Math 105 Statistics Lab/Quiz Due Monday 11/4 at the beginning of class

This lab will count as your quiz. Please be sure to include any graphs that you make/use in your responses.

1. For each of the three classes, make a histogram of the data in question 3 and use it to estimate the mean and median. Write a few sentences comparing and contrasting the heights in the classes. Use the mean, median and shape of graph to support your comparisons/contrasts.
2. Pick a question for which you predict the data will be skewed. Explain whether you think the graph will be skewed left or right and why, and then graph the data and comment on whether your guess was correct. (Use only our class data)
3. Make graphs of the data in questions 1 (gender) , 5 (calling home), 14 (date of graduation). Then write a complete, self-contained paragraph summarizing what you have discovered about the class from the graphs of the responses. In your summary, explain why you think the graphs show the results that they do. (Use only our class data)
4. (Mindscape 13) With the data from question 19 (hours of sleep) OR question 20 (hours of athletic activities) for all three classes do a 5-number summary of the data (data for all three classes is in the “All Data” column).
5. For this question use the data from all three classes (in the “All Data” column).
   1. Without doing any calculations, of the data from questions 18 (number of siblings), 19 (hours of sleep), or 20 (hours of athletic activity), which do you predict will have the largest standard deviation? Why? Which do you predict will have the smallest standard deviation? Why?
   2. Use Excel to compute the standard deviations (use the command STDEVP) and comment on whether the answer matches your prediction. If not, why do you think that is?