Practice B

11-5 Measures of Central Tendency and Variation

Find the mean, median, and mode of each data set.

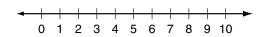
1. {12, 11, 17, 3, 9, 14, 16, 2}

- **2.** {6, 9, 9, 20, 4, 5, 9, 13, 10, 1}
- a. Mean
- a. Mean _____
- **b.** Median
- **b.** Median _____
- **c.** Mode _____
- c. Mode

Make a box-and-whisker plot of the data. Find the interquartile range.

3. {3, 7, 7, 3, 10, 1, 6, 6}





4. {1, 2, 3, 5, 3, 5, 8, 2}





Find the variance and standard deviation.

- **6.** {35, 67, 21, 16, 24, 51, 18, 32}
- **7.** {19, 23, 17, 20, 25, 19, 15, 22}
- **8.** {5, 12, 10, 13, 8, 11, 15, 12}

Solve.

The probability distribution for the amount of rain that falls on Boston in May each year is given below. Find the expected amount of rain for Boston in May.

Inches of Rain, n	5	6	7	8
Probability	0.05	0.10	0.64	0.21

- **10.** A biologist is growing bacteria in the lab. For a certain species of bacteria, she records these doubling times: 41 min, 45 min, 39 min, 42 min, 38 min, 88 min, 43 min, 40 min, 44 min, 39 min, 42 min, and 40 min.
 - a. Find the mean of the data.
 - **b.** Find the standard deviation.
 - c. Identify any outliers.
 - **d.** Describe how any outlier affects the mean and the standard deviation.