

Question	Scheme	Marks	AOs
<b>3(a)</b>	(Discrete) uniform (distribution)	B1	1.2
		(1)	
<b>(b)</b>	B(28, 0.2)	B1	3.3
<b>(i)</b>	$P(X \geq 7) = 1 - P(X \leq 6)$ [= 1 – 0.6784...]	M1	3.4
	awrt <b><u>0.322</u></b>	A1	1.1b
<b>(ii)</b>	$P(4 \leq X < 8) = P(X \leq 7) - P(X \leq 3)$ [= 0.818... – 0.160...]	M1	3.1b
	awrt <b><u>0.658</u></b>	A1	1.1b
		(5)	
<b>(6 marks)</b>			
<b>Notes</b>			
<b>(a)</b>	Continuous uniform is B0		
<b>(b)</b>	<b>B1:</b> for identifying correct model, B(28, 0.2) allow B, bin or binomial may be implied by one correct answer or sight one correct probability i.e. awrt 0.678, awrt 0.818 or awrt 0.160 B(0.2, 28) is B0 unless it is used correctly		
<b>(i)</b>	<b>M1:</b> Writing or using $1 - P(X \leq 6)$ or $1 - P(X < 7)$ <b>A1:</b> awrt 0.322 (correct answer only scores M1A1)		
<b>(ii)</b>	<b>M1:</b> Writing or using $P(X \leq 7) - P(X \leq 3)$ or $P(X < 8) - P(X < 4)$ or $P(X = 4) + P(X = 5) + P(X = 6) + P(X = 7)$ Condone $P(4)$ as $P(X = 4)$ , etc. <b>A1:</b> awrt 0.658 (correct answer only scores M1A1)		