Homework 2: Descriptive Statistics and Variability

1. Make a frequency distribution table for the following data that includes the frequency and the relative frequency for scores:

74 103 95 98 81 117 105 99 63 86 94 107 96 100 98 118 107 82 84 71 91 107 84 77

1. Answer the questions below on the basis of this figure:
   1. Is this figure a bar graph or a histogram? Explain your answer.
   2. How many modes does the figure include?
   3. Is the figure positively-skewed, negatively-skewed or symmetrical?
2. Calculate the sums of squares for the following set of data: 4, 6, 7, 8, 10.
3. The numbers that follow represent the total number of hours of sleep that I received each night for the first week of the semester: 6, 7, 7, 6, 7, 4.5, 8.  Find, the mean, median, and mode for these data.  Show your work.
4. Oddly, I wound up getting 12 hours of sleep one night during the third week of the semester. Which MCT would likely be most affected by that single anomalous datapoint?