

Practice Finding Measures of Center and Variability

Solve the problems.

- 1 This data set represents the number of children in 8 families.

4, 2, 1, 2, 4, 2, 6, 3

The mean of this data set is 3. What is the mean absolute deviation (MAD)?

- A 1.25 C 3.3
 B 8 D 3

- 2 Five students scored 80 on a test, five students scored 85, and five students scored 90. Complete each statement below by inserting the correct number.

- a. The mean is equal to _____.
 b. The median is equal to _____.
 c. The range is equal to _____.
 d. The mean absolute deviation is equal to _____.

- 3 In a statistical study, sixth and seventh graders were asked how many hours of television they watch over the course of a school week. The results are shown below.

	Mean (hr)	Median (hr)	Mean Absolute Deviation (hr)
6th Grade	16.5	18	10
7th Grade	15.75	15	6

Choose *True* or *False* for each statement.

- a. The mean absolute deviation tells how many students participated from each grade. True False
- b. The data for the 7th graders is likely more concentrated around its mean than the data for the 6th graders. True False
- c. Fifty percent of the 6th graders report that they watch more than 18 hours of television per week. True False
- d. You can determine the range of each set of data just from the information given. True False

- 4 In a marketing study, two different groups of 12 people previewed a new movie. They rated the movie from 10, the best, to 1, the worst. The data is shown below.

Group A: 8, 7, 1, 6, 8, 5, 5, 8, 8, 1, 7, 8

Group B: 8, 7, 1, 6, 5, 5, 7, 2, 8, 1, 7, 6

Which statement **must** be true? Circle all that apply.

- A The mode of Group A exceeds the mode of Group B by 1.
 - B The mean of Group A exceeds the mean of Group B by 1.
 - C The median of Group A is equal to the median of Group B.
 - D The range of Group A is equal to the range of Group B.
- 5 Ten sixth graders were asked two questions. Below are the questions and survey results.

Question 1: How many hours per day do you spend playing outside?

{0, 0, 0, 0, 1, 1, 1, 1, 2, 3}

Question 2: How many hours per day do you spend using an electronic device?

{0, 2, 4, 4, 5, 6, 6, 7, 8, 8}

Part A Draw a line plot for each set of data. Then describe the shape of each line plot.

Part B Find the mean of the data sets.

Part C On average, how much more time do sixth graders spend playing with electronic devices than they do playing outside?

Self Check ~~Go back and see what you can check off on the Self Check on page 273.~~