Name: _____ Date: _____

**Find the mean, median, mode, range, upper quartile, lower quartile, and interquartile range.
Then draw a box and whiskers plot.**

23, 6, 8, 14, 28, 8, 13, 28   48, 23, 97, 36, 27, 72, 48, 41, 58

1. Put the data in order: 10. Put the data in order:

_____   _____

_____ 2. Mean: _____ 11. Mean:

_____ 3. Median: _____ 12. Median:

_____ 4. Mode: _____ 13. Mode:

_____ 5. Range: _____ 14. Range:

_____ 6. Upper Quartile: _____ 15. Upper Quartile:

_____ 7. Lower Quartile: _____ 16. Lower Quartile:

_____ 8. Interquartile Range: _____ 17. Interquartile Range:

9. Box and Whisker plot: 18. Box and Whisker plot:

19. Is there an outlier?(Show Work)   20. Is there an outlier? (Show Work)

21. Determine the MAD.   22. Determine the MAD.

1. Your scores on the first 4 tests in Algebra were 85, 80, 90, and 93. What do you need to make on the 5th test to have a 90 average in the class?

2. Which measure of central tendency is MOST EASILY affected by outliers?

3. The table below shows the running times for science-fiction movies. Find the Mean Absolute Deviation of the data.

Running Times for Movies (min)					
98	87	93	88	126	108

4. The table shows the scores from the top 10 players of our Homecoming basketball game.
   Which player scored more than the upper quartile of the data?

   A. Matt
   B. Michael
   C. Jim
   D. Bobby

Player	Points	Player	Points
Michael	12	Dave	9
Brendan	6	Heath	15
Andrew	21	Jack	3
Jim	14	Bobby	10
Andre	5	Matt	18

For #5-6, use the graph to the right.

5. Which statement below is NOT true?
   A. 2nd period had the highest score on the test
   B. The median for 2nd period is 5 less than the median for 3rd
   C. The LQ for 2nd period is 5 less than LQ for 3rd period
   D. The UQ for 3rd period is 94

6. Fill in the blanks:
   - The median for 2nd period is _____
   - The median for 3rd period is _____
   - The lowest score for 3rd period is _____
   - The lower quartile for 2nd period is _____
   - The spread of the middle 50% for 2nd period is _____

Test Scores

2nd

3rd

50 55 60 65 70 75 80 85 90 95 100