AFM **2.1 Describing Data** Chapter 2

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| **Measures of Central Tendency:** Center values or the “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_” of a data set. Often described by the mean, median, and mode.**Mean:** The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the data set. **Median:** The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ value when the data set are arranged in order.**Mode:** The data value that occurs the \_\_\_\_\_\_\_\_\_\_\_\_\_ frequently. **Range:** The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ between the highest and lowest value in a set of data.**Five Number Summary:** The five numbers that make up a box-and-whiskers plot. They consist of the minimum, Q1, median, Q3, and Maximum.**Interquartile Range (IQR):** The difference between the \_\_\_\_\_\_ and \_\_\_\_\_\_\_ quartile. It is the length of the box in a box-and-whisker plot. |

**Example 1:** You scored an 83%, 74%, 95%, and 76% on your last four math tests. If you want to earn an 85% in the class, what score must you get on your next math test?

**Example 2:** You scored a 99%, 67%, 83%, and 86% on your last four science tests. If your next test counts twice, is it possible to average a 90%?

**Box-and-Whisker Plot**



**Example 3:** Give the five number summary for the following data. Then, create a box plot with the information.

37, 39, 40, 40, 40, 41, 42, 43, 44, 49, 51, 51

1. State the five-number summary
2. Create a box plot
3. Find the mode
4. Find the IQR
5. Find the range