

Name: Class:

Calculate mean absolute deviation

1. What is the mean absolute deviation (M.A.D) in the data set below?

(5, 8, 8, 9, 1,)

2. What is the mean absolute deviation (M.A.D) in the data set below?

(15, 17, 15, 18, 20, 21)

3. Calculate the mean absolute deviation in the data set below and round your answer to the nearest tenth.

(25, 5, 10, 16, 9, 18, 7)

4. What is the mean absolute deviation in the data set below? Round your answers to the nearest tenth.

(87, 77, 77, 94, 72, 65, 82, 97, 75, 71, 64)

5. Find the mean absolute deviation (MAD) in the data below and round your answer to the nearest hundredth.

(110, 20, 170, 110, 30, 58, 96, 100, 52, 63, 20, 25, 10)

6. What is the mean absolute deviation (MAD) in the data set below? Round your answer to the nearest whole number.

(1,340, 1,254, 2,379, 1,340, 2,115, 3,110)

7. Find the mean absolute deviation (MAD) in the data set below, and write your answer in three decimal places.

(1,340, 1,254, 2,379, 1,340, 2,115, 3,110)

Name: Class:

Calculate mean absolute deviation

What is the mean absolute deviation (M.A.D) in the data set below?

(5, 8, 8, 9, 1,)

To solve this problem, first of all find the mean.

$$\text{Mean} = 5+8+8+9+1/5$$

$$\text{mean} = 31/5 = 6.2$$

Secondly find the absolute deviation.

To do this take each number in the set and subtract the mean from it.

$$5 - 6.2 = -1.2$$

$$8 - 6.2 = 1.8$$

$$9 - 6.2 = 2.8$$

$$8 - 6.2 = 1.8$$

$$1 - 6.2 = -5.2$$

Now, find the absolute value of the answers.

$$|-1.2| = 1.2$$

$$|1.8| = 1.8$$

$$|2.8| = 2.8$$

$$|1.8| = 1.8$$

$$|-5.2| = 5.2$$

Next, find the sum of all the absolute values.

$$1.2 + 1.8 + 2.8 + 1.8 + 5.2 = 12.8$$

Finally find the M.A.D by dividing the sum above by the total number of values in the data set.

$$12.8/5 = 2.56$$

Round to the nearest tenth.

$$2.56 = 2.6$$

So, the M.A.D is 2.6.