Math 8 Muscardin

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chapter 7 – Data Analysis**

Test Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

To do:

7.1 – Averages

* Complete Notes ⃝

7.2 – Mean and Range

* Complete Notes ⃝

7.3 – Median

* Complete Notes ⃝
* Quiz 1 ⃝

7.4 – Mode

* Complete Notes ⃝

7.5 – Conclusions

* Quiz 2 ⃝

Complete Chapter Assignment ⃝

**Write Unit Test ⃝**

Math 8 **Lesson 7.1 – Averages** Muscardin

The **average**is a term which is used often to try and best represent the "central tendency" (or "typical value") of a set of numbers.

What number best represents the group of numbers?

 If I could throw away my data and replace it with only one “average” value, what would it be?

3 common ways to determine an average:

**Mean –**

**Median –**

**Mode –**

Math 8 **Lesson 7.2 – Mean and Range** Muscardin

Mean is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The mean is computed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ all of the numbers in the data set together and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by the number of elements contained in the data set.

**Example:**

Data set = 2, 5, 9, 3, 5, 4, 7

**\*\*Disadvantage of using mean is that if any number is extreme (outlier) then the mean will be stretched and less accurate\*\***

Range is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The range for a data set is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between the largest value and the smallest value contained in the data set.

**Example:**

Data set = 2, 5, 9, 3, 5, 4, 7

Math 8 **Lesson 7.3 - Median** Muscardin

Median is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. First you should reorder the data set from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ then if the number of elements are \_\_\_\_\_\_\_\_\_the median is the element in the **middle** of the data set. If the number of elements are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ then the median is the **average** of the two middle terms.

**Examples:**

Data set = 2, 5, 9, 3, 5, 4 ,7

Data set = 2, 5, 9, 3, 5, 4

Math 8 **Lesson 7.4 - Mode** Muscardin

Mode is the most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The mode for a data set is the element that occurs the most. It is not uncommon for a data set to have more than one mode. This happens when two or more elements occurs with equal frequency in the data set.

**Examples:**

Data set = 2, 5, 9, 3, 5, 4, 7

Data set = 2, 5, 2, 3, 5, 4, 7