Question	Answer	Marks	Guidance
(a)	$(x+1)^2 + (3x-22)^2 = 85$	M1	OE. Substitute equation of line into equation of circle.
	$10x^2 - 130x + 400 \; [=0]$	A1	Correct 3-term quadratic
	$[10](x-8)(x-5)$ leading to $x=8$ or 5	A1	Dependent on factors or formula or completing of square seen.
	$(8, 4), (5, -5)$	A1	If M1A1A0A0 scored, then **SC B1** for correct final answer only.
		4	
(b)	Mid-point of $AB = \left(6\frac{1}{2}, -\frac{1}{2}\right)$	M1	Any valid method
	Use of $C = (-1, 2)$	B1	SOI
	$r^2 = \left(-1-6\frac{1}{2}\right)^2 + \left(2+\frac{1}{2}\right)^2$	M1	Attempt to find r^2. Expect $r^2 = 62\frac{1}{2}$.
	Equation of circle is $(x+1)^2 + (y-2)^2 = 62\frac{1}{2}$	A1	OE.
		4	