

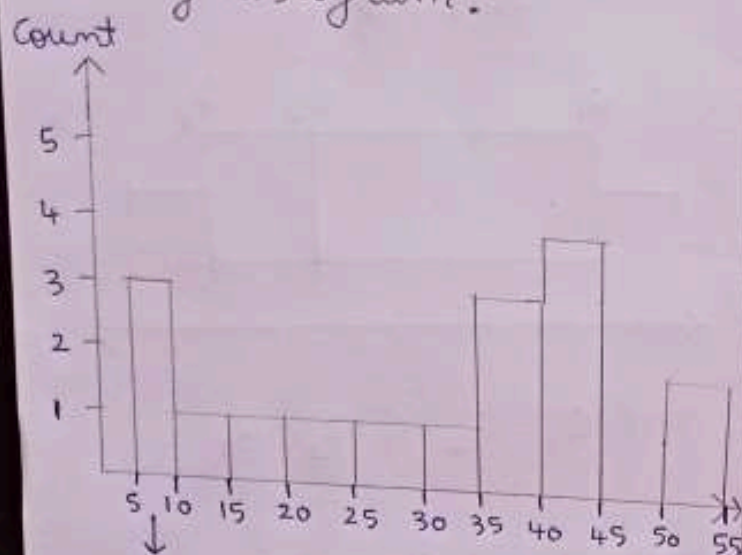
Histograms:

Frequency of elements

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

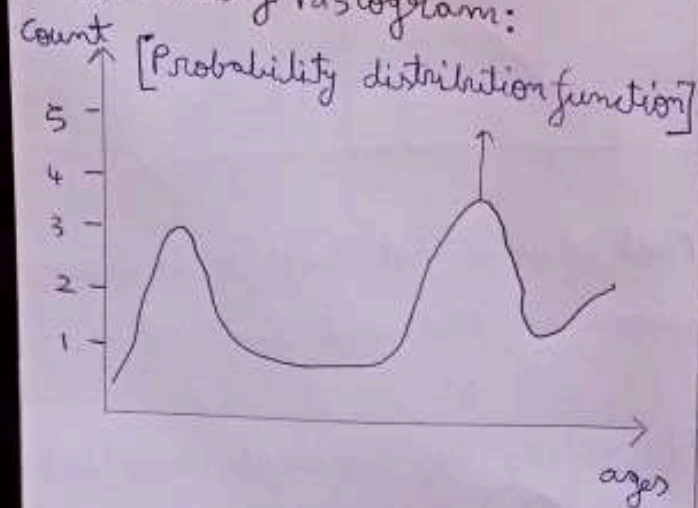
Random variable

Plotting histogram:



Count of elements in ages $\begin{cases} \geq 5 \\ < 10 \end{cases}$

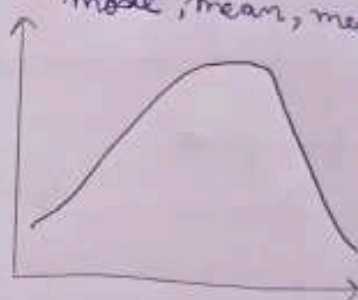
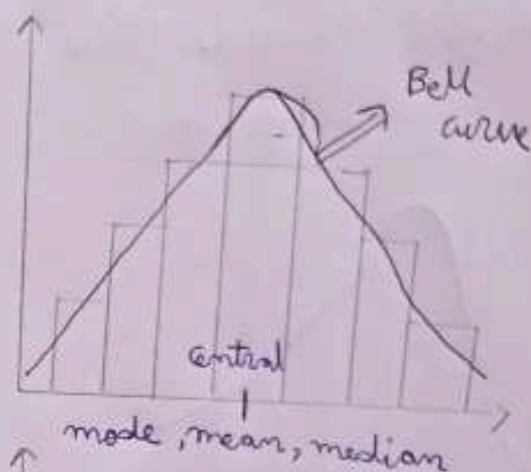
Smoothing histogram:



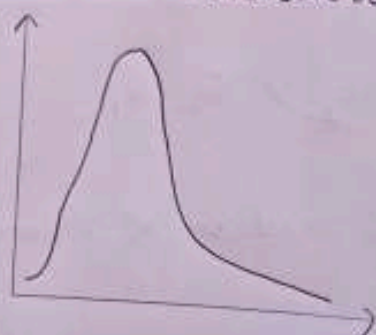
Probability distribution function says how your data is distributed.

are smoother by a process called kernel density estimator.

Normal/Gaussian distribution:



log normal distribution



Most of data follow these 2 distributions

Studying such distributions makes us understand better about data and make lot of assumptions.