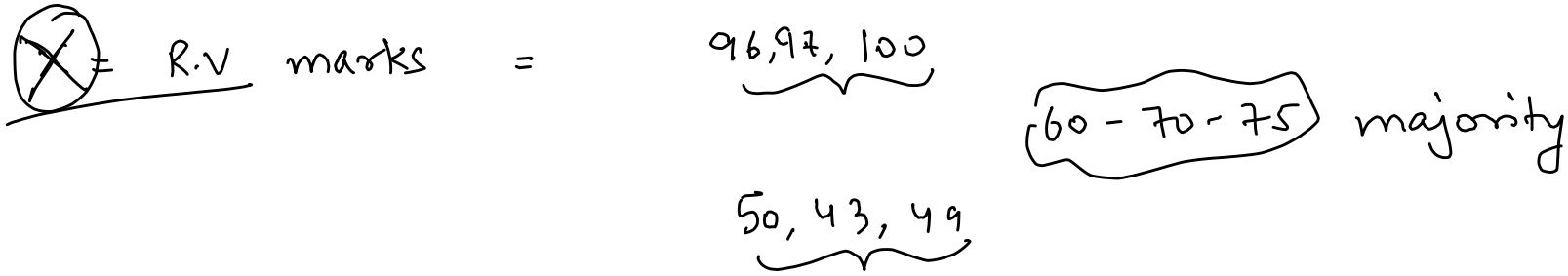
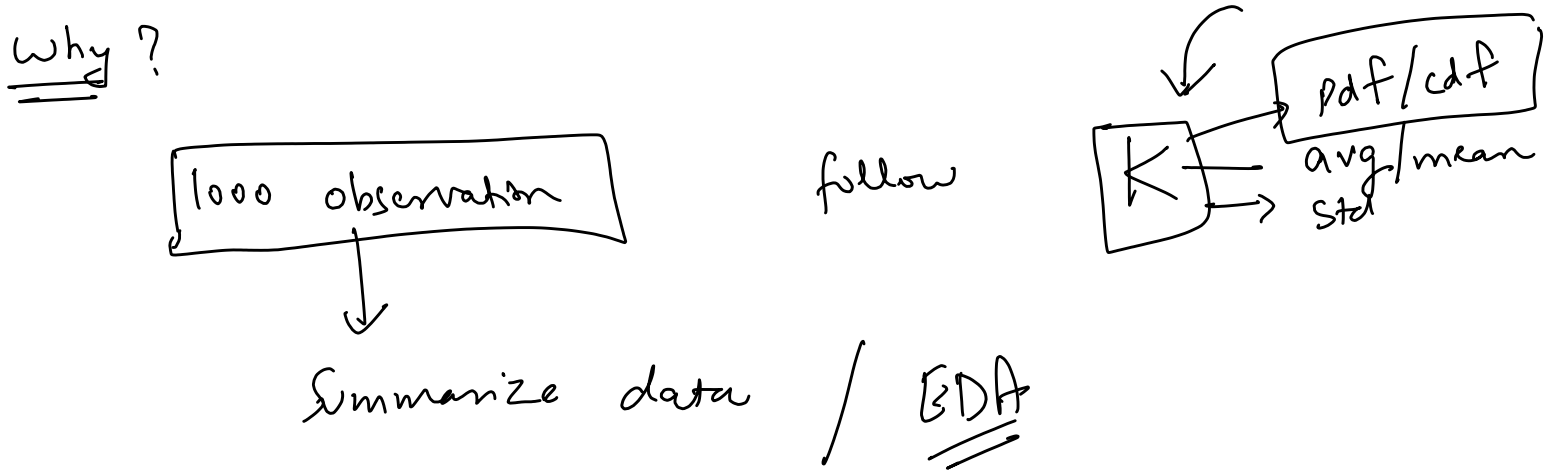
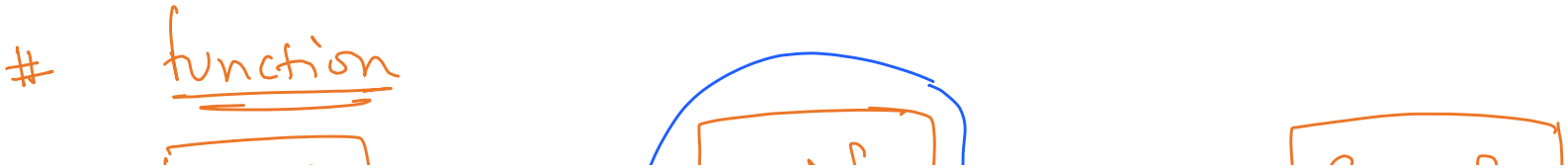
Probability Distributions

Monday, 8 November 2021 7:52 PM







Pdf → Continous r.v

Cdf

Pmf → discrete r.v

Uniform

↳ equally likely

↳ Discrete Uniform

↳ Continous Uniform

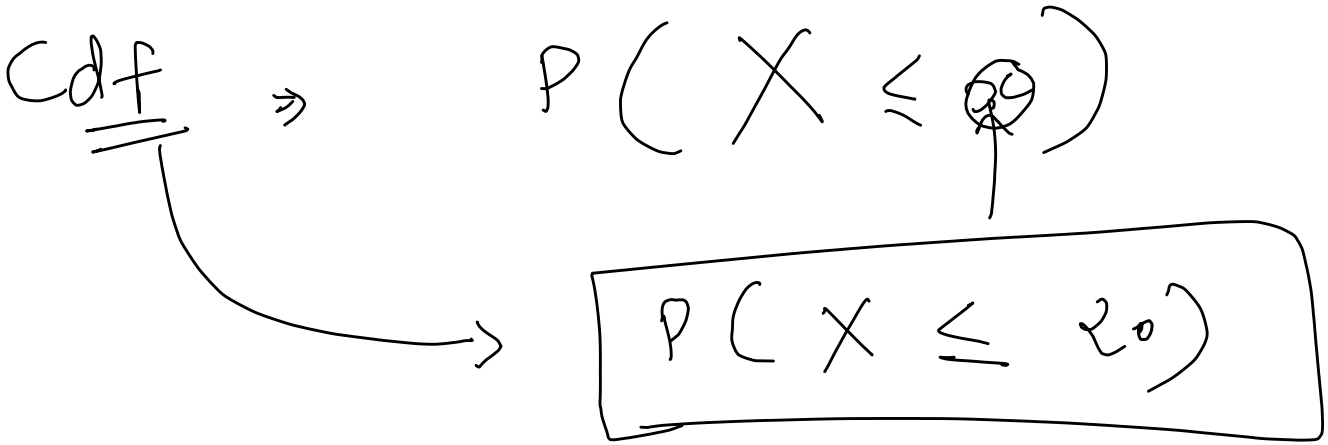
0.561

0.328

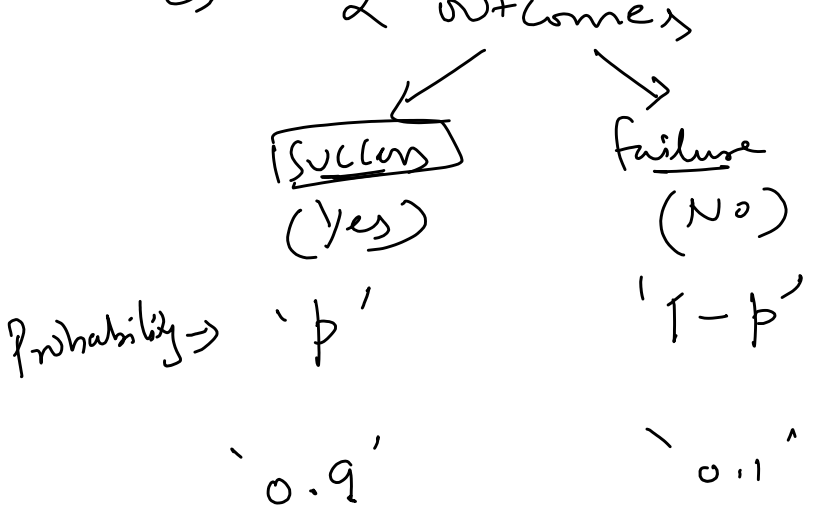
0.79

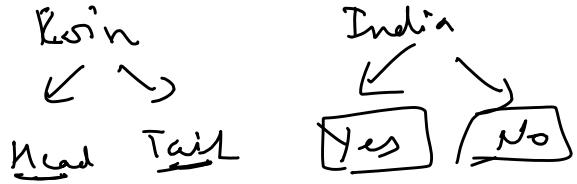
Coin → head
→ tail

$X \sim U(a, b)$



Bernaulli's Distribution



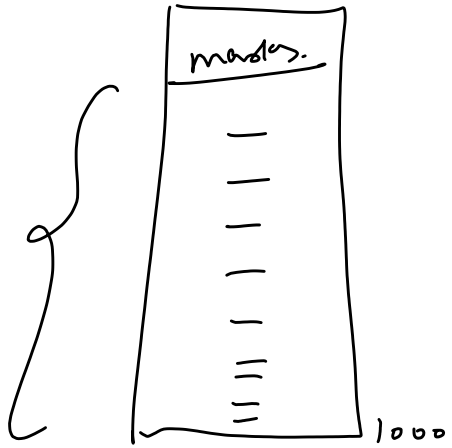


Normal Distribution

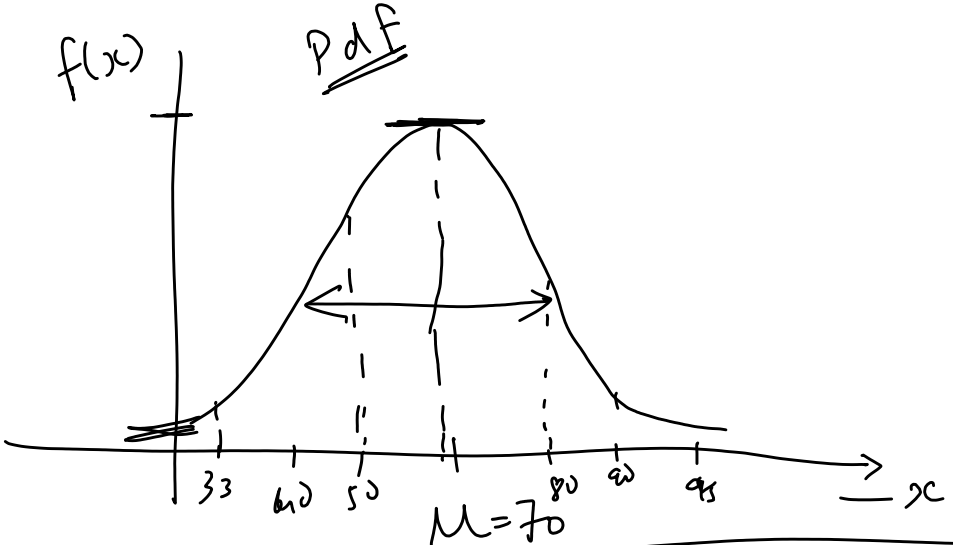
heights, weights, - - - - - -, marks - -

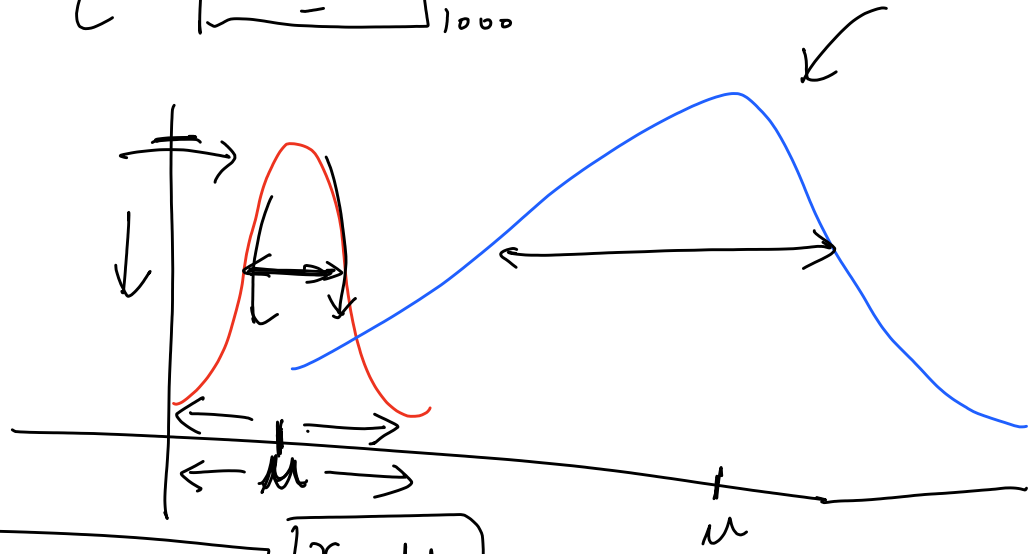
$$X \sim N(\mu, \sigma^2)$$

$\mu \rightarrow$ mean
$\sigma \rightarrow$ std.



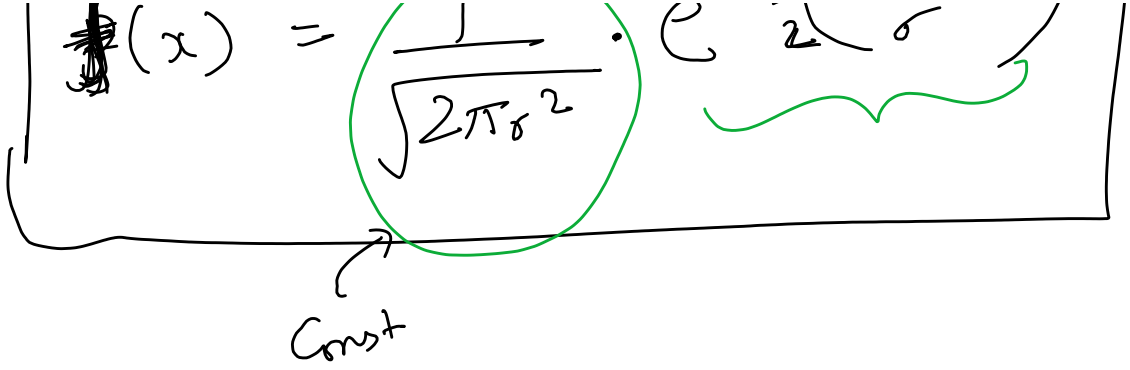
70 - 75 - 80





$x = \mu$

$$-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2$$


$f(x) = \frac{1}{\sqrt{2\pi\sigma^2}} \cdot e^{\frac{}{2\sigma}}$
Const