

Question	Scheme	Marks	AOs
2(a)	$f(x) = (x-2)^2 \pm \dots$	M1	1.2
	$f(x) = (x-2)^2 + 1$	A1	1.1b
		(2)	
(b)(i)	$P = (0, 5)$	B1	1.1b
(b)(ii)	$Q = (2, 1)$	B1ft	1.1b
		(2)	
(4 marks)			
Notes			

(a)

M1: Achieves $(x-2)^2 \pm \dots$ or states $a = -2$

A1: Correct expression $(x-2)^2 + 1$ ISW after sight of this

Condone $a = -2$ and $b = 1$. Condone $(x-2)^2 + 1 = 0$

(b)

(i) B1: Correct coordinates for P . Allow to be expressed $x = 0, y = 5$

(ii) B1ft: Correct coordinates for Q . Allow to be expressed $x = 2, y = 1$ (Score for the correct answer or follow through their part (a) so allow $(-a, b)$ where a and b are numeric)

Score in any order if they state $P = (0, 5)$ and $Q = (2, 1)$

.....
 Allow part (b) to be awarded from a sketch. So award

First B1 from a sketch crossing the y -axis at 5

Second B1 from a sketch with minimum at $(2, 1)$
