

Interpret Mean Absolute Deviation

1. Draw a dot plot of the times that five students studied for a test if the mean time they studied was 2 hours and the MAD was 0 hours.

2. Suppose the times that five students studied for a test are as follows:

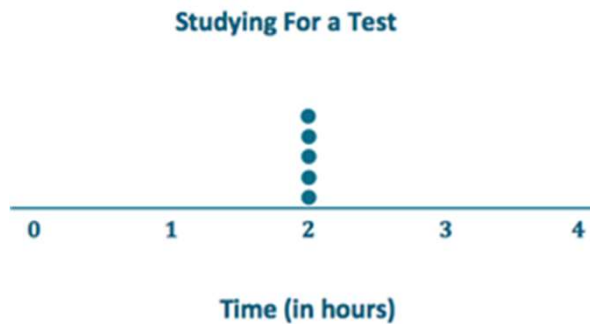
Student	Aria	Ben	Chloe	Dellan	Emma
Time (hours)	1.5	2	2	2.5	2

Michelle said that the MAD for this data set is 0 hours because the dot plot is balanced around 2. Without doing any calculations, do you agree with Michelle? Why or why not?

Interpret Mean Absolute Deviation

1. Draw a dot plot of the times that five students studied for a test if the mean time they studied was 2 hours and the MAD was 0 hours.

Since the MAD is 0 hours, all data values are all the same, and they would be equal to the mean value.



2. Suppose the times that five students studied for a test are as follows:

Student	Aria	Ben	Chloe	Dellan	Emma
Time (hours)	1.5	2	2	2.5	2

Michelle said that the MAD for this data set is 0 hours because the dot plot is balanced around 2. Without doing any calculations, do you agree with Michelle? Why or why not?

No. Michelle is wrong. There is variability within the data set, so the MAD is greater than 0 hours.

Note: If students agree with Michelle, then they have not yet mastered an understanding that the MAD is measuring variability. They need to understand that if data values differ in a distribution, whether the distribution is symmetric or not, then there is variability. Therefore, the MAD cannot be 0 hours.