

**LESSON**  
**9-1**

# Measures of Center and Spread

## Practice and Problem Solving

Two students, Brad and Jin, had the test scores shown below.  
Use their data for 1–10.

**Brad: 70, 76, 78, 80, 90, 94, 94, 98**

**Jin: 80, 82, 84, 84, 86, 86, 88, 90**

- |  |   |
|--|---|
| 1. Find Brad's mean test score.<br>_____           | 2. Find Jin's mean test score.<br>_____           |
| 3. Find Brad's median test score.<br>_____         | 4. Find Jin's median test score.<br>_____         |
| 5. Find Brad's range.<br>_____                     | 6. Find Jin's range.<br>_____                     |
| 7. Find Brad's first and third quartiles.<br>_____ | 8. Find Jin's first and third quartiles.<br>_____ |
| 9. Find Brad's interquartile range.<br>_____       | 10. Find Jin's interquartile range.<br>_____      |

**Use your statistics from 1–10 to solve.**

11. In what ways are Brad's and Jin's test scores similar?  
\_\_\_\_\_
12. In what ways are Brad's and Jin's test scores different?  
\_\_\_\_\_
13. Which of the two students would you consider a *more consistent* test taker? Explain your thinking.  
\_\_\_\_\_  
\_\_\_\_\_
14. One of the students has test scores with a standard deviation of 3 and the other has test scores with a standard deviation of 9.6. Without calculating, how can you tell which student has each standard deviation?  
\_\_\_\_\_  
\_\_\_\_\_

**Find the mean, median, and range for each data set.**

1. 18, 24, 26, 30

Mean: \_\_\_\_\_

Median: \_\_\_\_\_

Range: \_\_\_\_\_

2. 5, 5, 9, 11, 13

Mean: \_\_\_\_\_

Median: \_\_\_\_\_

Range: \_\_\_\_\_

3. 72, 91, 93, 89, 77, 82

Mean: \_\_\_\_\_

Median: \_\_\_\_\_

Range: \_\_\_\_\_

4. 1.2, 0.4, 1.2, 2.4, 1.7, 1.6, 0.9, 1.0

Mean: \_\_\_\_\_

Median: \_\_\_\_\_

Range: \_\_\_\_\_

**The data sets below show the ages of the members of two clubs. Use the data for 5–9.**

**Club A: 42, 38, 40, 34, 35, 48, 38, 45**

**Club B: 22, 44, 43, 63, 22, 27, 58, 65**

5. Find the mean, median, range, and interquartile range for Club A.

\_\_\_\_\_

6. Find the mean, median, range, and interquartile range for Club B.

\_\_\_\_\_

7. Find the standard deviation for each club. Round to the nearest tenth.

\_\_\_\_\_

8. Use your statistics to compare the ages and the spread of ages on the two clubs.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. Members of Club A claim that they have the “younger” club. Members of Club B make the same claim. Explain how that could happen.

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\_\_\_\_\_