Mean Absolute Deviation with Two Sets of Data Notes

Name _____

<u>Mean Absolute Deviation (MAD</u>: a numerical measure of spread that shows how much data values vary from the mean. A low MAD indicates that the data points tend to be very close to the mean so the mean is an accurate description of "typical". A high MAD indicates that the data points are spread out over a large range of values

Steps to Finding MAD	Steps to Finding MAD with the TI-73
1) Find the mean of the data	Enter data into List 1
-,	from that list, $\ orall $ to L2 then \exists to highlight L2
2) Subtract the mean from each data point	-3 1: L ₁ T $-3 \forall \forall$ 3: mean(-3 1: L ₁ β
-,	\forall to L3 then \exists to highlight L3
3) Get the absolute value of each of those	$1 \forall 1$: abs($-3 2$: L ₂ β
differences	·
	$-3 \forall \forall$ 3: mean(-3 3: L ₃ β
4) Find the mean of those values from step 3.	
1. Find the MAD of each of the data sets. Hours spent on Homework: 1, 1, 1, 2, 2, 3, 3, 3, 4, 4, 5, 5, 5, 7 MAD Hours spent Watching TV: 1, 2, 3, 3, 4, 4, 5, 6, 6, 7, 7, 8, 9, 9 MAD What does the MAD tell you about each data set? Value	
2. Find the MAD of each of the data sets.	
George's Points per Game: 23, 25, 25, 27,	28, 28, 29, 30, 31 MAD
Nate's Points per Game: 18, 24, 25, 26, 28, 30, 32, 34, 38 MAD	
What does the MAD tell you about each data set?	
Pause the video and try this problem on your own! Then press play and check your answers with a color pen.	
1. Find the MAD of each of the data sets.	
Sally's Earnings in one week: 122, 125, 130	D, 135, 135, 147, 152, 166 MAD
Jane's Earnings in one week: 111, 115, 120,	, 125, 125, 134, 144, 160 MAD

What does the MAD tell you about each data set?