18	$\frac{5}{x+2}+\frac{3}{x(x+2)}$ $(=2)$ or $\frac{5x}{x^2+2x}+\frac{3}{x^2+2x}$ $(=2)$		5	M1	Factorising $x^2 + 2x$ in correct expression on LHS or for writing the two fractions over a common denominator.
	$\frac{5x+3}{x(x+2)}=2$ **or** $\frac{5x+3}{x^2+2x}=2$ **or** $5x + 3 = 2x(x + 2)$ oe **or** $5x + 3 = 2x^2 + 4x$ oe			M1	Correct simplified single fraction = 2 or correct equation with no fractions.
	$2x^2 – x – 3$ $(= 0)$			M1	Correct 3 term quadratic
	$(2x – 3)(x + 1)$ $(=0)$ **or** $\frac{--1\pm\sqrt{(-1)^2-4\times2\times(-3)}}{2\times2}$ **or** $\left(x-\frac{1}{4}\right)^2-\frac{1}{16}-\frac{3}{2}=0$ oe			M1ft	independent For solving *their* 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 $\frac{1\pm\sqrt{1+24}}{4}$ or eg $\left(x-\frac{1}{4}\right)^2=\frac{25}{16}$ oe
		1.5 and –1		A1	oe dep on M3
					Total 5 marks

Alternative Mark Scheme for question 18 (obtaining a cubic)					
18	$\frac{5(x^2+2x)+3(x+2)}{(x^2+2x)(x+2)}$ (=2) oe		5	M1	Correct fraction over a common denominator (may be 2 separate fractions)
	eg $5(x^2+2x)+3(x+2)=2(x^2+2x)(x+2)$ oe			M1	Correct equation with no fractions.
	$2x^3+3x^2-5x-6 \quad (=0)$			M1	Correct cubic
	$(x+1)(2x-3)(x+2) \quad (=0)$			M1	For product of 3 correct linear factors.
		1.5 and –1		A1	oe dep on M3 Do not award A mark if extra solution (–2) given.
					Total 5 marks