Stat 171 - Worksheet for Section 2.3

Name: _____

1. The heights (in inches) of the players on a professional sports team are shown. What is the mean height?

$$81, 74, 78, 81, 87, 82, 80, 82, 77, 80, 85, 78, 80, 83, 75, 81, 73, 81$$

   (a) Find the sum of the data entries.
   (b) Divide the sum by the number of data entries.
   (c) Interpret the results in the context of the data.

2. For the heights of the players given in Problem 1 find the median height.

   (a) Order the data entries.
   (b) Find the middle data entry.
   (c) Interpret the results in the context of the data entry.

3. For the heights of the players given in Problem 1 find the mode.

   (a) Identify the entry that occurs with the greatest frequency.
   (b) Interpret the results in the context of the data.

4. Ages of ten Nobel prize winners are given. Detect any outlier. Compare the mean, median, and mode of the data with and without the outlier.

$$23, 56, 56, 57, 58, 58, 58, 62, 63, 66$$

5. Your grade in the Stat 171 course is determined by the following table. If your scores are 95% on Online homework and quizzes, 100% on Written homework, 85% on Exam 1, 75% on Exam 2, and 90% on Final exam, what is your grade? Did you get an A?

Online Homework and quizzes	30%
Written Homework	10%
Exams 1, and 2	15% each
Final Exam	30%

6. Use a frequency distribution to approximate the mean age of the 50 most powerful women listed below. (Use the table you constructed in Problem 1, Section 2.1)

$$26, 31, 35, 37, 43, 43, 43, 44, 45, 47, 48, 48, 49, 50, 51, 51, 51, 51, 52, 54, 54, 54, 55, 55,$$

$$55, 56, 57, 57, 57, 58, 58, 58, 59, 59, 59, 62, 62, 63, 64, 65, 65, 65, 66, 66, 67, 67, 72, 86$$

(a) Find the midpoint of each class.

(b) Find the sum of the products of each midpoint and corresponding frequency.

(c) Find the sum of the frequencies.

(d) Find the mean of the frequency distribution.