**Chapter 10.3 Excel Instructions**

**SUM and SUMPRODUCT**

Use the **Foster.xlsx** file from the Student Data Files folder on Canvas.

**Illustration:**

* Consider a transportation problem faced by Foster Generators.
* This problem involves the transportation of a product from three plants to four distribution centers.
* Production capacities for the three plants over the next three-month planning period are known.
* Foster has forecasted demand for the three-month period for each of the distribution centers.
* The per-unit shipping cost from each plant to each distribution center is also known.
* Management would like to determine how much of its production should be shipped from each plant to each distribution center.

1. SUMPRODUCT function is used in Cell B13 to calculate the total cost of shipping.
2. You can changes the values around in the gray box (Cells B17:E19)
   1. Remember each city’s capacity must be met
   2. Remember each city’s demand must be met

**Is this the lowest -cost plan? Can you make one meets the criterion but is cheaper?**

**IF and COUNTIF**

Use the **Gambrell.xlsx** file from the Student Data Files on Canvas

1. Go through each formula in the sheet to see how the IF and COUNTIF functions work

**VLOOKUP**

**Situation:**

* The director of sales at Granite Insurance needs to award bonuses to her sales force based on performance.
* There are 15 salespeople, each with his or her own territory.
* Based on the size and population of the territory, each salesperson has a sales target for the year.
* The measure of performance for awarding bonuses is the percentage achieved above the sales target.
* A salesperson is placed into one of five bonus bands and awarded bonus points.
* After all salespeople are placed in a band and awarded points, each is awarded a percentage of the bonus pool, based on the percentage of the total points awarded.

Use the **Granite.xlsx** file from the Student Data Files Folder on Canvas

1. Go through the table to see how the VLOOKUP function works