

Question			Answer	Marks	AO	Guidance
8			$[(x-3)^2 - 9 + y^2 = 16 \text{ or } (x-3)^2 + y^2 = 25]$			May not be seen
			Centre (3, 0)	B1	2.1	soi
			radius 5	B1	1.1	soi
			Translation of $\begin{pmatrix} k \\ k \end{pmatrix}$ soi	M1	1.1	e.g. $(3 + \alpha, \alpha)$
			$k = 2 \times 5 \cos 45^\circ$	M1	1.1	For use of the distance between centres C and D being $2r$ (look for attempts at Pythagoras in an isosceles triangle with hypotenuse 10) e.g. $2 \times \frac{5}{\sqrt{2}}$ or $5\sqrt{2}$ or $\frac{10}{\sqrt{2}}$ oe or 7.07 or 7.1
			Centre of D is $(3 + 5\sqrt{2}, 5\sqrt{2})$	A1	2.2a	(10.1,7.1)
				[5]		