**Math 221 \*\*\*\* Example Format \*\*\*\***

**Week 2 Lab**

Submitted by: (Insert Name Here \*\*REMOVE THIS NOTE PRIOR TO SUBMITTING\*\*)

(Note: Your labs should be well organized, with results clearly identified and in the proper order. When answering questions, be sure to use complete sentences and proper grammar. It is also important for you to fully explain your answers! Please do not answer “yes” (or “no”); you should explain why the answer is “yes”. \*\*REMOVE THIS NOTE PRIOR TO SUBMITTING\*\*)

**Part 1. Random Sampling**

(Insert your answers to the questions asked in the Excel lab file. Also, paste your Ordered Random Sample data here. See the worksheet Accounts from the Week2Lab.xls file for more details. \*\*REMOVE THIS NOTE PRIOR TO SUBMITTING\*\*)

**Part 2. Cereal and Fiber Type**

(Insert your Fiber Type Bar Chart and Pie Chart here. See the worksheet Cereal from the Week2Lab.xls file for more details. \*\*REMOVE THIS NOTE PRIOR TO SUBMITTING\*\*)

**Part 3. Milk Production**

**1.** Find the sample mean.

**2.** Find the sample standard deviation.

**3.** Make a frequency distribution for the data. Distribution is started at right.

**4.** Create a histogram for the data. Does the data appear bell-shaped?

**5.** What true percent of the data lies within one standard deviations of the mean? Within two standard deviations of the mean? How do these results agree with the Empirical Rule?

**6.** Find the median of the milk production.

**7.** Find the maximum and the minimum value.

**8.** What is the range?

**9.** What is the first Quartile?

**10.** What is the second Quartile? (What is this also called?)

**11.** What is the third Quartile?

**12.** What is the 80th percentile?

(Answer the above questions. Format your answers so that they are clearly shown. See the worksheet **Milk Production** from the **Week2Lab.xls** file for details. You should also work through the Descriptive Statistics examples found in the worksheet **Descriptive Statistics** in that same file. Be sure to insert your Histogram from Question 4 also. Be sure to answer all questions using complete sentences and clearly explain yourself. \*\*REMOVE THIS NOTE PRIOR TO SUBMITTING\*\*)

**Part 4. Linear Regression**

**Sugar and Calories Analysis**

(Insert scatter plot for Sugar and Calories. Also answer given questions here. \*\*REMOVE THIS NOTE PRIOR TO SUBMITTING\*\*)

**Sugar and Cost Analysis**

(Insert scatter plot for Sugar and Cost. Also answer given questions here. \*\*REMOVE THIS NOTE PRIOR TO SUBMITTING\*\*)

**Weight and Cost Analysis**

(Insert scatter plot for Weight and Cost. Also answer given questions here. \*\*REMOVE THIS NOTE PRIOR TO SUBMITTING\*\*)

(Place your answers in the appropriate position. Format them so that they are clearly shown. See the worksheet **Linear Regression**from the **Week2Lab.xls** file for details. Be sure to follow the examples given in the files linked from our course for detailed instructions. Be sure to answer all questions using complete sentences and clearly explain yourself. \*\*REMOVE THIS NOTE PRIOR TO SUBMITTING\*\*)