

LESSON
8-1

Practice

Measures of Central Tendency and Variation

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

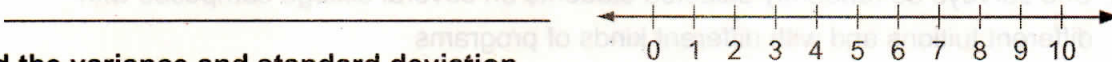
- | | |
|------------------------------------|--|
| 1. { 12, 11, 17, 3, 9, 14, 16, 2 } | 2. { 6, 9, 9, 20, 4, 5, 9, 13, 10, 1 } |
| a. Mean _____ | a. Mean _____ |
| b. Median _____ | b. Median _____ |
| c. Mode _____ | c. Mode _____ |

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.

- | | |
|---------------------------------------|---------------------------------------|
| 5. { 7, 4, 3, 9, 2 } | 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.

9. 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.
- Find the mean of the data. _____
 - Find the standard deviation. _____
 - Identify any outliers. _____
 - Describe how any outlier affects the mean and the standard deviation. _____