

Qu	Scheme	Marks	AOs
2(a)	A and B labelled correctly or reversed or for C labelled correctly together with a reason e.g. since there is no intersection between A and B or the probability of A and B happening is zero	B1	2.4
	$(0.08 + 0.2 + 0.12) \times (0.12 + 0.18) [= 0.12]$ or $(0.17 + 0.08) \times (0.08 + 0.2 + 0.12) [= 0.1]$	M1	1.1b
	$(0.08 + 0.2 + 0.12) \times (0.12 + 0.18) = 0.12$ hence independent or $(0.17 + 0.08) \times (0.08 + 0.2 + 0.12) = 0.1 \neq 0.08$ hence not independent	A1	1.1b
	Correctly deducing labels are B, C, A (in that order)	A1cso	2.2a
		(4)	
(b)	0.75	B1ft	3.4
		(1)	
(5 marks)			
Notes:			
<p>(a) B1: For A and B identified as being the two end labels (or C identified as the centre label) and correct reason</p> <p>M1: For a correct calculation to check for independence of the left and middle event or for a correct calculation to check for independence of the middle and right events</p> <p>You may see: $\frac{0.12}{(0.08 + 0.2 + 0.12)} [= 0.3]$ or $\frac{0.12}{(0.12 + 0.18)} [= 0.4]$ or $\frac{0.08}{(0.08 + 0.2 + 0.12)} [= 0.2]$</p> <p>or $\frac{0.08}{(0.17 + 0.08)} [= 0.32]$ [NB $P(A \mid C)$ notation not used since off spec.]</p> <p>A1: For fully correct working with conclusion of which pair of events are independent (or not)</p> <p>A1cso: For correct deduction of position of labels B, C, A</p> <p>Note: If correct working seen for independence condition with labels B, C, A but reason for the mutually exclusive aspect not seen then B0M1A1A1</p>			
(b) B1ft: ft their B			