Algebra 2

9-00 Measures of Center and Dispersion

Measure of central tendency

• A number used to represent the ______ or _____ of a set of data values.

Mean

, of *n* numbers is the ______ of the numbers divided by ______.

 $\bar{x} = \frac{x_1 + x_2 + \dots + x_n}{\tilde{x}}$

Median

______ number when the numbers are written in ______. (If *n* is even, the median is the ______.)

Mode

Number or numbers that occur most _____. There may be _____ mode, ____ mode, or _____ mode.

The winning scores of 6 baseball games are 5, 7, 8, 5, 10, 3. Find the mean, median, and mode.

Algebra 2 9-00

Measure of dispersion

Name: ____

• Statistic that tells you how ______, or _____, data values are.

Range

• _____ between the _____ and _____ data values.

Range = max - min

Standard deviation

Describes the ______ differences (or deviation) between a data's ______ and the ______.

$$\sigma = \sqrt{\frac{(x_1 - \bar{x})^2 + (x_2 - \bar{x})^2 + \dots + (x_n - \bar{x})^2}{n}}$$

Find the standard deviation of the following data set. 4,8,12,15,3

Finding the standard deviation on a graphing calculator TI calculator

- 1. [STAT] \rightarrow Edit, Enter data values in L1 (clear list first)
- 2. [STAT] \rightarrow CALC \rightarrow 1-Var Stats, [ENTER] x2, Find σx

NumWorks

- 1. Select Statistics from home
- 2. In Data tab
- 3. Enter data in Value V1 list
- 4. In Stats tab
- 5. Read standard deviation from list

463 #1-2, 464 #1-7 = 9