1	$(y-4)^2-(y-4)+y^2=10$ or $x^2-x+(x+4)^2=10$		6	M1	for substituting linear equation into the quadratic equation
	$2y^2-9y+10=0$ or $2x^2+7x+6=0$			A1	for a correct equation in the form $ax^2+bx+c=0$ or $ax^2+bx=-c$ or equations of the same form but in y
	$(2y-5)(y-2)=0$ or $\frac{--9\pm\sqrt{(-9)^2-(4\times2\times10)}}{2\times2}$ or $(2x+3)(x+2)=0$ or $\frac{-7\pm\sqrt{7^2-(4\times2\times6)}}{2\times2}$			M1ft	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 $\frac{-7\pm\sqrt{49-48}}{4}$ or eg $\left(x+\frac{7}{4}\right)^2-\frac{1}{16}=0$ oe $\frac{9\pm\sqrt{81-80}}{4}$ or eg $\left(y-\frac{9}{4}\right)^2-\frac{1}{16}=0$ oe
	(- 1.5, 2.5) and (- 2, 2)			A1	for both pairs of coordinates oe eg $\left(\frac{-3}{2},\frac{5}{2}\right)$ accept coordinates listed as pairs, ie x_1, y_1, x_2, y_2
	$\sqrt{('-1.5'-'-2')^2+('2.5'-'2')^2}$			M1	dep on M1 for finding length of AB
		$\frac{\sqrt{2}}{2}$		A1	dep M3
					Total 6 marks

2	$3y^2+7y+16=(2y-1)^2-(2y-1)$	$3\left(\frac{x+1}{2}\right)^2+7\left(\frac{x+1}{2}\right)+16=x^2-x$		5	M1 substitution of linear equation into quadratic.
	E.g. $y^2-13y-14\,(=0)$ oe $y^2-13y=14$	E.g. $x^2-24x-81\,(=0)$ oe $x^2-24x=81$			A1 (dep on M1) writing the correct quadratic expression in form $ax^2+bx+c\,(=0)$ allow $ax^2+bx=c$
	E.g. $(y-14)(y+1)\,(=0)$ or $(y=)\frac{-(-13)\pm\sqrt{(-13)^2-4\times1\times-14}}{2}$ or $\left(y-\frac{13}{2}\right)^2-\left(\frac{13}{2}\right)^2=14$ oe	E.g. $(x+3)(x-27)\,(=0)$ or $(x=)\frac{-(-24)\pm\sqrt{(-24)^2-4\times1\times-81}}{2}$ or $\left(x-\frac{24}{2}\right)^2-\left(\frac{24}{2}\right)^2=81$oe			M1 (dep on M1) for the first stage to solve their 3-term quadratic equation (allow one sign error and some simplification – allow as far as $\frac{13\pm\sqrt{69+56}}{2}$ or $\frac{24\pm\sqrt{576+324}}{2}$ or eg $\left(x-\frac{24}{2}\right)^2-225$ oe
	$(x=)$ 2×'14'−1 and 2×'−1'−1	$(y=)\frac{'27'+1}{2}$ and $\frac{'-3'+1}{2}$oe			M1 (dep on previous M1) may be implied by values of y or x that are consistent with a correct substitution.
			(27, 14) and (−3, −1)		A1 for both solutions dep on M2 Must be paired correctly. accept $x=27$, $y=14$ and $x=-3$, $y=-1$
					Total 5 marks