

7.3 Center and Spread

SWBAT use measures of center and spread to describe a set of data.

Assignments:

HW53

Mode, Median, Upper Quartile, and Lower Quartile, Range

▶ Mode

- ▶ the number that is most common in a set of data

▶ Median

- ▶ The middle of a set of data

▶ Lower Quartile

- ▶ The median of the lower half of data (smaller numbers)

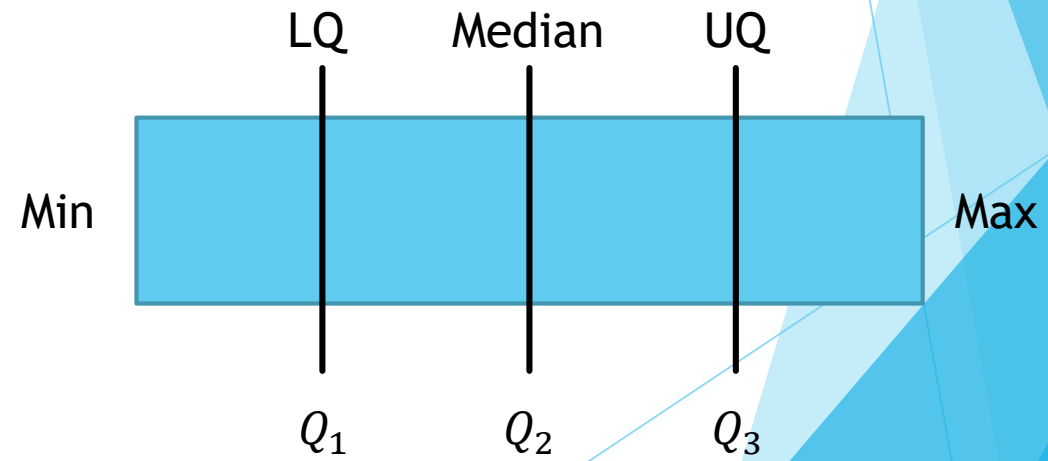
▶ Upper Quartile

- ▶ The median of the upper half of data (bigger numbers)

▶ Range

- ▶ The distance between the minimum (smallest) and the maximum (biggest)

Hours Slept					
6.25	5.75	5.25	6	8	7
6	8.75	5.5	6.5	6	4.75
9	6.5	8.25	7.75		



Mean (or Average)

- ▶ A calculated “middle” of a set of data
- ▶ To find the mean:
 1. Add up all the data points.
 2. Divide by how many data points there are. Round to two decimal places.

- ▶ Math notation:

$$\bar{x} = \frac{\sum x_i}{n}$$

\bar{x} = “x-bar” = mean

Σ = “Sigma” = sum

x_i = list of individual data points

n = total number of data points

State	Percent
Alaska	0
Virginia	4.3
Massachusetts	6.25

State	Percent
Wyoming	4
Utah	4.7
Rhode Island	7

Sales Tax

State	Percent
Oklahoma	4.5
Alabama	4
Vermont	6

State	Percent
Nebraska	5.5
Arizona	5.6
Idaho	6

State	Percent
South Dakota	4
Delaware	0
Connecticut	6.35