**Descriptive Statistics**

* Measure of Center Tendency
* Measure of Variation
* Measure of Position
* Visualization

**Measure of Center:**One number that can present the sample.

* Mean/Average
* Median
* Mode
* Midrange

**Example:** [**https://www.ssa.gov/oact/cola/central.html**](https://www.ssa.gov/oact/cola/central.html)

**A close up of a text

AI-generated content may be incorrect.**



**Example:**

The data show the number of patients in a sample of six hospitals who acquired an infection while hospitalized. Calculate the measure of center tendency.

110, 76, 29, 38, 105, 31



The mean



To calculate the median:

* + Order the sample: 29, 31, 38, 76, 105, 110
  + If there is no number in the middle, we find the average of the two numbers in the middle, which is



The mode:

* + There is no mode because all numbers occur only once.
  + (Note that if a sample may have multiple node)



The midrange



**You try 1**

Calculate the measure of center tendency.

11, 70, 28, 48, 15, 31, 48

**You try 2**

Calculate the measure of center tendency.

11, 70, 28, 48, 15, 31, 48, 48

**You try 3**

Calculate the measure of center tendency.

11, 70, 28, 48, 15, 31, 48, 48, 31