

Chapter 9: Statistics and probability

CH 9.2 - Measures of Central Tendency

Learning Intention:

- I will learn to use reasoning to determine which measure of central tendency best describes a set of data
- I will learn how to solve problems using mean, median, and mode

Measure of Central Tendency

- A measure that represents the **CENTER** of a set of data, such as **MEAN** or **MEDIAN**
- The **MODE** may be a measure of central tendency, however, there may not be a **MODE**, and it may not be anywhere near the center

Outliers

- Unusually **LARGE** or **SMALL** values in the data set

Measure	What is it	When to use it	Factors that affect accuracy
Mean	• The average $\text{mean} = \frac{\text{sum of values in data set}}{\text{\# of values in data set}}$	When the values are relatively close together	When there are outliers in the data
Median	• For odd # of values - middle value • For even # of values - average of two middle values	When the values are relatively close together When there are outliers in the data	• when there are large gaps in the data
Mode	• Most frequently occurring value(s)	For data that represents frequency of choice	• when there is no mode • when there are multiple modes • may not be anywhere close to the middle of the data set.

Practice Assignment: Page 311 #1-3, choose three apply questions