**Chapter 3.3 Excel Instructions**

1. **Create a Scatter Chart**

Use data file **Electronics.xlsx**

1. Select cells B2:C11
2. Click the **Insert** tab in the Ribbon
3. Click the **Insert Scatter (X,Y) or Bubble Chart** button in the **Charts** group
4. When the list of scatter chart subtypes appears, click the **Scatter** button
5. Click the **Design** tab under the **Chart Tools** Ribbon
6. Click **Add Chart Element** in the **Chart Layouts** group
   1. Select **Chart Title**, and click **Above Chart**
   2. Click on the text box above the chart, and replace the text with *Scatter Chart for the San Francisco Electronics Store*
7. Click **Add Chart Element** in the **Chart Layouts** group
   1. Select **Axis Title**, and click **Primary Horizontal**
   2. Click on the text box under the horizontal axis, and replace “Axis Title” with *Number of Commercials*
8. Click **Add Chart Element** in the **Chart Layouts** group
   1. Select **Axis Title,** and click **Primary Vertical**
   2. Click on the text box next to the vertical axis, and replace “Axis Title” with *Sales ($100s)*
9. Right-click on the one of the horizontal grid lines in the body of the chart, and click **Delete**
10. Right-click on the one of the vertical grid lines in the body of the chart, and click **Delete**

**To add a linear trendline** using Excel, we use the following steps:

1. Right-click on one of the data points in the scatter chart, and select **Add Trendline…**
2. When the **Format Trendline** task pane appears, select **Linear** under **Trendline Options**
3. **Create a Line Chart**

Use data file **Kirkland.xlsx**

1. Select cells A2:B13
2. Click the **Insert** tab on the Ribbon
3. Click the **Insert Line Chart** button in the **Charts** group
4. When the list of line chart subtypes appears, click the **Line with Markers** button under **2-D Line**

This creates a line chart for sales with a basic layout and minimum formatting

1. Select the line chart that was just created to reveal the **Chart Buttons**
2. Click the **Chart Elements button**
   1. Select the check boxes for **Axes**, **Axis Titles**, and **Chart Title**. **Deselect** the check box for **Gridlines**.
   2. Click on the text box next to the vertical axis, and replace “Axis Title” with *Sales ($100s)*
   3. Click on the text box next to the horizontal axis and replace “Axis Title” with *Month*.
   4. Click on the text box above the chart, and replace “Sales ($100s)” with *Line Chart for Monthly Sales Data*
3. **Create a Line Chart of Regional Sales**

Use data file **KirklandRegional.xlsx**

1. Select cells A2:C14
2. Click the **Insert** tab on the Ribbon
3. Click the **Insert Line Chart** button in the **Charts** group
4. When the list of line chart subtypes appears, click the **Line with Markers** button under **2-D Line**

This creates a line chart for sales with a basic layout and minimum formatting

1. Select the line chart that was just created to reveal the **Chart Buttons**
2. Click the **Chart Elements button**
   1. Select the check boxes for **Axes**, **Axis Titles**, **Chart Title, and Legend**. **Deselect** the check box for **Gridlines**.
   2. Click on the text box next to the vertical axis, and replace “Axis Title” with *Sales ($100s)*
   3. Click on the text box next to the horizontal axis and replace “Axis Title” with *Month*.
   4. Click on the text box above the chart, and replace “Sales ($100s)” with *Line Chart of Regional Sales Data*
3. **Create Sparklines in Cells using Kirkland Regional Data**
4. Click the Insert Tab on the Ribbon
5. Click Line in the Sparklines group
6. When the Create Sparklines dialog box appears
   1. Enter B3:B14 in the Data Range: box
   2. Enter B15 in the Location Range: box
   3. Click OK
7. Copy cell B15 to cell C15
8. **Create a Stacked-Column Chart in Excel**

Use the data file **KirklandRegional.xlsx**

1. Select cells A2:C14
2. Click the **Insert** tab on the Ribbon
3. In the **Charts** group, click the **Insert Column or Bar Chart** button
   1. Select **Stacked Column** under **2-D Column**

To create a clustered-column or clustered-bar chart – In step 3 above select “Clustered Column” under the 2-D Column in Step 3.

1. **Create Bar Chart**

Use data file **AccountsManaged.xlsx**

1. Select cells A2:B9
2. Click the **Insert** tab on the Ribbon
3. Click the **Insert Column or Bar Chart** button in the **Charts** group
4. When the list of bar chart subtypes appears:
   1. Click the **Clustered Bar** button in the **2-D Bar** section
5. Select the bar chart that was just created to reveal the **Chart Buttons**
6. Click the **Chart Elements** button
   1. Select the check boxes for **Axes**, **Axis Titles**, and **Chart Title**. Deselect the check box for **Gridlines**.
   2. Click on the text box next to the vertical axis, and replace “Axis Title” with *Accounts Managed*
   3. Click on the text box next to the vertical axis, and replace “Axis Title” with *Manager*
   4. Click on the text box above the chart, and replace “Chart Title” with *Bar Chart of Accounts Managed*

**Make the bar chart even easier to read!**

1. Select cells A1:B9
2. Right-click any of the cells A1:B9
   1. Choose **Sort**
   2. Click **Custom Sort**
3. When the **Sort** dialog box appears:
   1. Make sure that the check box for **My data has headers** is checked
   2. Choose **Accounts Managed** in the **Sort by** box under **Column**
   3. Choose **Smallest to Largest** under **Order**
   4. Click **OK**

**Add Labels to the Data**

1. Select the chart to reveal the **Chart Buttons**
2. Click the **Chart Elements** button
   1. Select the check box for **Data Labels**
3. **Make a Bubble Chart**

Use data file **Billionaires.xlsx**

1. Select cells B2:D7
2. Click the **Insert** tab on the Ribbon
3. In the **Charts** group, click **Insert Scatter (X,Y) or Bubble Chart** button
   1. In the **Bubble** subgroup, click **Bubble**
4. Select the chart that was just created to reveal the **Chart Buttons**
5. Click the **Chart Elements** button
   1. Select the check boxes for **Axes**, **Axis** **Titles**, **Chart** **Title** and **Data Labels**. **Deselect** the check box for **Gridlines**.
   2. Click on the text box under the horizontal axis, and replace “Axis Title” with *Billionaires per 10 Million Residents*
   3. Click on the text box next to the vertical axis, and replace “Axis Title” with *Per Capita Income*
   4. Click on the text box above the chart, and replace “Chart Title” with *Billionaires by Country*
6. Double-click on one of the Data Labels in the chart (e.g., the “$54,600” next to the largest bubble in the chart) to reveal the **Format Data Labels** task pane
7. In the **Format Data Labels** task pane, click the **Label Options** icon and open the **Label Options** area
   1. Under **Label Contains**, select **Value from Cells** and click the **Select Range**… button
   2. When the **Data Label Range** dialog box opens, select cells A2:A8 in the Worksheet
   3. Click **OK**
8. In the **Format Data Labels** task pane, deselect **Y Value under Label Contains**, and select **Right** under **Label Position**
9. **Create a Heat Map in Excel**

Use the data file **SameStoreSales.xlsx**

1. Select cells B2:M17
2. Click the **Home** tab on the Ribbon
3. Click **Conditional Formatting** in the **Styles** group
   1. Choose **Color Scales** and click on **Blue–White–Red Color Scale**

To add the sparklines in Column N, we use the following steps:

1. Select cell N2
2. Click the **Insert** tab on the Ribbon
3. Click **Line** in the **Sparklines** group
4. When the **Create Sparklines** dialog box opens:
   1. Enter *B2:M2* in the **Data Range:** box
   2. Enter *N2* in the **Location Range:** box
   3. Click **OK**
5. Copy cell N2 to N3:N17
6. **A scatter-chart matrix cannot be done in Excel.** Each scatter plot must be created individually using the data from two variables at a time.
7. **Create a PivotChart in Excel**

Use the data file **Restaurant.xlsx**

1. Click the **Insert** tab on the Ribbon
2. In the **Charts** group, select **PivotChart**
3. When the **Create PivotChart** dialog box appears:
   1. Choose **Select a Table or Range**
   2. Enter A1:D301 in the **Table/Range** box
   3. Select **New Worksheet** as the location for the PivotTable Report
   4. Click **OK**
4. In the **PivotChart Fields** area, under **Choose fields to add to report**:
   1. Drag the **Quality Rating** field to the **AXIS (CATEGORIES)** area
   2. Drag the **Meal Price ($)** field to the **LEGEND (SERIES)** area
   3. Drag the **Wait Time (min)** field to the **VALUES** area
5. Click on **Sum of Wait Time (Min)** in the **Values** area
6. Select **Value Field Settings**… from the list of options that appear
7. When the **Value Field Setting** dialog box appears:
   1. Under **Summarize value field by**, select **Average**
   2. Click **Number Format**
   3. In the **Category:** box, select **Number**
   4. Enter 1 for **Decimal places**
   5. Click **OK**
   6. When the **Value Field Settings** dialog box reappears, click OK
8. Right-click in Cell B2 or any cell containing a meal price column label
9. Select **Group** from the list of options that appears
10. When the **Grouping** dialog box appears
    1. Enter 10 in the **Starting at:** box
    2. Enter 49 in the **Ending at:** box
    3. Enter 10 in the **By:** box
    4. Click **OK**
11. Right-click on “Excellent” in cell A5
12. Select **Move** and click **Move “Excellent” to End**