

Name: _____ Period: _____ Date: _____

Mean, Median, and Mode Guide Notes

MEASURES OF CENTRAL TENDENCY

A measure of central tendency is the typical or the most representative of set of numbers. The three measures of central tendency which are most commonly used are:

- mean (or average)
- median
- mode

Mean or average is the sum of all the scores divided by the number of scores. In symbols,

$$\bar{x} = \frac{\sum x}{n}$$

Example: Find the average of the following set of scores 45, 53, 42, 51, 48, 46, 49, 45, and 47.

Sample Problem 1:

The prices of certain books are set at \$10, \$15, \$18, \$20 and \$24. Find the arithmetic mean of these five books.

Name: _____ Period: _____ Date: _____

Mean, Median, and Mode Guide Notes

Weighted Arithmetic Mean

Example: Let us compute for the weighted arithmetic mean considering that 10,000 books were sold at \$10; 8,000 were sold at \$15; 5,000 were sold at \$18; 4,000 books were sold at \$20 and 2,000 were sold at \$24.

Sample Problem 2:

Find the average grade of Missy if her report card is given below:

Subject	Units	Grade
English	3	87
Math	3	85
Science	3	87
Literature	2	88
History	2	89

Name: _____ Period: _____ Date: _____

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Median

Median is defined as the middle number in a given set of numbers. This means that the median divides the distribution into two equal parts such as that half is above or greater than it, while the other half is below or less than its value.

Example: Find the median of the following set of scores 45, 53, 42, 51, 48, 46, 49, 45, and 47.

Sample Problem 3:

Find the median of the following sets of score 92, 91, 92, 91, 90, 83, 85, 86, 84, and 87

Name: _____ Period: _____ Date: _____

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Mode

The mode is the number that occurs the most often in a set or the one with the highest frequency.

Example: Find the mode of the following set of scores 45, 53, 42, 51, 48, 46, 49, 45, and 47.

Sample Problem 4:

Find the mode of the following sets of score 92, 91, 92, 91, 90, 83, 85, 86, 84, and 87.