

StatisticsMean, median, mode:

→ All of them are some kind of averages.

Experiment 5 times the outcome = $\{2, 3, 1, 5, 4\}, \frac{2}{5}$

• mean = $\frac{2+3+1+5+4}{5}$ (sum them up and divided by the number of readings)

• median = 1 2 3 4 5 (short them and take the median value)

• mode = 1 2 2 3 4 5 (means take the frequently occurring value)
mode = 2

Example-1 Find the mean, median and mode for this data: 13 18 13 14 13 16 14 21 13

→ • mean = $\frac{13+18+13+14+13+16+14+21+13}{9} = 15$

• median = (short them ascending or descending order)

= 13, 13, 13, 13, 14, 14, 16, 18, 21

= 14

• mode = 13, 13, 13, 13, 14, 14, 16, 18, 21

↳ most frequent

= 13

Ex-2

find the mean, median and mode of this given data:

→ 1, 2, 4, 7

→

$$\bullet \text{ Mean} = \frac{1+2+4+7}{4} \Rightarrow 3.5$$

$$\bullet \text{ Median} = \frac{2+4}{2} = 3$$

'n' is odd - $n/2$

n is even - $\frac{(n/2) + (n/2 + 1)}{2}$

• mode = "none"

{ 1, 1, 2, 2, 4, 7

{ • mode = (1, 2)

→ • Range = diff between ~~small~~ largest and smallest numbers
= (7 - 1)
= 6