On my honor, as a University of Colorado at Boulder student, I have neither given nor received unauthorized assistance on this work.

SIGNATURE:

1) (3 points) A study was conducted to determine how people get jobs. Four hundred subjects were randomly selected and the results are listed below.

Job Sources of	
Survey Respondents	Frequency
Newspaper want ads	72
Online services	124
Executive search firms	69
Mailings	32
Networking	103

Construct a Pareto chart of the data or explain why a Pareto chart cannot be constructed for this data.

2) A student decides to investigate how many bottles of water her classmates drink per week. A sampling of her class yielded the following results.

a.) (1 point) Create a stem-and-leaf display for these data. Use the key  $1 \mid 3 = 13$ .

b.) (2 points) If the student were to make a frequency table with 4 classes, what should she make her class width?

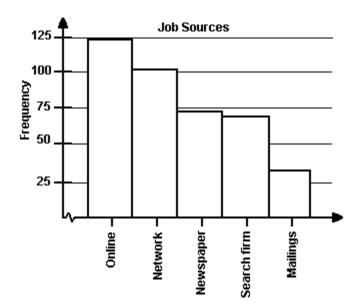
3) (4 points) The scores on a recent statistics test are given in the frequency distribution below.

Scores	Frequency
0-60	2
61-70	6
71-80	13
81-90	8
91-100	4

a.) (2 points) Construct the corresponding relative frequency table.

b.) (2 points) Construct the corresponding cumulative frequency table.

1) 1 point for having a histrogram, 1 point if it is correct and 1 point if the rectangles are in descending order.



2) a.) 1 point for an entirely correct table.

1	467
2	589
3	169
4	5

b.) 1 point for using (45 – 14) / 4 and 1 point for rounding  $\mathbf{up}$  to 8. 3)

a.) Give 1 point for putting things into fractions (or percentages) and 1 point if it is entirely correct.

Scores	Relative Frequency
0-60	2/33 = 0.061
61-70	6 / 33 = 0.182
71-80	13 / 33 = 0.394
81-90	8 / 33 = 0.242
91-100	4 / 33 = 0.121

b.) Give 1 point for having things being added together and 1 point if it is entirely correct.

Scores	Cumulative Frequency	
0-60	2	
61-70	8	
71-80	21	
81-90	29	
91-100	33	