In the Data group, click Select Data
   - The Select Data Source dialog box appears.
4. Click Add.
5. Click the cell that is the Series Name:
6. Press the Tab key.
7. Highlight the values in the series (vertical axis).
8. Click OK.
10. Highlight the values in the category (horizontal axis).
11. Press the Enter key.
12. Click OK.

Scatter Charts
Creating a Scatter Chart
1. Highlight the range of cells.
2. Click the INSERT tab.
3. In the Charts group, click the Scatter drop-down menu.
4. Select More Options...
5. In the Format Trendline window that appears to the right, select the desired trendline radio button.
6. To display the equation on the chart, check the Display Equation on chart option.
7. To display the R-squared value on the chart, check Display R-squared value on chart.
Adding Vertical Gridlines
1. Click the chart.
2. Select the Plus sign.
3. Check Gridlines.
   a. For more options click the arrow that appears to the right of the word.

Formatting Gridlines
1. Right-click the gridline (horizontal or vertical).
2. Click Format Gridlines…
3. Change the formatting options.
4. Click the X to close.

Adjusting the Horizontal Axis Minimum Value
1. Click the chart.
2. Select the Plus sign.
3. Place the pointer over the word Axes and click the arrow to its right.
4. Select More Options…
5. In the Format Axis window, select the Axis Options icon.
6. Select Axis Options to display the options.
7. Under Vertical axis crosses, edit the desired options.

Displaying Tick Marks
1. In the Format Axis window, select the Axis Options icon.
2. Select Tick Marks to display the contents.
3. Select the desired options.

Applying Themes
1. Click the item to apply the theme to.
2. Click the PAGE LAYOUT tab.
3. In the Themes group, click Themes
4. Move the cursor onto a theme to preview it.
5. Click a theme to apply it.

Bar Charts

Creating a Bar Chart
1. Highlight the range of cells.
2. Click the INSERT tab.
3. In the Chart group, click the Bar drop-down menu.

Applying a Chart Style
1. Click the chart.
2. Click the DESIGN tab.
3. In the Chart Styles group, click the desired style.

Formatting the Chart Area
1. Right-click the chart area (outside of the plot area).
2. The mini toolbar appears for changing the Fill color, Outline color, and other formatting options.
3. For additional formatting options, double-click the chart area.

Inserting Smart Art Graphics
1. Select any cell.
2. Click the INSERT tab.
3. In the Illustrations group, click SmartArt.
4. Choose the type in the left pane.
5. Choose the various layouts in the middle pane.
6. Click OK.
7. Expand the tab on the left side of the SmartArt graphic to enable the text pane.

Grouping Objects
1. Click the SmartArt graphic.
2. Hold down the shift key and click the other chart.
3. Right-click the chart border.
4. Click Group > Group.

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**Formatting the Plot Area**  
1. Right-click the plot area.  
2. The mini toolbar appears for changing the **Fill** color, **Outline** color, and other formatting options.  
3. For additional formatting options, double-click the plot area.  

**Moving and Formatting the Legend**  
- If the legend is not visible, click the chart.  
- Click the Plus sign next to it.  
- Check **Legend**.  
  1. Right-click the legend.  
  2. The mini toolbar appears for changing the **Fill** color, **Outline** color, and other formatting options.

**Formatting the Bars and Data Labels**  
1. Right-click any bar in the chart.  
2. Click **Format Data Series**...  
3. There are multiple formatting options that appear.  
4. Change the desired settings.  
5. Click **Close**.

**Inserting a Text Box**  
1. Click the **INSERT** tab.  
2. In the **Text** group, click **Text Box**.  
3. Click and hold the mouse button, drag it to fit the desired size.

**Creating a Copy of an Existing Chart**  
1. Right-click the chart area.  
2. Click **Copy**.  
3. Right-click the desired location to place the copy.  
4. Under **Paste Options**, click the desired paste option.

- Moving the mouse over an option will show a preview of the output.

**Chart Templates**  
**Creating a Chart Template**  
1. Right-click the desired chart.  
2. Click **Save as Template**.  
3. In the **File Name** field, type in the name of the template.  
4. Click **Save**.

**Applying a Chart Template**  
1. Click the chart.  
2. Click the **DESIGN** tab.  
3. In the **Type** group, click **Change Chart Type**.  
4. In the left side panel, click **Templates**.  
5. Click the desired template > OK.

**Moving a Chart to another Worksheet**  
1. Click the chart.  
2. Click the **DESIGN** tab.  
3. In the **Location** group, click **Move Chart**.  
4. To create a new worksheet, click **New Sheet**: and type in a name.  
5. Click **OK**.  
6. To move to an existing worksheet, click **Object in**:  
7. Click the drop-down menu.  
8. Click the desired sheet > OK.

**Inserting Shapes**  
1. Click the **INSERT** tab.  
2. In the **Illustrations** group, click **Shapes**.  
3. Click the desired shape.  
   - The cursor will change to a crosshair.  
4. Click and hold down the mouse button, drag the mouse to fit the desired size.  

- Holding down the **Shift** key while dragging will maintain the objects default proportions.

**Printing Options for Charts**  
1. Click the chart.  
2. Click the **PAGE LAYOUT** tab.  
3. In the **Page Setup** group, click the **Page Setup** dialog box icon in the bottom right corner.  
4. This dialog box contains additional printing options for the chart.

**Inserting Charts into PowerPoint Slides**  
1. Right-click the chart area.  
2. Click **Copy**.  
3. In the PowerPoint slide, right-click the desired location.  
4. Under **Paste Options**, click the desired option.  
   - Moving the mouse over an option will show a preview of the output.

**Using the Paste Special Command**  
1. Copy the desired object.  
2. Click the desired cell.  
3. Click the **HOME** tab.  
4. In the **Clipboard** group, click the **Paste** drop-down menu > **Paste Special**...  
   - This dialog box can paste the copied object as a different type of object such as a PNG picture instead of the original object.  
5. Click the desired option > OK.

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