

MEDIAN

- Middle of the data
- Accurate measure of central tendency when the data has an outlier
 - Outlier: data that is much bigger or much smaller than the rest of the data
- Steps to find the median:
 1. Put the data in order from least to greatest
 2. Find the middle number (If there are 2 numbers in the middle add them together and divide by 2 to get the median)

1, 3, 3, **6**, 7, 8, 9

Median = **6**

1, 2, 3, **4**, **5**, 6, 8, 9

Median = $(4 + 5) \div 2$
= **4.5**

MEAN

- Average of the data
- Accurate measure of central tendency when the data has a small range
- To find the mean:
 1. Find the sum of your data set
 2. Count the amount of #s in the data set
 3. Divide the sum by the amount of #s in the data set

Example 1.

Find the mean of the following set of numbers.

19, 6, 17, 6

Solution.

To find the mean divide the sum of the numbers by the number of numbers.

$$\begin{aligned}\frac{\text{Sum of numbers}}{\text{Number of numbers}} &= \frac{19 + 6 + 17 + 6}{4} \\ &= \frac{48}{4} \\ &= 12\end{aligned}$$

MEDIAN

- _____
- Accurate measure of _____ when the data has an _____
 - Outlier: data that is much _____ or much _____ than the rest of the data
- Steps to find the median:
 1. Put the data in order from _____
 2. Find the _____ (If there are 2 numbers in the middle add them together and divide by 2 to get the median)

Examples:

- 8, 6, 3, 1, 3, 7, 9

- 6, 1, 3, 4, 2, 5, 7, 9, 8

MEAN

- _____
- Accurate measure of _____ when the data has a _____
- Steps to find the mean:
 1. Find the _____ of your data set
 2. Count the _____ in the data set
 3. _____ by the amount of #s in the data set

Example:

- 19, 6, 17, 6

