

Learning Goals

- Understand the ways to describe the center and spread of a dataset, including mean, median, mode, range, and standard deviation, and what each measure conveys about the data.
- Interpret how outliers influence statistical measures and use tools like z-scores and standard deviation ranges to identify unusual observations.
- Compare and interpret center and spread within subgroups to draw meaningful conclusions about categorical variables.

Key Definitions

- **Mean:**

- **Median:**

- **Mode:**

- **Range:**

- **Standard Deviation:**

- **Outlier:**

- **z-score:**

Standard Deviation Steps

List the steps to calculate the standard deviation by hand.

- 1.
- 2.
- 3.
- 4.
- 5.

Calculation Practice

Dataset: 8, 9, 8, 12, 8, 9

- Mean:
- Median:
- Mode:
- Standard Deviation: