

Question		Answer	Marks	AO	Guidance
4		$x^2 + y^2 - 6x + 4y + k = 0$ $\Rightarrow (x-3)^2 - 9 + (y+2)^2 - 4 + k = 0$	M1*	1.1	Attempt to complete the square for both x and y terms. Must have $(x \pm 3)^2 + (y \pm 2)^2 + \dots$
		$(r^2 =) 9 + 4 - k = 5^2$	M1dep*	1.1	Setting up an equation for k correctly using either 5 or 5^2 (e.g., $\sqrt{13-k} = 5$ or $13-k = 25$)
		$k = -12$	A1 [3]	1.1	cao