

Measures of central Tendency.

Date: _____

Day: _____

- Mean } Quantitative
- Median }
- Mode } Qualitative / Quantitative

Mean: $\bar{X} = \frac{\sum X}{n}$



2, 3, 1, 5, 4, 2, 3, (20)

$$\bar{X} = \frac{2+3+1+5+4+2+3}{7} = \frac{20}{7} = 2.9 \approx 3 \text{ sec}$$

$$\bar{X} = \frac{40}{8} = 5 \text{ sec}$$

Mean is not good when data contains outliers or extreme value.

* weighted mean

$$(4 \times 7) + (2 \times 1) + (5 \times 2) + 1 + 4$$

$$\bar{X}_w = \frac{\sum w_i X_i}{\sum w_i}$$

$i = 1, 2, \dots, n$

Items	exp.	w	wX
Food.	7	0.4	
clothing	2	0.1	
Fee	5	0.2	
fuel	1	0.3	
Rent	4	0.5	
		1	Sum