Question	Answer	Mark	Mark scheme	Additional guidance
21	(4.49, −3.98) (−0.49, 5.98)	P1	for substitution of a rearrangement into their equation of the circle, eg $x^2+(5-2x)^2=36$ **or** $\left(\frac{5-y}{2}\right)^2+y^2=36$ **or** correctly expanding of $(5-2x)^2=4x^2-20x+25$ **or** expansion of $\left(\frac{5-y}{2}\right)^2=\frac{y^2-10y+25}{4}$	3 correct terms out of 4 terms or 4 terms ignoring signs, Note that, for example, $-20x+25$ is regarded as three terms in the expansion of $(5-2x)^2$
		P1	For expanding **and** forming a correct quadratic, eg $x^2+4x^2-20x+25=36$ **or** $x^2+4x^2-20x-11\,(=0)$ **or** $5x^2-20x+25=36$ **or** $5x^2-20x-11\,(=0)$ **or** $\frac{y^2-10y+25}{4}+y^2=36$ **or** $y^2-10y+25+4y^2=144$ **or** $5y^2-10y-119\ (=0)$	Brackets must be correctly expanded for this mark
		P1	(dep on P1) for process to solve using formula, ft a 3 term quadratic, eg $\frac{-(-20)\pm\sqrt{(-20)^2-4\times5\times(-11)}}{2\times5}$ **or** $\frac{20\pm\sqrt{620}}{10}$ oe or $\frac{-(-10)\pm\sqrt{(-10)^2-4\times5\times(-119)}}{2\times5}$ or $\frac{10\pm\sqrt{2480}}{10}$ oe	Can be implied by both x values correct or both y values correct eg $x=4.48...$ **and** $x=-0.48...$ **or** $y=-3.97...$ **and** $y=5.97...$

Question	Answer	Mark	Mark scheme	Additional guidance
21 cont.		P1	(dep on 1st P1) for substituting their 2 found values of x or y in a suitable equation **or** (dep on P1) for one correct pair of values following from a correct quadratic	**or** correct method after starting again Can use equation of circle also
		A1	(4.4899..., −3.979...) (−0.4899..., 5.979...)	Answers must be correctly paired. May be in the body of the working. Accept figures rounded or truncated to 2dp or better