Assignment Day 10

1) The Excel file Sales Data provides data on a sample of customers. An industry trade publication stated that the average profit per customer for this industry was at least $4,500. Using a test hypothesis, do the data support this claim or not?

2) Using the data in the Excel file Ohio Education Performance, test the hypotheses that the mean difference in writing and reading scores is zero and that the mean difference in math and science scores is zero. Use the paired sample procedure.

3) Using the Facebook Survey, determine if the mean number of hours spent online per week is the same for males as it is for females.

4) Using the data in the Excel file Consumer Transportation Survey, test the following null hypothesis:
   a. Individual spend at least 8 hours per week in their vehicles.
   b. Individuals drive an average of 600 miles per week.
   c. The average age of SUV drivers is no greater than 35.
   d. At least 80% of individuals are satisfied with their vehicles.

5) Determine if there is evidence to conclude that the mean number of vacations taken by married individuals is less than the number taken by single/divorced individuals using the data in the Excel file Vacation Survey. Use a level of significance of 0.05. Would your conclusion change if the level of significance is 0.01?

6) Using the data in the Excel file Cell Phone Survey, apply ANOVA to determine if the mean response for Value for dollar is the same for different types of cell phones.

7) For the data in the Excel file Accounting Professionals, perform a chi-square test of independence to determine if age group is independent of having a graduate degree.