

Question 3**(6 marks)**

The tables below display the partially completed probability distribution and cumulative distribution for a discrete random variable X .

x	1	2	3	4	5
$P(X=x)$	0.2	0.15			0.05

x	1	2	3	4	5
$P(X \leq x)$	0.2		0.6	0.95	

(a) Complete the missing probability entries in each of the tables above. (2 marks)

(b) Evaluate $P(2 \leq X \leq 4)$. (2 marks)

(c) Evaluate $P(X = 1 \mid X \leq 3)$. (2 marks)