Biostatistics and Spreadsheets

Due Date: ________________

Name _______________________

Given the weights of 150 people.

1. Enter these into a Microsoft Excel Spreadsheet. Check your entries to make sure that they are correct.

2. Sort the weights in ascending order.

3. Group the weights into class intervals of width 20, commencing with the range below the range containing the lowest number (minimum) and ending with the range higher than that containing the highest number (maximum).

4. Using the data in the class intervals, create a histogram and frequency polygon for the data.

5. Do basic statistics on the data. You may need to use the add-ins option under Tools. Select the Data Analysis tool paks. Then do basic statistics on the sorted data.

6. Use the basic statistics to draw a box plot in Paint. The vertical lines on the box plot represent the minimum, Q1 (first quartile), median, Q3 (third quartile), and maximum. You can use calculation formula cells to generate the locations of Q1 and Q3.

7. Write a report about the weights. Include a printout of the three graphs and the results of the basic stats procedure. Part of the discussion in the paper must give a description of each part of the basic stats report and what it means. These parts are as follows.

- Mean
- Standard Error
- Median
- Mode
- Standard Deviation
- Sample Variance
- Kurtosis
- Skewness
- Range
- Minimum
- Maximum
- Sum
- Count

In addition to the definitions and meanings above, discuss the results of the graphical and statistical analyses that you performed. Submit the report and graphics printouts using this page as a cover sheet.