**Lesson 6.3 Using Statistical Measures to Compare Populations**

Steps to find the Mean Absolute Deviation (MAD):

1. Find the **MEAN** of the **DATA** for each set of data.
2. Take the **ABSOLUTE VALUE** of the **difference** between the **mean** and **each data point**.
3. Find the **MEAN** of the **ABSOLUTE VALUES**.

Examples:

1. The Test Scores of two students are shown below. What is the difference of the means as a multiple of the mean absolute deviation?



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| --- | --- |
| 1. Calculate the Mean of Student A 2. Calculate the MAD for Student A    * Find the absolute value of the difference between the mean and each data point    * Now find the average of those numbers 3. So, the MAD is: | 1. Calculate the Mean of Student B 2. Calculate the MAD for Student B    * Find the absolute value of the difference between the mean and each data point    * Now find the average of those numbers 3. So, the MAD is: |
| 1. Now Find the Difference of the Two Means (#1 Student A – Student B): 2. Now Divide the Difference of the Two Means by the Mean of the MAD (#4 ÷ #3): | |

**Now do Your Turn on page 182- in your notes.**