**10-3 Skills Practice**

***Measures of Spread***

**Find the minimum, lower quartile, median, upper quartile, and maximum values for each data set.**

**1. SEASHELLS** Jorja collected the following number of seashells for the last nine trips to the beach: 5, 11, 7, 12, 13, 17, 3, 15, 14.

**2. SHOE SIZE** The following shoe sizes of students at a high school were randomly recorded for one hour: 6, 8, 8.5, 10, 12, 6.5, 7, 8, 8.5, 7.5, 9, 11.5, 10, 13, 5.5, 6.5, 5, 9.5.

**3. EXERCISE** Kent tracked his daily number of minutes of exercise. Find the mean and median of the data set, and then identify any outliers. If the set has an outlier, find the mean and median without the outlier, and state which measure is affected more by the removal of this value.

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| **Number of Minutes of Exercise** | | | | | |
| 30 | 35 | 25 | 28 | 40 | 38 |
| 36 | 29 | 34 | 45 | 42 | 39 |

**Find and interpret the standard deviation of each set of data.**

**4.** {10, 9, 11, 6, 9} **5.** {6, 8, 2, 3, 2, 9}

**6.** {23, 18, 28, 36, 15} **7.** {44, 35, 40, 37, 43, 38, 40}

**8. PARKING** A city councilor wants to know how much revenue the city would earn by installing parking meters on Main Street. He counts the number of cars parked on Main Street each weekday: {64, 79, 81, 53, 63}. Find and interpret the standard deviation.

**9. SOFTBALL** A statistician for the Rams softball team is comparing the number of strikeouts the Rams have at home games with the number of strikeouts the Rams have at away games. Compare the mean and standard deviation of each set of data.

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| **Away Games** | | | | |
| 7 | 9 | 5 | 8 | 12 |
| 10 | 5 | 4 | 8 | 9 |

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| **Home Games** | | | | |
| 3 | 1 | 5 | 2 | 2 |
| 6 | 10 | 2 | 4 | 5 |