



Tutorial-1

1. A random variable x has the following probability distribution

x	0	1	2	3	4	5	6	7
P(x)	0	K	2K	2K	3K	K ²	2K ²	7K ² +K

- (i) Find the value of K
- (ii) Evaluate $P[X < 6]$ and $P[X \geq 6]$
- (iii) If $P[X \geq C] > 1/2$ find minimum value of C
- (iv) Evaluate $P[1.5 < x < 4.5/x > 2]$

2. A random variable X has the following probability distribution.

x	-2	1	0	1	2	3
P(x)	0.1	K	0.2	2K	0.3	3K

- (i) Find K
- (ii) Evaluate $P(x < 2)$ and $P(-2 < x \leq 2)$
- (iii) Find the Cumulative distribution of x .

Evaluate the mean of x