



CLASS NOTES

Median

Median refers to the value that lies in the middle of the data (when arranged in ascending or descending order)

When number of observations is odd,

$$\text{Median} = \text{Middle observation}$$

Example: 12, 15, 14, 13, 16, 18, 19

Ascending order: 12, 13, 14, 15, 16, 18, 19

Number of observations = 7 (odd)

Median = middle observation

$$= 15$$

When number of observations is even,

$$\text{Median} = \frac{\text{Sum of the pair of middle observations}}{2}$$

Example: 12, 15, 14, 13, 16, 18, 19, 17

Ascending order: 12, 13, 14, 15, 16, 17, 18, 19

Number of observations = 8 (even)

$$\text{Median} = \frac{\text{Sum of the pair of middle observations}}{2}$$

$$= \frac{15 + 16}{2}$$

$$= \frac{31}{2}$$

$$= 15.5$$