21	$\frac{6}{n}\times\frac{5}{n-1}$ or $\frac{n-6}{n}\times\frac{n-7}{n-1}$ oe **or** $\frac{6}{n}\times\frac{n-6}{n-1}$		6	M1	for red, red or blue, blue This may be seen as part of an equation allow eg $n-6-1$ in place of $n-7$ **or** for red, blue
	$\frac{6}{n}\times\frac{5}{n-1}$ and $\frac{n-6}{n}\times\frac{n-7}{n-1}$ oe **or** $2\times\frac{6}{n}\times\frac{n-6}{n-1}$ oe			M1	for both products, with no other products This may be seen as part of an equation **or** for red, blue + blue, red
	$\frac{6}{n}\times\frac{5}{n-1}+\frac{n-6}{n}\times\frac{n-7}{n-1}=\frac{9}{17}$ oe **or** $2\times\frac{6}{n}\times\frac{n-6}{n-1}=1-\frac{9}{17}$ oe			M1	Correct equation **or** correct equation using the complementary event.
	$2n^2 - 53n + 306$ (= 0) oe			A1	Correct simplification of equation to a 3 term quadratic. eg $8n^2 - 212n + 1224$ (= 0)
	$(2n - 17)(n - 18)$ (= 0) or $\frac{--53\pm\sqrt{(-53)^2-4\times2\times306}}{2\times2}$ or $\left(n-\frac{53}{4}\right)^2-\left(\frac{53}{4}\right)^2+153=0$ oe			M1	For solving **correct** 3 term quadratic equation using any correct method. If factorising, allow brackets which expanded give 2 out of 3 terms correct (if using formula or completing the square allow one sign error and some simplification – allow as far as eg $\frac{53\pm\sqrt{2809-2448}}{4}$ or eg $\left(n-\frac{53}{4}\right)^2=\frac{361}{16}$ oe **or** for both correct solutions of the correct quadratic. $n = 18$, $n = 8.5$
		18		A1	cao dep M3 do not award if non-integer solution also given.
					Total 6 marks