

Question		Answer	Marks	AO	Guidance
16	(a)	$0.16 \times 0.84 \times 2$ or B(2, 0.16) or B(2, 0.84) seen or $1 - (0.84^2 + 0.16^2)$ $\frac{168}{625}$ or 0.2688 or 0.269 or 0.27 cao	M1 A1	1.1 1.1	condone omission of 2 allow recovery from bracket error mark the final answer allow SC1 for correct answer unsupported
			[2]		
16	(b)	$0.75 - 0.66 = 0.09$ [0.16 – 0.09 =] 0.07 isw	M1 A1	3.1a 1.1	allow 0.09 embedded in correct place in Venn diagram or contingency table; allow M1 for 9% allow SC1 for correct answer unsupported
			[2]		
16	(c)	$\frac{0.09}{0.75}$ 0.12	M1 A1	3.1a 1.1	M0 for 0.12 from wrong working allow SC1 for correct answer unsupported
			[2]		
16	(d)	$0.12 \neq 0.16$ so not independent	M1 A1	2.1 2.2a	if M0 allow SCB1 for $0.16 \times 0.75 \neq 0.09$ so not independent
			[2]		