9.5 Mean Absolute Deviation   Name _____

I can summarize data by describing the overall pattern of the data and noticing unusual deviations from the overall pattern.

Notes:

The **Mean Absolute Deviation (MAD) –** is an average of how data values differ from the mean.

   1)   Find thee mean of the data.
   2)   Find the <u>difference</u> of each value in the set from the mean.
   3)   Find the mean of these differences.

Data Set: (Prices of kites) $7, $20, $9, $35, $12, $15, $7, $10, $20, $25   (Mean = 16)

Order Data:	**7**	**7**	**9**	**10**	**12**	**15**	**20**	**20**	**25**	**35**
Difference of Data & Mean:	16 -7	16 -7	16 -9	16 -10	16 -12	16 -15	20 -16	20 -16	25 -16	35 -16
	9	**9**	**7**	**6**	**4**	**1**	**4**	**4**	**9**	**19**

Mean of Differences (MAD):   9 + 9 + 7 + 6 + 4 + 1 + 4 + 4 + 9 + 19 = 72 ÷ 10 = 7.2
So the prices differ from the mean by an average of $7.20.

-    -   -   -   -   -   -   -   -   -   -   -   -   -   -

Find and interpret the MAD of the data. Round answer to the nearest tenth if needed.

1)   25, 28, 20, 22, 32, 28, 35, 34, 30, 36   Mean: _____

Order Data:										
Difference of Data & Mean:										

Mean of Differences (MAD): _____   Interpret: _____

2)   132, 127, 106, 140, 158, 135, 129, 138   Mean: _____

Order Data:								
Difference of Data & Mean:								

Mean of Differences (MAD): _____   Interpret: _____

(Turn page over for # 3)

3) Choose the set of data from your class's spreadsheet that you used for lesson 9.2.

List the letter of your data: _____   Mean: _____

Order set of data:

Order Data:

Difference of
Data & Mean:

Mean of Differences (MAD): _____

Interpret: _____