CHAPTER 8: MEASURES OF CENTRAL TENDENCY

Introduction to central tendency

A **central tendency** (or, more commonly, a **measure of central tendency**) is a central value or a typical value for a probability distribution. It is occasionally called an average or just the **center** of the distribution. The most common measures of central tendency are the arithmetic mean, the median and the mode.

The significance property of measures of central tendency

- It represents a single score around which the center of the entire distribution tends to be located.
- It conveys us the shape and nature of the distribution of data.
- It condenses the data to a single value.
- It enhances the comparison between data.

Types and measures of central tendency

The most commonly used measures of central tendency are:

- Mean
- Median
- Mode

Mean:	**Average.** The sum of a set of data divided by the number of data. (Do not round your answer unless directed to do so.)
Median:	The **middle** value, or the mean of the middle two values, when the data is arranged in numerical order. Think of a "median" being in the middle of a highway.
Mode:	The value (number) that appears the **most**. It is possible to have more than one mode, and it is possible to have no mode. If there is no mode-write "no mode", do not write zero (0) .

Calculation in central tendency

Example #1

Find the mean, median and mode for the following data: 5, 15, 10, 15, 5, 10, 10, 20, 25, 15.

(You will need to organize the data.)

5, 5, 10, 10, 10, 15, 15, 15, 20, 25