**Chapter 10.2 Excel Instructions**

Use the **Nowlin.xlsx** data file on Canvas.

**Question to Answer: For what quantities between 0 and 300,000 phone cases is outsourcing more cost-effective?**

**Use a one-way data table with increments of $25,000 to answer this.**

1. Select Cells D4:E17
2. Click the **Data** tab in the Ribbon
3. Click **What-If Analysis** in the **Forecast** group, and select **Data Table**
4. When the **Data Table** dialog box appears, enter B11 in the **Column Input cell:** box
   1. Click **Ok.**

**What does the table tell us? What do the negative numbers mean?**

Suppose that Nowlin has now received five different bids on the per-unit cost for outsourcing the production of the Viper. Clearly, the lowest bid provides the greatest savings.

**Use a two-way data table with bids of $2.89, $3.13, $3.50, $3.54, and $3.59 to answer this.**

1. Select Cells D4:I17
2. Click the **Data** tab in the Ribbon
3. Click **What-If Analysis**  in the **Forecast** group, and select **Data Table**
4. When the **Data Table** dialog box appears
   1. Enter B7 in the **Row input cell:** box
   2. Enter B11 in the **Column Input cell:** box
   3. Click **Ok.**

**What does the table tell us? What do the negative numbers mean?**

**Use Goal Seek to find the quantity of phone cases that satisfies the goal of zero savings due to outsourcing for a bid price of $3.50 (Where the Nowlin company is indifferent between manufacturing and outsourcing)**

1. Click the **Data** tab in the Ribbon
2. Click **What-If Analysis** in the **Forecast** group, and select **Goal Seek**
3. When the **Goal Seek** dialog box appears:
   1. Enter B17 in the **Set cell**: box
   2. Enter 0 in the **To** **value**: box
   3. Enter B11 in the **By changing cell**: box
   4. Click **OK**
4. When the Goal Seek Status dialog box appears, click **OK**

**What does the new B11 mean?**

Let’s consider the case of Middletown Amusement Park. John Miller, the manager, has developed a simple spread sheet model of the park’s daily profit.

**Use Scenario Manager to generate a scenario summary report:**

Use the Middletown.xlsx file from the Student Data files on Canvas.

1. Click the **Data** tab in the Ribbon
2. Click **What-If Analysis** in the **Forecast** group, and select **Scenario Manager**
3. When the **Scenario Manager** dialog box appears: click the **Add…** button
4. When the **Add Scenario** dialog box appears
   1. Enter Partly Cloudy in the **Scenario Name:** box
   2. Enter $B$6:$B$9,$B$11 in the **Changing Cells:** box
   3. Click **OK**
5. When the **Scenario Values** dialog box appears
   1. Enter 3000 in the **$B$6** box
   2. Enter 1600 in the **$B$7** box
   3. Enter 15 in the **$B$8** box
   4. Enter 45 in the **$B$9** box
   5. Enter 33000 in the **$B$11** box
   6. Click **Ok**
6. When the **Scenario Manager** dialog box appear, repeat steps 3-5 for each scenario
7. When all scenarios have been entered and the **Scenario Manager** dialog box appears, click **Summary**
8. When the **Scenario Summary** dialog box appears
   1. Select **Scenario Summary**
   2. Enter B25 in the **Result Cells** box
   3. Click **Ok**

**What do we see in the summary?**