NAME: _____

DATE: _____

1.   Use the following data to:.
        24, 32, 54, 31, 16, 18, 19, 14, 17, 20

    a. Find the five-number summary.
    b. Create a box and whisker plot for the data.

2 – 4 Find the mean, range and sample standard deviation for each set of data below.

2.   25, 40, 50, 80, 78, 70, 45, 75, 95, 42

3.   62, 80, 11, 66, 40, 68, 81, 79, 48, 65

4.   95, 100, 105, 105, 115, 115, 120, 120, 130, 125

5 – 7 Use the data set given to answer the questions.

Male weights for a book club: 112, 120, 135, 140, 160, 150, 155, 170

5. Find the mean, range and sample standard deviation.

6. A new male student weighting 225 pounds joins the club. Find the new mean, range, and sample standard deviation.

7. What happened to the standard deviation and why?

8. The three data sets have the same mean and range, but is the variation the same? Prove your answer by computing the standard deviations.

        a. 5, 7, 9, 11, 13, 15, 17
        b. 5, 6, 7, 11, 15, 16, 17
        c. 5, 5, 5, 11, 17, 17, 17

9 – 10 Three data sets are shown in the dot plots at right. Answer the questions without performing calculations.

9. Which data set appears to have the smallest standard deviation? Explain your choice.

10. Which data appears to have the largest standard deviation? Explain your choice.