

Mean Absolute Deviation

It's all Greek to me! Greek letters are used a lot in math to represent words and formulas.

π (pi) = _____

μ (mu) = symbol for the _____

Σ (uppercase sigma) symbol for _____

σ (sigma) symbol for _____

Mean absolute deviation- Measures the "spread" of the data

The data from the Ch. 8 Geometry test scores are as follows: 89, 97, 90, 98, 60, 77, 77, 100

Step One: Find the mean

$\mu =$ _____ *Sometimes the mean is written like this... Σ

Step Two: Figure out the deviation. The deviation is _____. This means....How far away is a number from the mean.

Test Score	Deviation ($x - \mu$)	Ab. Dev (sigma) Dev (sigma) $ (x - \mu) $
89		
97		
90		
98		
60		
77		
77		
100		
$\mu =$	$\mu =$	$\mu =$

Step Three: Some of these values are negative...How can we make them positive?

Find the _____.

Find the absolute value for each deviation for each number.

Step Four: Find the mean of the absolute deviation or the MEAN ABSOLUTE DEVIATION.

Example: Find the mean absolute deviation for the following data: 12, 15, 17, 19, 21, 11

$\mu =$ _____

Mean Absolute Deviation = _____

Try these on your own:

1. Find the mean absolute deviation for the following data: 3, 4, 5, 6, 7, 8, 9, 10

$$\mu = \underline{\hspace{2cm}}$$
$$\text{Mean Absolute Deviation} = \underline{\hspace{2cm}}$$

2. Find the mean absolute deviation for the following data: 100, 200, 300, 400, 500, 600

$$\mu = \underline{\hspace{2cm}}$$
$$\text{Mean Absolute Deviation} = \underline{\hspace{2cm}}$$

3. Find the mean absolute deviation for the following data: 91, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101

$$\mu = \underline{\hspace{2cm}}$$
$$\text{Mean Absolute Deviation} = \underline{\hspace{2cm}}$$

4. Find the mean absolute deviation for the following data: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15

$$\mu = \underline{\hspace{2cm}}$$
$$\text{Mean Absolute Deviation} = \underline{\hspace{2cm}}$$

5. Find the mean absolute deviation for the following data: 7543, 6920, 3931, 8763, 9532

$$\mu = \underline{\hspace{2cm}}$$
$$\text{Mean Absolute Deviation} = \underline{\hspace{2cm}}$$