Name: _____ Lecture time (10 or 11 or 12): _____

Lab Problems 1-2

Statistics 0200
Dr. Nancy Pfenning

1. (5 pts.) How many credits were surveyed students taking?

   (a) What variable or variables are involved? For each variable, tell whether it is quantitative or categorical.

   (b) **Before you even look at the data**, try to make a rough guess for each of the following: [If you're completely clueless, just answer with a "?".]
       i. (center) mean:_____median: _____
       ii. (spread) standard deviation: _____   range: _____to _____
       iii. shape:_____
           Do you expect outliers? (Explain briefly.)

   (c) Use **MINITAB Basics Examples C-F** to find the following:
       Five Number Summary:_____ _____ _____ _____ _____
       mean_____standard deviation _____
       shape (based on stemplot/histogram/boxplot)_____

   (d) **Summarize** your findings in one or two sentences. Be sure to express your results specifically in terms of the variable(s) of interest, and mention to what extent the results match your guesses in (b).

2. (5 pts.) For surveyed students, how do the shoesizes of males compare to those of females?

   (a) What variable or variables are involved?For each variable, tell whether it is quantitative or categorical.

   (b) **Before you even look at the data**, try to make a reasonable guess for each of the following:

       i. Which group will have a higher center (or about the same)?_____

       ii. Which group will have more spread (or about the same)?_____

       iii. What shapes do you expect?
           Do you expect outliers?

   (c) Use **MINITAB Basics Example I** to make a comparison:

       i. Does one group have a considerably higher center?

       ii. Does one group have more spread?

       iii. Compare the shapes.

   (d) **Summarize** your findings in one or two sentences. Be sure to express your results specifically in terms of the variable(s) of interest, and mention to what extent the results match your guesses in (b).