

12			P(1st HGP' & 2nd GP' or 1st HGP & 2nd GP' or 1st HG' & 2nd GP') $= \frac{25}{100} \times \frac{36}{99} + \frac{3}{100} \times \frac{37}{99} + \frac{15}{100} \times \frac{37}{99}$				P(1st HGP' & 2nd GP' or 1st {H – HGP'} & 2nd GP') $= \frac{25}{100} \times \frac{36}{99} + \frac{18}{100} \times \frac{37}{99}$ $\text{or } \frac{43}{100} \left(\frac{25}{43} \times \frac{36}{99} + \frac{18}{43} \times \frac{37}{99} \right)$
				M1	3.1b	One of the following expressions seen: M1 Another seen: M1 $\frac{25}{100} \times \frac{36}{99} \text{ or } \frac{3}{100} \times \frac{37}{99} \text{ or } \frac{15}{100} \times \frac{37}{99}$ $\text{or } \left(\frac{8}{100} \times \frac{36}{99} + \frac{7}{100} \times \frac{37}{99} \right)$	or $\frac{18}{100} \times \frac{37}{99}$ M2 or $\frac{43}{100} \left(\frac{25}{43} \times \frac{36}{99} \right)$ M1 or $\frac{43}{100} \left(\frac{18}{43} \times \frac{37}{99} \right)$ M2
			$= \frac{87}{550} \text{ or } 0.158 \text{ (3 sf)}$	M1	2.1	3rd M1 for all correct	
				A1	1.1		
				[4]			