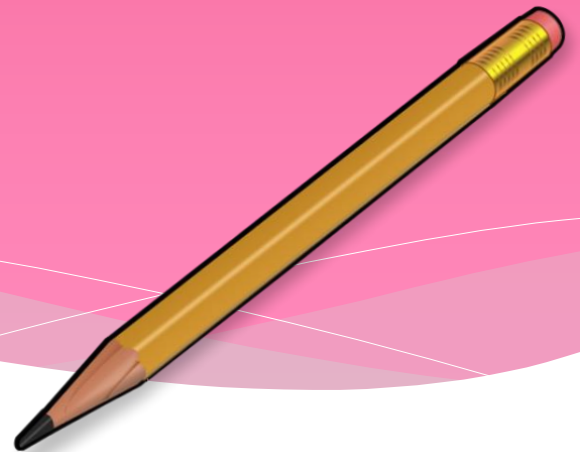# Inquiry #4 Notes

I can calculate the range and the average/mean of a set of data.

Median – is the middle

* Median is the number that falls exactly in the middle of a set of data when the data are arranged in order from least to greatest.
* If there is an even number of a set of data you will average the 2 middle numbers.

Finding the Median:

Example: What is the median of the following set of numbers?

2, 3, 5, 6, 8, 10, 13

Median= 6

Example: What is the median of the following set of numbers?

1, 2, 2, 4, 4, 5

2+4=6

6/2=3 Median= 3

Mode – is the most

* The number that appears the most often in a given data set.
* If all numbers appear just once there is no mode, the mode is not zero because zero is a number.
* If multiple numbers are repeated the same amount of times there can be multiple modes.

Finding the Mode:

Example: What is the mode of the following set of numbers?

2, 3, 3, 5, 6, 8, 10, 13

Mode= 3

Example: What is the mode of the following set of numbers?

4, 8 12, 34, 40, 43, 2

Mode= No Mode

Mean – is the average

* To compute the mean:

    1) add all the numbers to get the sum (total)

    2) divide the sum (total) by the number of addends (how many numbers you added).

Finding the Mean/Average

Example: What is the mean of the following set of numbers?

2, 1, 3

2+1+3= 6

6/3= 2   Mean= 2

Range – is the difference

* The difference between the lowest and the greatest values.

Finding the Range

Example: What is the range of the following set of numbers?

4,5,8,12, 16, 20

20-4= 16   Range= 16

Example: What is the range of the following set of numbers?

22, 13, 6, 8, 30, 9

30-6= 24   Range= 24

Whiteboard Practice!

1. Calculate the Mean of the following set of numbers: 2, 4, 6, 4
Answer: 4

2. Calculate the Mode of the following set of numbers: 1, 10, 3, 4, 3
Answer: 3

3. Calculate the Range of the following set of numbers: 20, 12, 33, 40, 15
Answer: 28

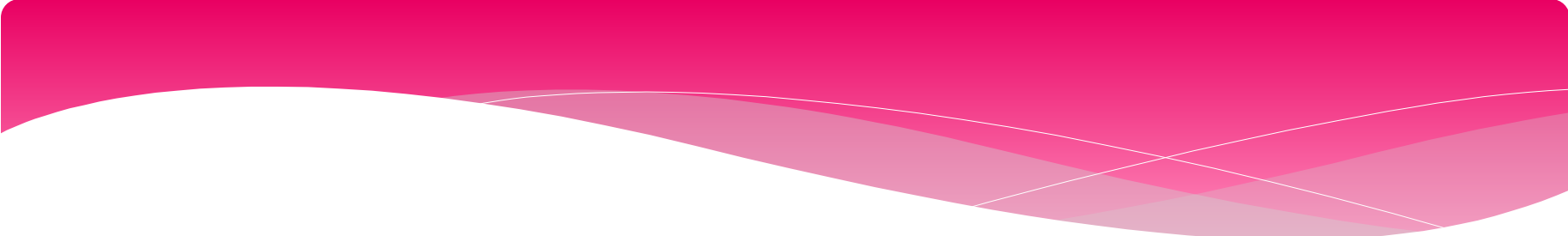4. Calculate the Mean of the following set of numbers: 3, 6, 9
Answer: 6

5. Calculate the Median of the following set of numbers: 4, 10, 8, 3, 12
Answer: 8

6. Calculate the Mean of the following set of numbers: 10, 12, 8, 6
Answer: 9

7. Calculate the Median of the following set of numbers: 2, 5, 7, 8, 9, 10, 12, 14
Answer: 8.5

8. Calculate the Range of the following set of numbers: 7, 13, 9, 4, 3, 17
Answer: 14

9. Calculate the Mean of the following set of numbers: 21, 24, 25
Answer: 23.7