22	eg $2(-3-2x)^2+x^2=-6x+42$	eg $2y^2+\left(\frac{-3-y}{2}\right)^2=-6\left(\frac{-3-y}{2}\right)+42$		5	M1	substitution of $y=\pm3\pm2x$ (or $x=\frac{\pm3\pm y}{2}$) into $2y^2+x^2=-6x+42$ to obtain an equation in x only (or y only)
	eg $9x^2+30x-24(=0)$ **or** $3x^2+10x-8(=0)$ allow eg $3x^2+10x=8$	eg $\frac{9}{4}y^2-\frac{3}{2}y-\frac{195}{4}(=0)$ **or** $9y^2-6y-195(=0)$ **or** $3y^2-2y-65(=0)$ allow eg $3y^2-2y=65$			M1 ft	(dep on previous M1) for multiplying out and collecting terms, forming a three term quadratic in any form of ax^2+bx+c (= 0) where at least 2 coefficients (a or b or c) are correct
	eg $(3x-2)(x+4)(=0)$ **or** $\frac{-10\pm\sqrt{10^2-4\times3\times-8}}{2\times3}$ **or** $3\left[\left(x+\frac{5}{3}\right)^2-\left(\frac{5}{3}\right)^2\right]=8$ oe (should give $(x=)\frac{2}{3}, -4$)	eg $(3y+13)(y-5)(=0)$ **or** $\frac{2\pm\sqrt{(-2)^2-4\times3\times-65}}{2\times3}$ **or** $3\left[\left(y-\frac{1}{3}\right)^2-\left(\frac{1}{3}\right)^2\right]=65$ oe (should give $(y=)-\frac{13}{3}, 5$)			M1 ft	(dep on M1) method to solve **their** 3 term quadratic using any correct method (allow one sign error and some simplification – allow as far as eg $\frac{-10\pm\sqrt{100+96}}{6}$ **or** $\frac{2\pm\sqrt{4+780}}{6}$) **or** if factorising allow brackets which expanded give 2 out of 3 terms correct)**or** correct values for x (allow 0.66(6…) or 0.67) **or** correct values for y (allow −4.33(3…))
	eg $2\left("\frac{2}{3}"\right)+y=-3$ **and** $2("-4")+y=-3$	eg $2x+"-\frac{13}{3}"=-3$ **and** $2x+"5"=-3$			M1	(dep on previous M1) for substituting **their** 2 found values of x or y in a suitable equation (use 2dp or better for substitution) **or** fully correct values for the other variable (correct labels for x / y)
	Working required		$x=-4$, $y=5$ and $x=\frac{2}{3}$, $y=-\frac{13}{3}$		A1	oe (dep on M1) and a correct quadratic (allow coordinates) allow $x=0.66(6\ldots)$ or 0.67, $y=-4.33(3\ldots)$, $x=-4$, $y=5$
						Total 5 marks