8	(a)		0.4×0.4 or 0.6×0.2 seen	M1	3.1a	or tree diagram with correct outcomes and probabilities shown	allow 0.4×0.4×0.4 or 0.4×0.6×0.2
			0.4×0.4 + 0.6×0.2	A1	1.1		
			0.28	A1 **[3]**	1.1		mark the final answer
8	(b)		$\frac{1}{120}$ or $\frac{5}{120}$ seen	M1	3.1a		
			$\frac{1}{24}$ or 0.0416666…to 2 or more sf	A1 **[2]**	1.1	**B2** for 0.0416666…unsupported **B0** for 0.042 unsupported	mark the final answer

Question			Answer	Marks	AOs		Guidance
8	(c)		$1 -$ their $\frac{1}{24}$ evaluated	M1	3.1a		
			$1 - \left(\frac{23}{24}\right)^n > 0.95$ FT	M1	2.1	allow use of $=$, $\geqslant$ or $\leqslant$	
			$\left(\frac{23}{24}\right)^n < 0.05$ FT	M1	1.1	allow use of $=$ or $\leqslant$	
			$n = 71$ cao	A1 [4]	2.2a	70.3890…unsupported but rounded to 1 or more dp implies **M1M1M1**	award full marks for 71 unsupported or from trial and improvement