1.   Classify each of the following as N, nominal; O, ordinal; or I/R, interval/ratio data: (10)

    a.   zip code of your local address   _____

    b.   letter grade you will receive in this class _____

    c.   country you were born in   _____

    d.   amount of money you have with you   _____

    e.   mileage (miles per gallon) your car gets _____

2.   With which of the data classes (in question 1) can the following measure of central tendency be used?   (A given measure may be used for more than one data class.)   (10)

    a.   mean   _____

    b.   mode   _____

    c.   median   _____

3.   What is the difference between a parameter and a statistic?   (5)

4.   Given the following sample data set:

    6,12,9,7,8,4,3,12,15

    a.   compute the mean   (5)

    b.   what is the median?   (5)

    c.   what is the mode?   (5)

    d.   compute the variance   (6)

    e.   compute the standard deviation   (4)

5.   Under what conditions might a median be a better measure of the center of your data set than the mean?   (5)

6.   What is the difference between a bar chart and a histogram?   (5)

7.   A given "bell shaped" curve measuring some value X has a mean of 120 and a standard deviation of 20.

    a.   What is the z-score for a value of 130?   (5)

    b.   What values of X (i.e. between –X to +X) would encompass about 68% of all the scores?   (5)

    c.   A z-score of –1.7 would correspond to what X score?   (5)

8.   Under what circumstances would you use a pie chart rather than a bar chart?   (5)

9.   For the given data set, compute the *five-number summary*.   (15)

    1,5,3,9,12,6,8,13,22,5,6,9,23,17,14,11

10. Using the following (made up) data set of the number of lawyers who recently passed the state examination construct a bar chart.   (10)

Texas	110
Oklahoma	85
Arkansas	90
Louisiana	95
New Mexico	80