MEAN, MEDIAN, MODE, & RANGE

The MEAN is the numerical average of the data set

Find the mean by adding up all numbers in the data set and dividing by the number of numbers.

Ex: Find the mean of 4, 12, 22, 7, 2, 5:

$$\frac{4+12+22+7+2+5}{6} = 8.67$$

The MEDIAN is the number that is in the middle of a set of data.

How do you find the median?

- 1. Order numbers from least to greatest
- 2. Find the middle number
- 3. *Sometimes: If there are two numbers in the middle, find the average (or mean) of the two Ex #1: Find the median of 12, 34, 22, 2, 5, 7, 10, 12:

$$2, 5, 7, 10, 12, 12, 22, 34$$

$$\frac{10+12}{2} = 11$$

Ex #2: Find the median:

5, 17, 23, 11, 19

The MODE is the number that occurs most often. There may be multiple modes.

How do you fine the mode?

- 1. Put numbers in order
- 2. Look for repeated numbers
- 3. Pick the most repeated (there may be more than one)

Ex #1: Find the mode 2, 10, 15, 8, 2, 14:

Ex #2: Find the mode:

3, 17, 8, 8, 3, 14, 22

The RANGE is the difference between the highest and lowest number.

How do you find the range?

- 1. Put numbers in order
- 2. Greatest number minus the smallest number

Ex: Find the range 12, 34, 22, 2, 5, 7, 10, 12:

$$34 - 2 = 32$$

Practice:

The following are Abby's science test scores. Find the mean, median, mode, and range of her scores. 86, 97, 84, 73, 63, 88, 97, 100, 95