

Measures of Central Tendency: Mean, Median, and Mode

Name: _____

Class: _____

Date: _____

In mathematics there are different kinds of *averages*. As a group these averages are **measures of central tendency**: the *mean*, the *median*, and the *mode*.

The **mean** or **average** is found by adding a group of numbers and dividing the sum by the number of items added. The mean or average is the best-known and most used measure of central tendency. If the data is arranged in order, the middle number of the set of data is called the **median**. Another measure of central tendency is the **mode**, which is the number in the set of data that occurs most often.

Example 1 Carter's Cafe kept track of the number of customers they had during one week. The results were: 127, 115, 153, 135, 163, 153, 120. Find the mean, median, and mode of the results.

Mean: Add the data and divide by 7.
 $127 + 115 + 153 + 135 + 163 + 153 + 120 = 966$
 $966 \div 7 = 138$
The mean or average was 138 customers.

Median: Arrange the data in order. Identify the middle value.
115, 120, 127, 135, 153, 153, 163
↑
The middle value is 135. The median is 135 customers.

Mode: Look at the data. Which number occurs the most times.
153 occurs twice. The mode is 153 customers.

Note: If no number occurs more than once, there is no mode. If two numbers occur equally as often, there are two modes.

Practice

1. Desiree made a survey of milk prices at 5 grocery stores. She found these prices per gallon: \$2.40, \$2.80, \$2.38, \$2.78, \$2.44 Find the mean, median, and mode of this data.

Mean: _____ Median: _____ Mode: _____

2. In one week, Mark had sales of \$250, \$250, \$250, \$250, \$250, and \$250. Find the mean, median, and mode of this data.

Mean: _____ Median: _____ Mode: _____

3. The Zero Corporation had monthly income during the first quarter of \$18,000, \$27,000, and \$18,000. Find the mean, median, and mode of this data.

Mean: _____ Median: _____ Mode: _____

4. Jamal kept track of the number of phone calls he received during one ten-hour business day. The results were: 1, 2, 7, 7, 6, 3, 7, 3, 2, 2. Find the mean, median, and mode of this data.

Mean: _____ Median: _____ Mode: _____