

Question			Answer	Mark	AO	Guidance
1	(a)	(i)	$(x - 4)^2 - 5$	B1 B1 [2]	1.1 1.1	B1 for each constant. For '4' (Allow $a = 4$) For '-5' (Allow $b = -5$) ISW
1	(a)	(ii)	-5	B1FT [1]	1.1	FT their b Accept $(4, -5)$ as the coordinates of the minimum point but must be correct for their a and b .
1	(b)		$(-8)^2 - 4 \times (11 - k) = 0$ or $x^2 - 8x + 11 - k \equiv (x - 4)^2$ $k = -5$	M1 A1 [2]	1.1 1.1	Write $b^2 - 4ac = 0$ (accept >0 for this mark only) or equate with completed square form. Accept a sketch or equivalent reasoning. Final answer must be given as $k = -5$ SCB1: correct answer without working (max [1/2])