

1	(a)		$\frac{1}{55}$	M1 for $\frac{4}{12} \times \frac{3}{11} \times \frac{2}{10}$	
	(b)		Conclusion (supported)	A1 for $\frac{1}{55}$ oe C1 starts correct argument, eg by calculating a relevant probability, eg $\frac{5}{15} \times \frac{4}{14} \times \frac{3}{13}$ C1 statement of "more likely" from eg comparison of probabilities, ft answer to (a) eg $\frac{1}{55}$ (= 0.018...) and $\frac{2}{91}$ (= 0.021... or 0.022)	

2	(a)	0.55, 0.67, 0.33, 0.35, 0.65	B1	for 0.55 in correct position	Can be seen as fractions or percentages Follow through acceptable for method marks from their tree in part (a) providing probabilities are less than 1. Accept fractional equivalents
	(b)	0.341	B1	for the branches for the second game correct	
			M1	for one correct product, eg $0.45 \times "0.33"$ (=0.1485) or " $0.55" \times "0.35"$ (=0.1925) or $0.45 \times "0.67"$ (=0.3015) or " $0.55" \times "0.65"$ (=0.3575)	
			M1	for correct method eg $(0.45 \times "0.33") + ("0.55" \times "0.35")$ or $1 - (0.45 \times "0.67") - ("0.55" \times "0.65")$	
A1	answer in range 0.34 – 0.341 oe				

3		$\frac{52}{72}$	P1	for $\frac{4}{9} \times \frac{3}{8} \left(\frac{12}{72} \right)$ or $\frac{4}{9} \times \frac{5}{8}$ or $\frac{5}{9} \times \frac{4}{8} \left(\frac{20}{72} \right)$	Accept equivalent fractions, decimals (0.72...) or percentages (72.22.....%)
			P1	for $1 - \left(\frac{5}{9} \times \frac{4}{8} \right)$ or $\frac{4}{9} \times \frac{3}{8} + \frac{4}{9} \times \frac{5}{8} + \frac{5}{9} \times \frac{4}{8}$ oe	
			A1	for $\frac{52}{72}$, $\frac{13}{18}$ oe SC B1 for answer of $\frac{56}{81}$ (replacement)	