

Find the mean absolute deviation of each data set.

Data Set 1	46	49	51	53	56
Data Set 2	11	24	51	78	91

- a. What do you notice about the means of the two data sets?
- b. What do you notice about the mean absolute deviation of the two data sets? What does the MAD tell you about the variability of each set of data?

Find the mean absolute deviation of each data set.

Data Set 1	46	49	51	53	56
Data Set 2	11	24	51	78	91

Data Set 1

mean = 51

46	51	AD 5
49	51	2
51	51	0
53	51	2
56	51	
		+ 5
		14 ÷ 5

MAD = 2.8

Data Set 2

mean = 51

11	51	AD 40
24	51	27
51	51	0
78	51	27
91	51	
		+ 40
		134 ÷ 5

MAD = 26.8

- a. What do you notice about the means of the two data sets?

The means are the same.

- b. What do you notice about the mean absolute deviation of the two data sets? What does the MAD tell you about the variability of each set of data?

Data set 2 has the higher MAD which means it has the higher variability.

Data set 1 has low MAD and does not have as much spread as data set 2.