ALBERT

Name _____ Date _____

Mean, Median, IQR and MAD Worksheet

Grade 6 · Common Core 6.SP.B.5

> Summarize numerical data sets in relation to their context, such as by reporting the number of observations; describing the nature of the attribute under investigation; giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation); and relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.

Practice

Builds the skill step by step.

1. Data: 2, 4, 6, 8. Find the mean.

2. Data: 2, 4, 6, 8. Find the mean absolute deviation (MAD).

3. Data: 5, 5, 5, 5. What is the MAD?

4. What does the mean absolute deviation measure?

   A. The average distance of the values from the mean

   B. The middle value

   C. The difference between the largest and smallest values

   D. The most common value

5. Data: 1, 3, 5, 7, 9, 11, 13. Find the IQR.

6. A survey asked 25 students how many books they read this month. How many observations are in the data set?

7. Data: 10, 12, 14. Find the MAD.

8. Which measures go together to describe data with an outlier?

   A. Median and IQR

   B. Mean and MAD

   C. Mean and range

   D. Mode and mean

9. Data: 3, 7, 7, 9, 14. Find the median.

10. Data: 6, 8, 10, 12. Find the MAD.

ALBERT

Name _____ Date _____

Mean, Median, IQR and MAD Worksheet

Grade 6 · Common Core 6.SP.B.5

On Level

Grade-level practice.

1. Data: 4, 6, 7, 9, 14. Find the mean and the MAD.

2. Data: 12, 15, 18, 20, 22, 25, 40. Find the median and the IQR.

3. Data: 30, 32, 33, 35, 90. Which pair best summarizes the data?

   A. Mean 44 and MAD

   B. Median 33 and IQR

   C. Mean 44 and range

   D. Mode and range

4. Two teams' scores: Team A has a mean of 50 and MAD 2. Team B has a mean of 50 and MAD 9. Which team scores more consistently?

5. Data: 8, 10, 12, 14, 16. Find the MAD.

6. Data: 2, 3, 5, 6, 8, 9, 11, 12. Find Q1, Q3 and the IQR.

7. A data set is roughly symmetric with no outliers. Which measures are a good choice?

   A. Median and range only

   B. Mode only

   C. The maximum and minimum only

   D. Mean and MAD

8. A class recorded the minutes 5 students spent on homework: 20, 25, 30, 35, 40. Find the mean and the MAD.

9. Data: 1, 1, 2, 2, 3, 9. Find the mean and the median.

10. Data: 7, 9, 9, 10, 15. What attribute is being measured if these are the ages, in years, of 5 cousins? Give the number of observations and the unit.

ALBERT

Name _____ Date _____

Mean, Median, IQR and MAD Worksheet

Grade 6 · Common Core 6.SP.B.5

Challenge

Multi-step and word problems that stretch it.

1. Data: 10, 11, 13, 14, 17. Find the MAD.

2. Plant heights (cm): 4, 6, 7, 7, 8, 9, 22. Which measure of center and which measure of variability should you report, and what are their values?

3. Set A: 2, 4, 6, 8, 10. Set B: 5, 5, 6, 7, 7. Which statement is true?

   A. Both have the same MAD.

   B. Both have a mean of 6, but A has a larger MAD.

   C. B has a larger mean.

   D. A has a smaller IQR.

4. Data: 3, 5, 6, 8, x. The mean is 6. Find x, then find the MAD.

5. Quiz scores: 6, 7, 7, 8, 8, 8, 9, 10. Find the mean, median and IQR.

6. Sam says a MAD of 0 means the mean is 0. Is he right? Use the data 4, 4, 4 to explain.

7. Weekly allowance data has a mean of $12 and a median of $8. What is the most likely shape?

   A. Skewed right

   B. Skewed left

   C. Symmetric

   D. Uniform

8. Daily high temperatures (°F) for a week: 60, 62, 63, 65, 65, 66, 69. Find the mean and the MAD, rounded to the nearest tenth.

9. Two data sets have the same median of 50. Set A has an IQR of 4 and Set B has an IQR of 25. Describe what this means.

10. Data: 2, 4, 4, 5, 5, 6, 30. How much does the mean change if you remove 30?