

Q	Marking instructions	AO	Marks	Typical solution
11(a)	Evaluates $g''(1)$ or $g''(4)$	3.1a	M1	$g''(1) = -3$
	Deduces nature of the turning point at $x = 1$ or the turning point at $x = 4$	2.2a	A1	$-3 < 0$ therefore maximum at $x = 1$
	Obtains $g''(1) = -3$ and $g''(4) = 3$ and compares each value with 0 to correctly deduce the nature of both turning points Must link to explicitly stated x values or coordinates Condone incorrect y values for any coordinates given	2.2a	R1	$g''(4) = 3$ $3 > 0$ therefore minimum at $x = 4$
Subtotal			3	

Q	Marking instructions	AO	Marks	Typical solution
11(b)	Identifies one correct increasing region	2.4	M1	$x < 1, x > 4$
	Obtains $x < 1, x > 4$ Accept $x \leq 1, x \geq 4$	2.1	R1	
Subtotal			2	