# A. Finding the Mean (Average)

The mean of a set of values is the sum of the values divided by the number of values. It is also called the average.

 **Example:** Find the mean of 19, 13, 15, 25, and 18

 19 + 13 + 15 + 25 + 18 = 90 = 18

 5 5

When the mean is known and you must find a missing value, some simple rules of algebra must be applied.

# B. Finding the Median

The median refers to the midpoint in a series of numbers. To find the median, arrange the numbers in order from smallest to largest. If there is an odd number of values, the middle value is the median. If there is an even number of values, the average of the two middle values is the median.

**Example #1:** Find the median of 19, 29, 36, 15, and 20

In order: 15, 19, **20**, 29, 36 since there are 5 values (odd number), 20 is the

median (middle number)

**Example #2:** Find the median of 67, 28, 92, 37, 81, 75

In order: 28, 37, **67**, **75**, 81, 92 since there are 6 values (even number), we

must average those two middle numbers to get the median value

 Average: 67 + 75 = 142 = 71 is the median value

 2 2

# C. Finding the Mode

The mode of a set of values is the value that occurs most often. A set of values may have more than one mode or no mode.

**Example #1:** Find the mode of 15, 21, 26, 25, 21, 23, 28, 21

 The mode is 21 since it occurs three times and the other values occur only once.

**Example #2**: Find the mode of 12, 15, 18, 26, 15, 9, 12, 27

 The modes are 12 and 15 since both occur twice.

**Example #3:** Find the mode of 4, 8, 15, 21, 23

 There is no mode since all the values occur the same number of times.

**D. Finding the Range**

The range of a set of data describes how big a spread there is from the largest value in the set to the smallest value. Use the range to show how much the numbers vary.

**Example:** For the set {1, 1, 2, 3, 5, 6, 10}, the range is 10 – 1 = 9.

**Mean, Median, Mode & Range Practice Sheet**

A. For the following groups of numbers, calculate the mean, median and mode for each.

1. 18, 24, 17, 21, 24, 16, 29, 18 Mean\_\_\_\_\_\_\_

Median\_\_\_\_\_\_

Mode\_\_\_\_\_\_\_

 Range \_\_\_\_\_\_\_

1. 75, 87, 49, 68, 75, 84, 98 Mean\_\_\_\_\_\_\_

Median\_\_\_\_\_\_

 Mode\_\_\_\_\_\_\_

 Range \_\_\_\_\_\_\_

 3. 55, 47, 38, 66, 56, 64, 44, 63, 39 Mean\_\_\_\_\_\_\_

 Median\_\_\_\_\_\_

 Mode\_\_\_\_\_\_\_

 Range \_\_\_\_\_\_\_