

### Activity 3

Name: \_\_\_\_\_

1. Take a survey of the class. For each person, record their gender, a quantitative variable of your choice and a qualitative variable (use a closed question) of your choice. Record your data below.
2. Is your sample representative of the CSU population? Why or why not?
3. Ignoring gender, use Excel to create a pie graph for the responses to the qualitative variable. Paste the graph below.
4. Now, create a double bar graph displaying the qualitative variable and gender. You may use Excel if you wish. Paste the graph below.
5. Using Excel or Minitab, obtain the following information for the quantitative variable.

mean =

standard deviation =

min =

max =

median =

Q1 =

Q3 =

6. Create a boxplot for the quantitative variable. Paste the graph below. Does this show any outliers?
7. Create a histogram on Minitab for the quantitative variable. Paste the graph below. Does there appear to be any outliers in the data set?
8. Based on the histogram and boxplot, does the quantitative variable appear to be skewed left or right? Or is it approximately symmetric?
9. Based on the answer to question 8, would you use the mean or median as a measure of center for the quantitative variable? Or, are they equally good?
10. Based on the histogram, what is the mode?