9-13-17

1) Data set: 1, 5, 6, 10, 7, 2, 2, 6, 2, 5

Data set in order: 1, 2, 2, 2, 5, 5, 6, 6, 7, 10

Sum of the numbers: 46

Mean = $46 \div 10 = 4.6$	Mode = 2
Median = $\frac{5+5}{2} = \frac{10}{2} = 5$	Range = $10 - 1 = 9$

2) Data set: 5, 5, 6, 9, 4, 3, 4, 8, 10, 4

Data set in order: 3, 4, 4, 4, 5, 5, 6, 8, 9, 10

Sum of the numbers: 58

Mean = $58 \div 10 = 5.8$	Mode = 4
Median = $\frac{5+5}{2} = \frac{10}{2} = 5$	Range = $10 - 3 = 7$

9-13-17

Measures of Central Tendency

Math Test Scores:
94, 86, 92, 100, 99, 91
99, 83

Mean

Median

Mode

Range

- Think: Average.

To find the mean:

1. Add all values
2. Divide by the number of values.

Example Problem:

Find the Mean of the numbers.

$94+86+92+100+99+91+99+83$
$= 744$

$\text{mean} = \frac{744}{8} = 93$

- Think: middle.

To find the median:

1. Put numbers in order from least to greatest.
2. Mark off high and low values until you reach the middle.
3. If there are 2 middles, add them and divide by 2.

Example Problem:

Find the Median of the numbers.

~~83~~, ~~86~~, ~~91~~, 92, 94, ~~99~~, ~~99~~, ~~100~~

$\frac{92+94}{2} = \frac{186}{2} = 93$

- Think: most.

To find the mode:

1. Put numbers in order from least to greatest.
2. Find the number that appears the most.
3. There may be more than one mode, or there may be no mode.

Example Problem:

Find the Mode of the numbers.

83, 86, 91, 92, 94, 99, 99, 100

99

- Think: difference.

To find the range:

1. Put numbers in order from least to greatest.
2. Subtract the lowest number from the highest number.

Example Problem:

Find the Range of the numbers.

$100 - 83 = 17$