6) Histograms and Skewness → (Frequency) ⇒ Distributions
(talks about) (Get idea about)

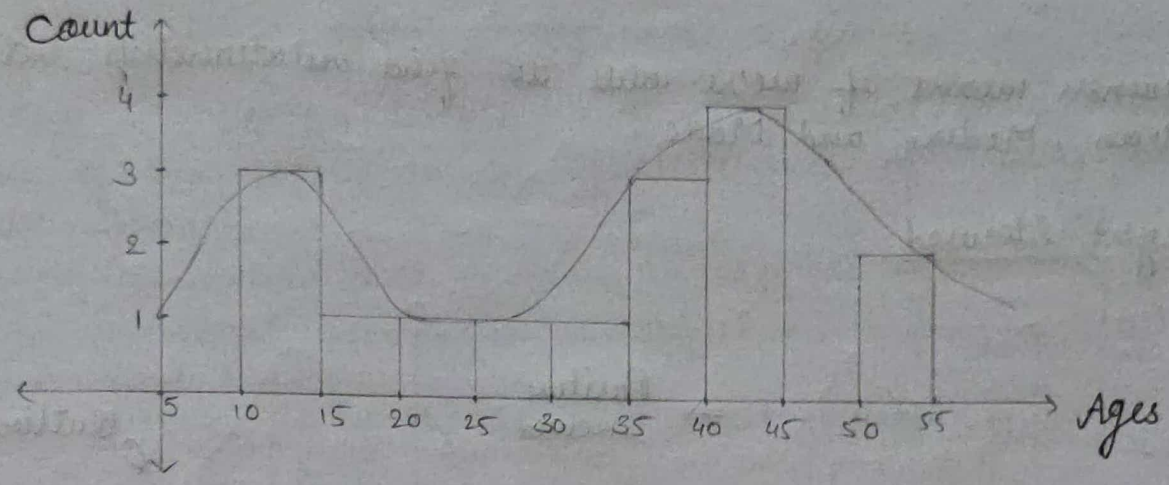
Ages = {10, 12, 14, 18, 24, 26, 30, 35, 36, 37, 40, 41, 42, 43, 50, 51}

Bins = No of groups

Bins size = group size

$\frac{50}{5} = \underline{10}$ No. of bins

↳ Bin size



SMOOTHEN THE HISTOGRAM

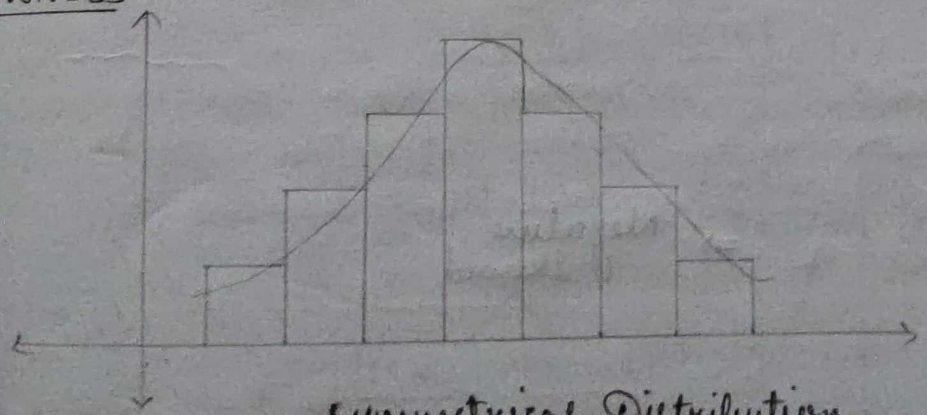
⇓

we get, Probability distribution function

⇓

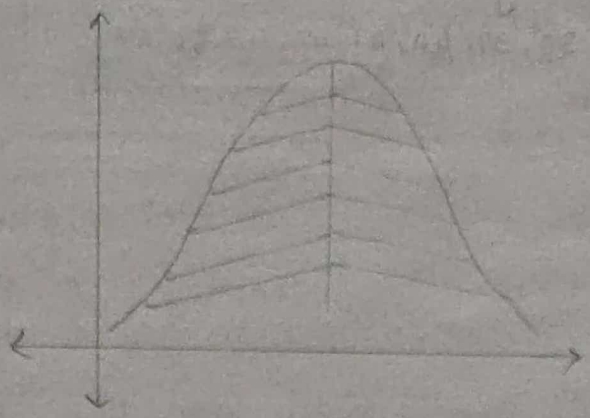
we say, Probability density function (since, it is a continuous value)

* SKEWNESS



Symmetrical Distribution

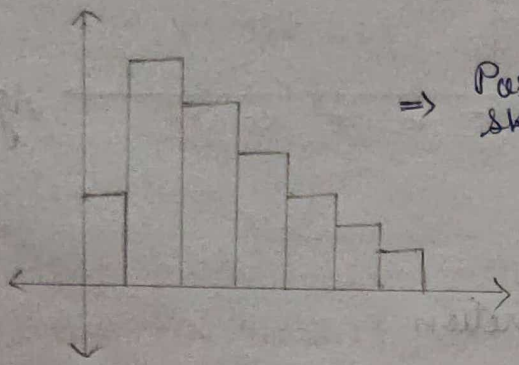
50% of data on left side is = 50% data on right side



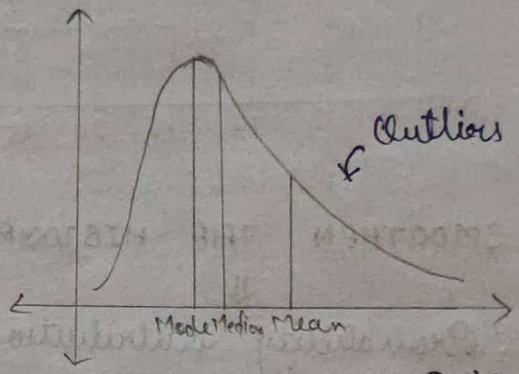
- Symmetrical distribution
- No skewness
- Here, Mean = Median = Mode
- everything is present in central region.

Skewness means if we're able to find relationships between Mean, Median and Mode.

2] Right Skewed



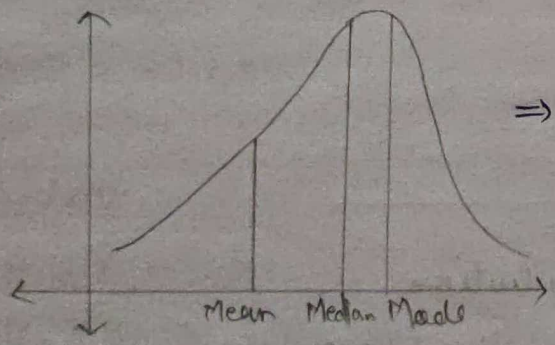
⇒ Positive Skewed



Less Normal Distribution

Mean > Median > Mode

3] Left Skewed



⇒ Negative Skewed

Relationship: Mean ≤ Median ≤ Mode