

Measures of Variability

For **1** through **6**, use the following data set: 12, 20, 16, 10, 17, 9, 23, 13

1. What is the mean of this set?

2. What is the absolute deviation from the mean for the following values:

a. 12 _____

b. 16 _____

c. 20 _____

3. Which value in the original set has the greatest absolute deviation from the mean? Which has the least absolute deviation?

4. What is the mean absolute deviation for the set?

5. What is first quartile for the set? The third quartile?

6. What is the IQR for the set?

For **7** and **8**, use the following data set: 3, 7, 11, 15, 20, 31, 39, 42

7. **Writing to Explain** The data set shows the approximate hourly tides in feet recorded at a beach during an 8-hour period. What is the mean absolute deviation for the data set? Explain how you found it.

8. Which is the IQR for the set?

A 26

B 28

C 35

D 36