Name: $\qquad$ Lecture time (10 or 11 or 12 ):

## Lab Problems 1-2

Statistics 0200
Spring 2009
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: $\qquad$ median: $\qquad$
ii. (spread) standard deviation: $\qquad$ range: $\qquad$ to $\qquad$
iii. shape:

Do you expect outliers? (Explain briefly.)
(c) Use MINITAB Basics Examples C-F to find the following:

Five Number Summary: $\qquad$
$\qquad$
$\qquad$
mean $\qquad$ standard deviation $\qquad$ shape (based on stemplot/histogram/boxplot) $\qquad$
(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)? $\qquad$
ii. Which group will have more spread (or about the same)? $\qquad$
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).

