① Bernoulli Distribution

↳ It is a discrete probability Distribution

↳ It Concern with a **PMF**.

ex = It applies to events that have one trial and two outcomes. These are known as bernoulli distribution.

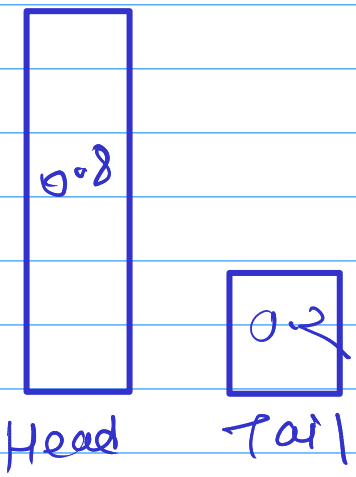
→ one Trial & Two outcome

↳ Tossing a Coin

Total probability = 1

If, $P(H) = 0.8$

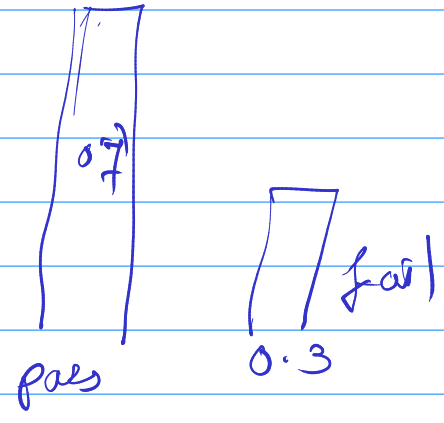
$P(T) = 0.2$



exam 1 | pass/fail

$P(Pass) = 0.7$

$P(fail) = 0.3$



② Binomial Distribution.

↳ It is a descrete probabability Distribution

↳ It Concern with a PMF.

It applies to the event where n no. of trials & two possible outcome.

n - no. of trial is an Independent trials.

Ex - Tossia a Coin 5 times.

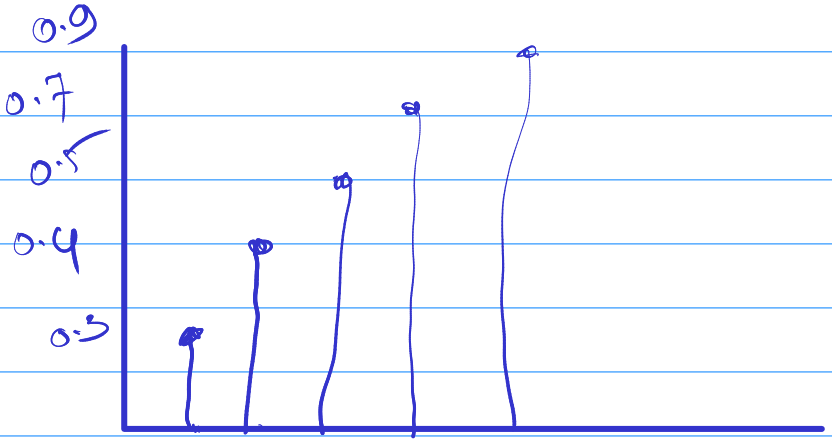
P(H) = 0.3

P(H) = 0.4

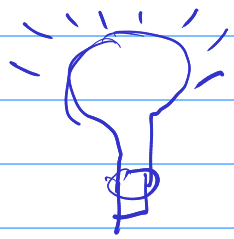
P(H)) = 0.5

P(H) = 0.7

P(H) = 0.9



Thomas edison - Bulb

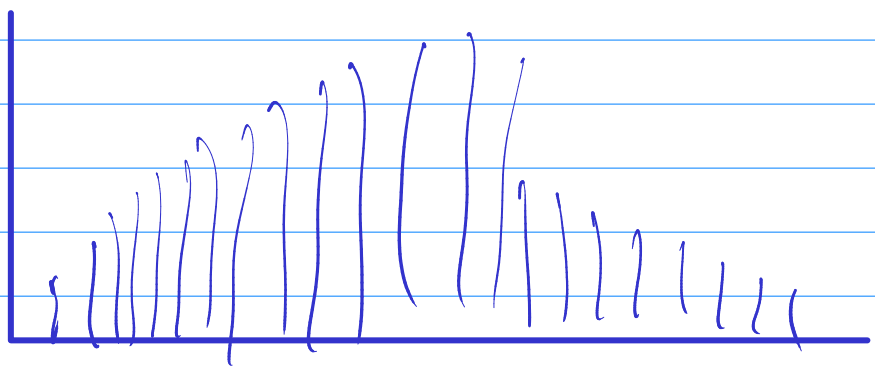


P(L) = P(success) = 0.1

0.2

0.5

0.8



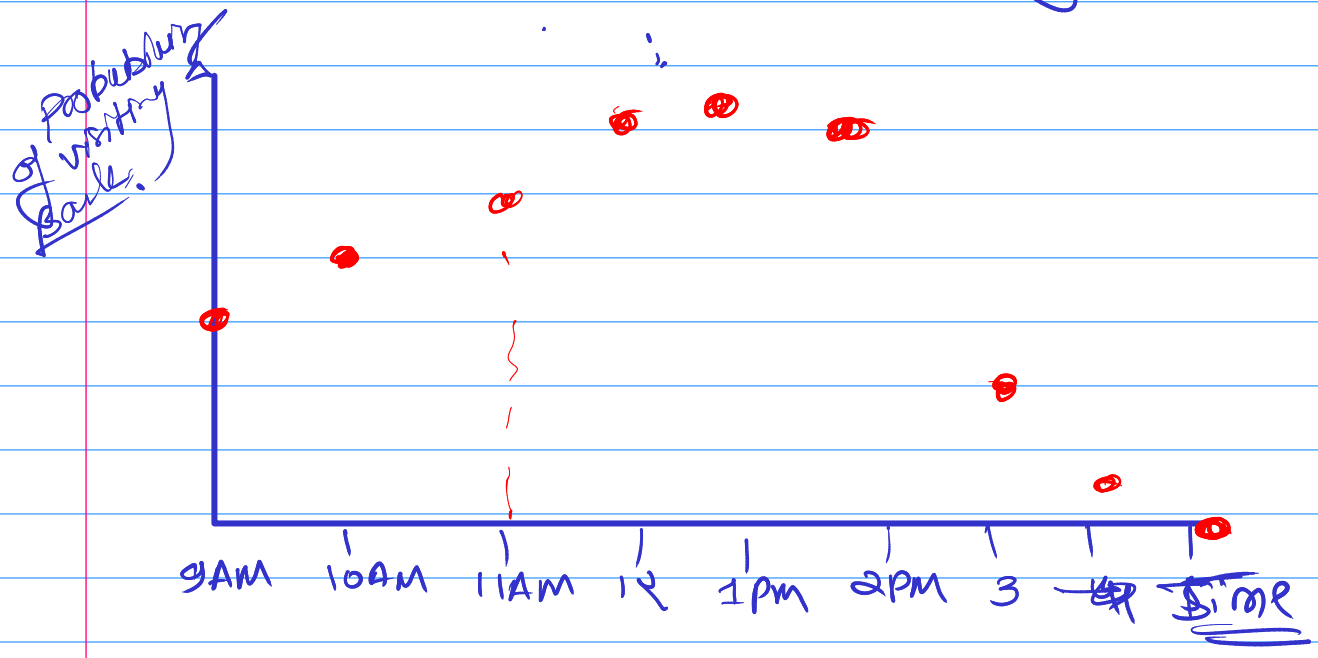
③ Poisson Distribution

→ It concern with PMF

— Descrete probability Distribution

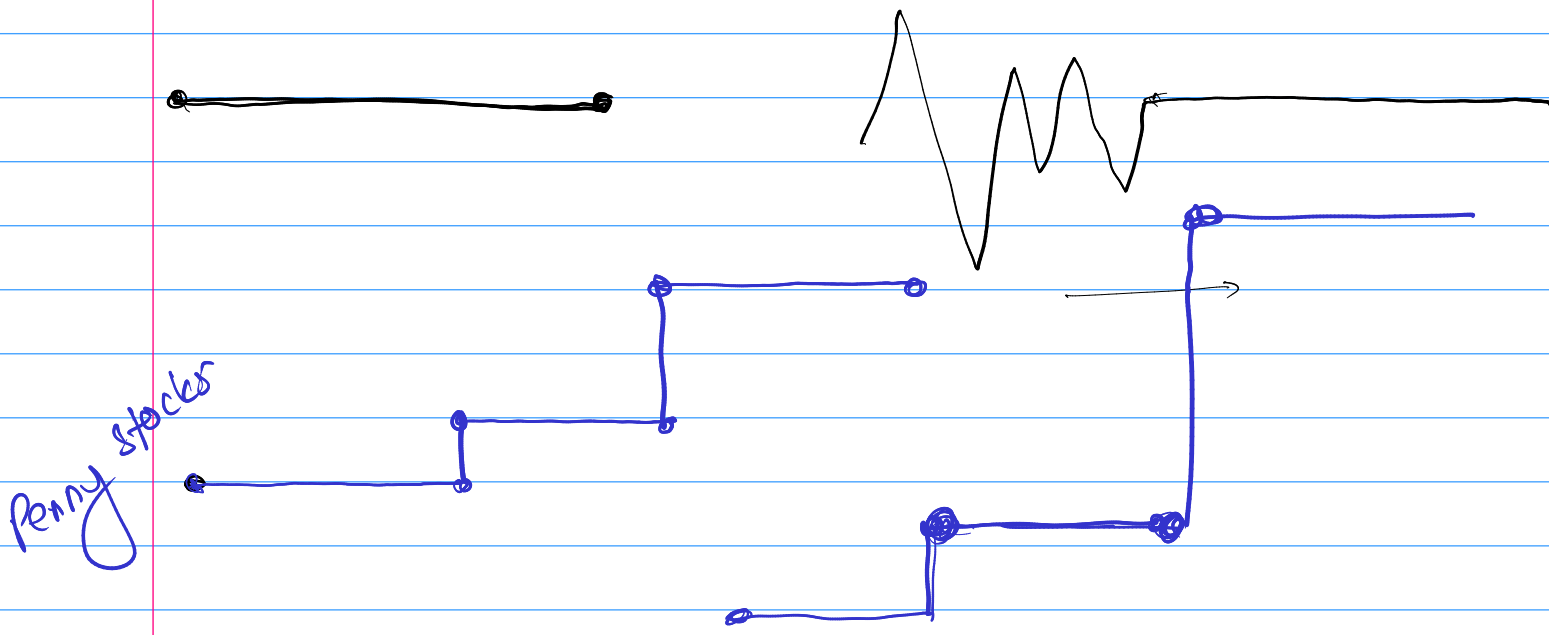
It applies to the no. of event occuring in fix interval of time.

Ex Customers visiting a bank after every 1 Hr.

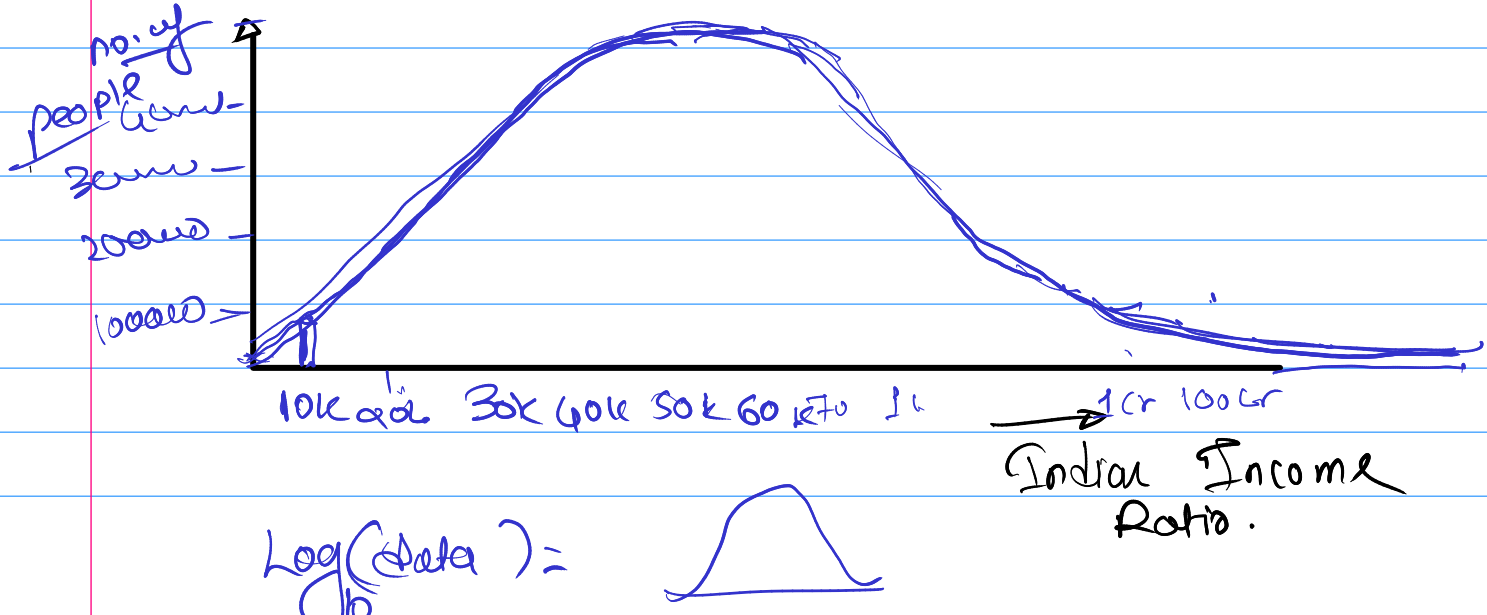


④ Uniform Distribution

It applies when an event occurring follows uniform probability.



⑤ Log - Normal Distribution



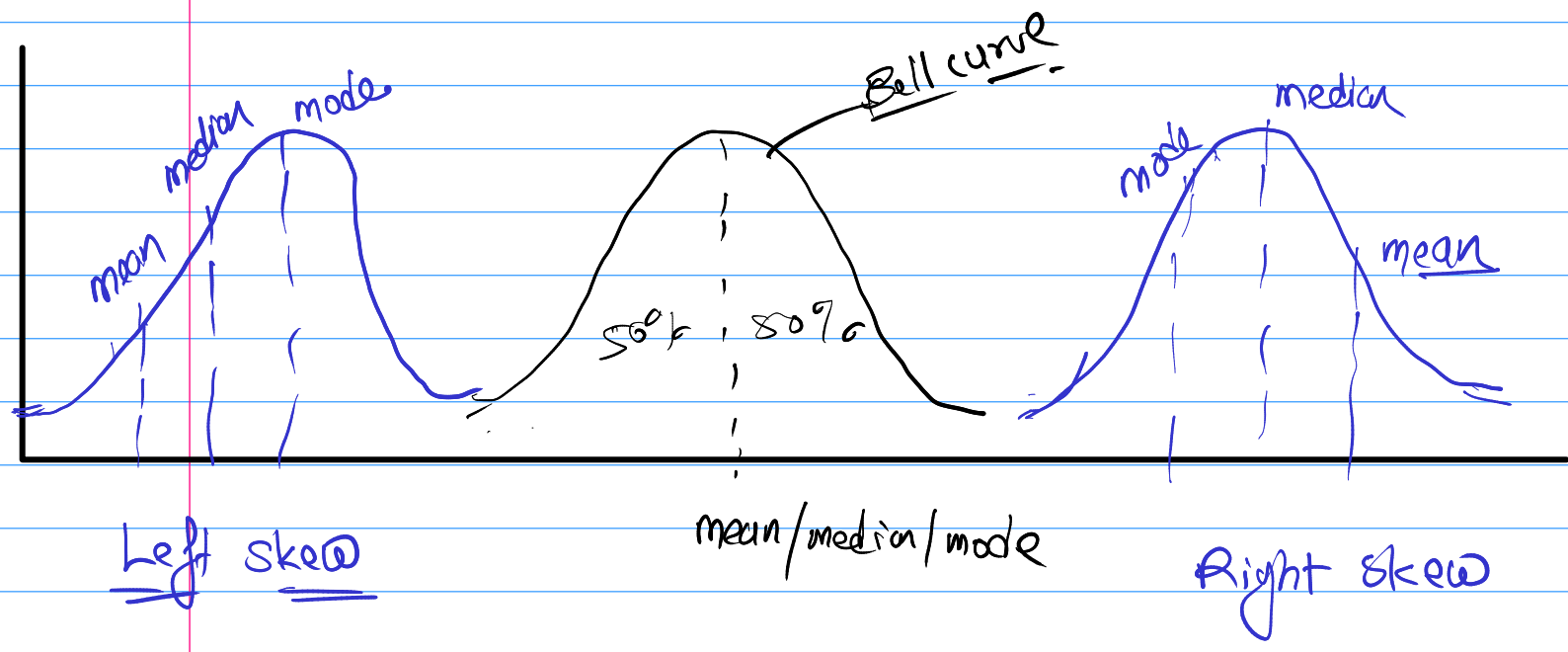
$\text{Log}_{10}(\text{data}) =$

⑥ Normal / Gaussian Distribution

↳ It concern with PDF (continious data)

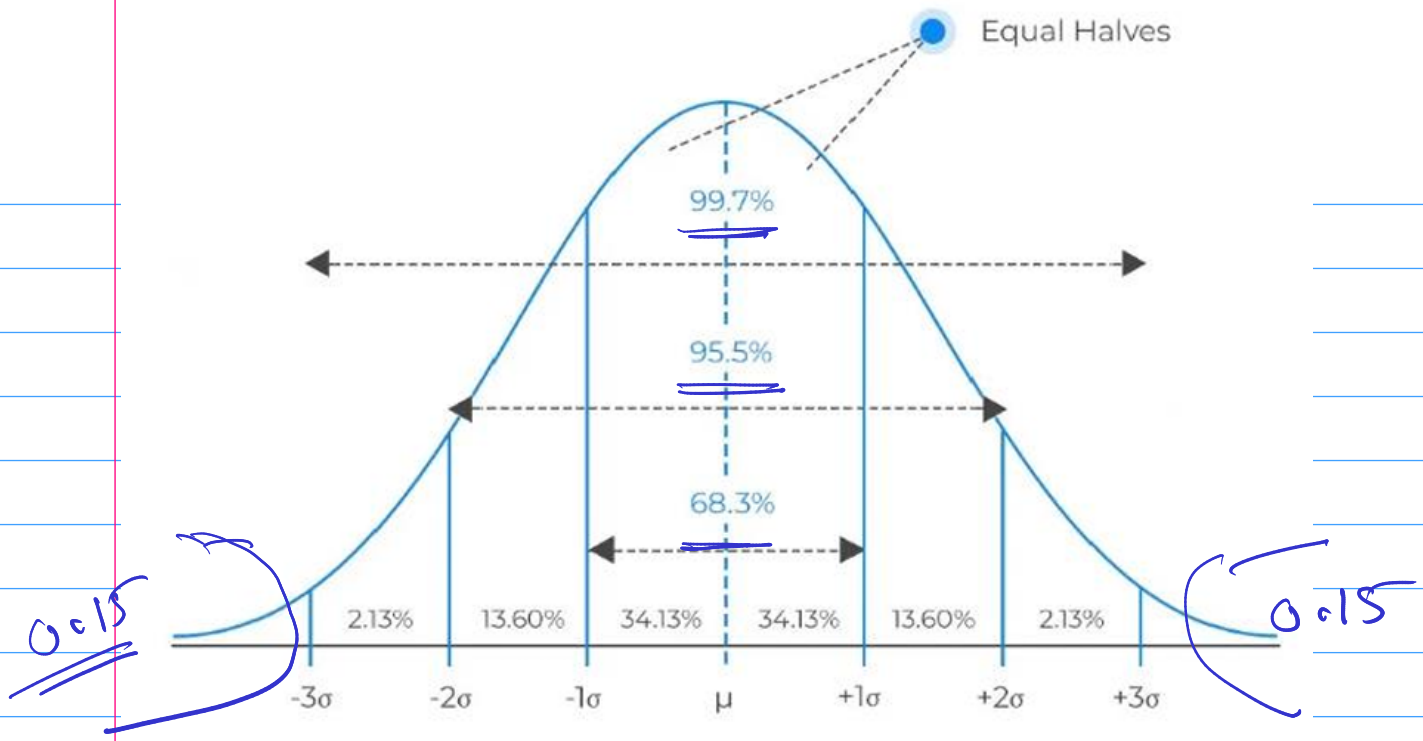
↳ Where the distribution follows symmetric curve.

↳ When mean = mode = median.



Empirical Rule of Normal Distribution

- **The empirical rule in statistics, also known as the 68 95 99 rule, states that for normal distributions, 68% of observed data points will lie inside one standard deviation of the mean, 95% will fall within two standard deviations, and 99.7% will occur within three standard deviations.**



Topics ⇒ Proper presentation.

Micro — Power point presentation

Topic — Subtopic — digram — formula — Questions.

PPT ⇒ monday

central Tendency — Topic, Subtopic, Defination, key point, formula / example, diagram, Questions

dispersion

Correlation