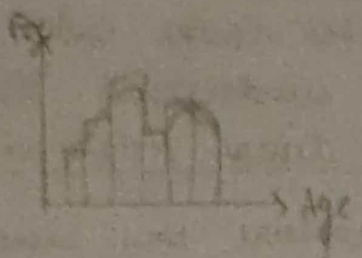
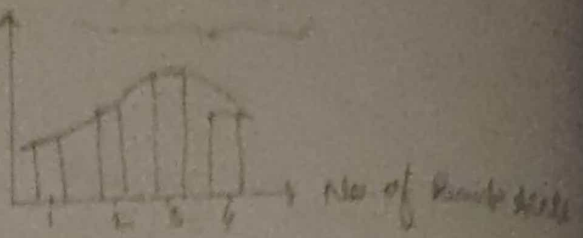
Probability Distribution function ? Distribution of data ?

Pdf
(Continuous value)



- whenever you have the continuous value and you try to draw the distribution then we say it as Pdf.

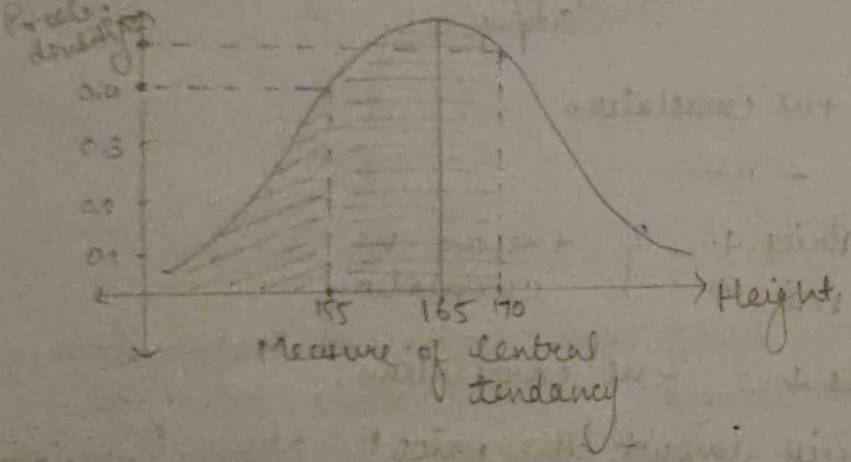
Pmf
(Discrete value)



- when you have the discrete value then, you basically use Pmf to probably see the distribution

1) Probability density function

1. Continuous random variable



$Pr(H \leq 155)$
(Area under curve)

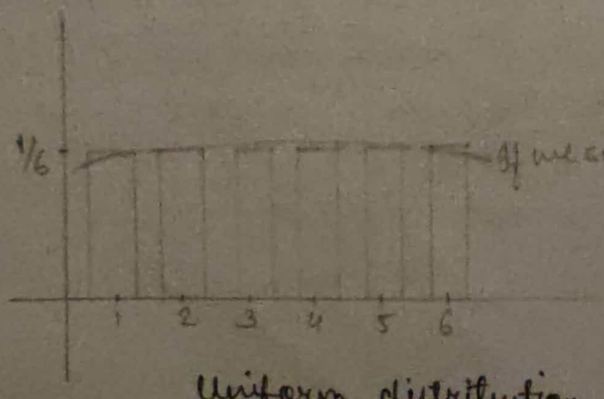
$Pr(H \geq 155 \text{ and } H \leq 170)$

2) Probability Mass Function

1. Discrete random variable

eg: Rolling a dice {1,2,3,4,5,6}

$P(1) = 1/6 \quad P(2) = 1/6$
$P(3) = 1/6 \quad P(4) = 1/6$

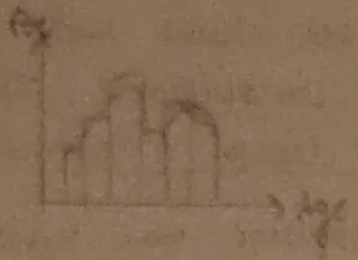


Uniform distribution

$P(X \leq 4) = P(X=1) + P(X=2) + P(X=3) + P(X=4)$
$= 1/6 + 1/6 + 1/6 + 1/6 = 4/6 = 2/3$

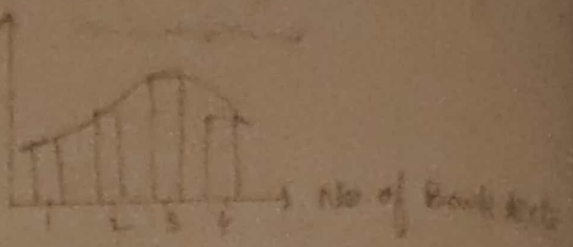
Probability Distribution function ? Distribution of data ?

Pdf
(Continuous value)



- whenever you have the continuous value and you try to draw the distribution then we say it as pdf.

Pmf
(Discrete value)



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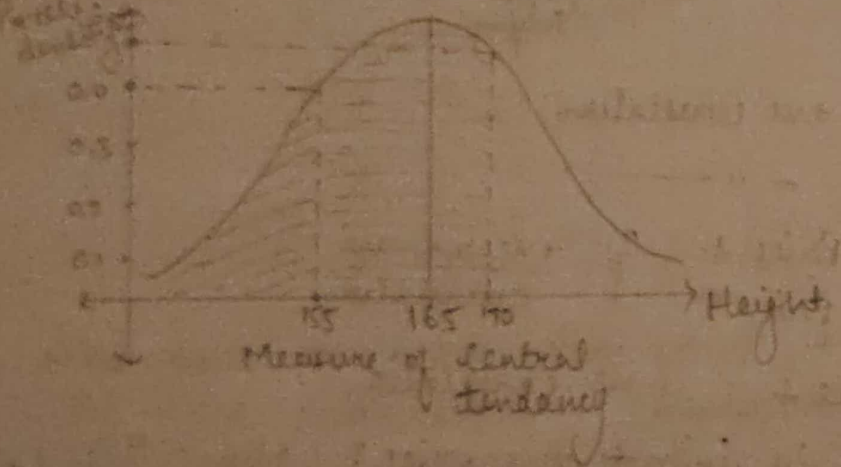
1. Continuous random variable



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(Area under curve)

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2) Probability Mass Function

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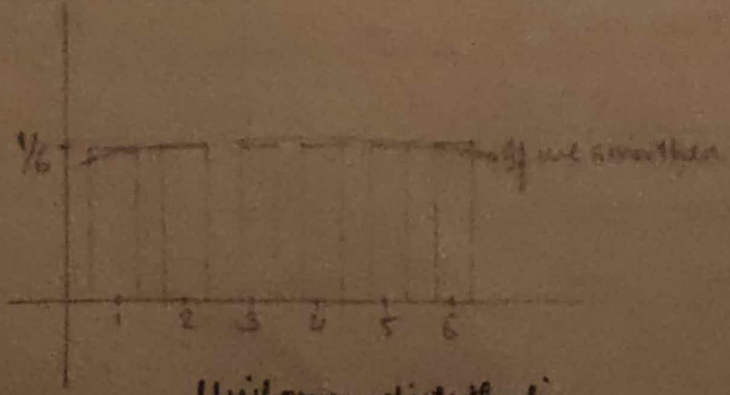

Uniform distribution