

Instructions: You must show all work to receive full credit for the problems below. You may use Excel where appropriate. Any datasets needed will be posted on Canvas with the quiz file, and you should submit such work along with your quiz. Round answers to two decimal places unless other instructions are given in the problem.

- Use the data in **154quiz6data.xlsx** Sheet 1 to create a complete set of descriptive statistics including the mean, median, mode, standard deviation, five-number summary, etc. Report the values here.

$$\text{mean} = 155.33$$

$$\text{mode} = 102.64$$

$$\text{St. dev} = 97.46$$

$$\text{min} = 8.53$$

$$1^{\text{st}}Q = 85.84$$

$$\text{median} = 127.98$$

$$3^{\text{rd}}Q = 206.58$$

$$\text{max} = 489.63$$

- Using the same data as above, make a histogram of the data. Appropriately label your graph and give it a descriptive title. Describe the shape of the distribution as roughly symmetric, left skewed, right skewed or other.

graph in Excel
right skewed

- Using the same data, make a boxplot of the same data. Does it agree with the shape described above? Why or why not?

yes. top tail longer than bottom one & all outliers on the large end of the values, mean is higher than the median

- Use the data in the table to find the weighted average.

Values	66	52	98	65	78	79
Weight	11	16	5	33	8	27

69.5