PW SKILLS

① Probability Distribution Function / Density Function

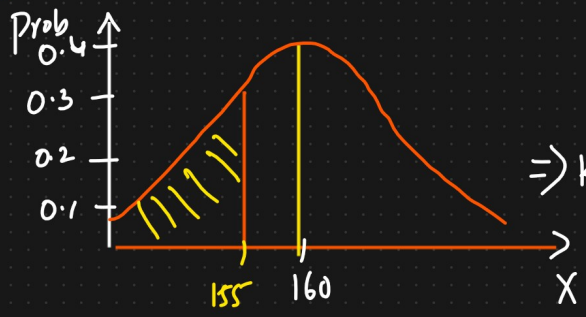
① Probability Density Function (pdf) → Distribution of the continuous data

Eg: Height of students

[0 to 1]

$Pr(X \leq 155)$ = Area under the curve

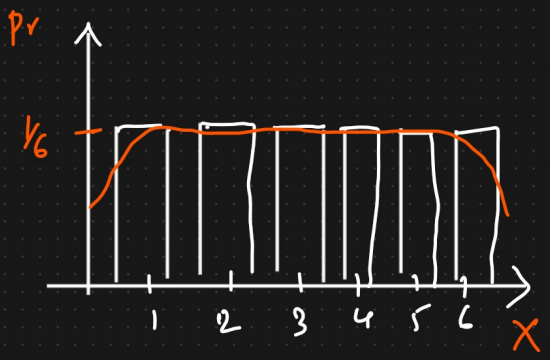
0·3, 0·4, 0·5



⇒ Kernel Density Estimator

② Probability Mass function (PMF): Distribution of a Discrete Random Variable

Eg: Rolling a Dice {1, 2, 3, 4, 5, 6}

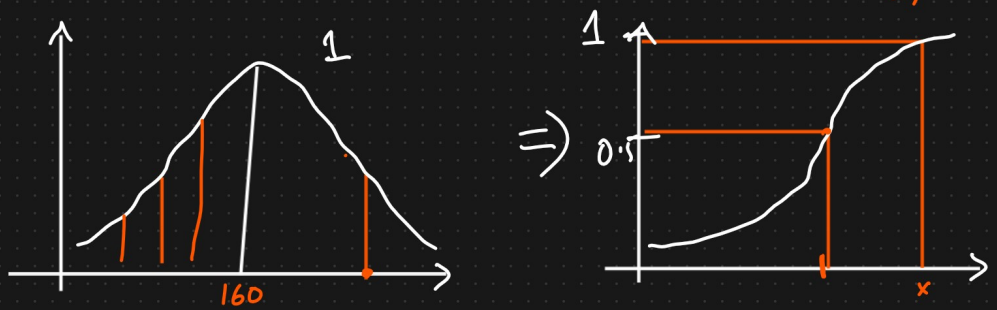


$Pr(X \leq 4) = Pr(X=1) + Pr(X=2) + Pr(X=3) + Pr(X=4)$

$= \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$

$= \frac{4}{6} = \frac{2}{3}$

③ Cumulative Distribution Function (cdf)



⇒ Cumulative sum