

Paper 1		
Question number	Scheme	Marks
1 (a)	$3x < 12$ $x < 4$	M1 A1 [2]
(b)	$(2x+1)(x-3) > 0$ Critical values are $x = -\frac{1}{2}$ and $x = 3$ $x < -\frac{1}{2}$ $x > 3$	M1 M1 A1 [3]
(c)	$x < -\frac{1}{2}$ $3 < x < 4$	B1ft [1]
Total 6 marks		

Part	Mark	Guidance
(a)	M1	Attempts to solve the inequality to achieve $3x < 12$ Allow $3x < a$ where a is an integer
	A1	For $x < 4$
(b)	M1	Attempts to solve the inequality by any method to find critical values See General Guidance for acceptable methods. If a calculator is used, the critical values must be fully correct for this mark. Allow = or > for this mark or even no sign at all provided it is clear they are solving a quadratic. $(2x+1)(x-3) > 0 \Rightarrow x = \dots, \dots \left(x = -\frac{1}{2}, 3 \right)$
	M1	For forming a correct inequality, which must be an open interval, following through their two critical values which must have come from the solution of a 3TQ. $x < -\frac{1}{2} \quad x > 3$ Accept any correct notation. E.g., $x < -\frac{1}{2}$ or $x > 3$ Or $\left\{ x : x < -\frac{1}{2} \right\} \cup \left\{ x : x > 3 \right\}$ Condone $x < -\frac{1}{2}$ and $x > 3$ for this mark only
	A1	For the correct inequality with the correct critical values using any acceptable notation. Eg, $x < -\frac{1}{2} \quad x > 3$
(c)	B1ft	For $x < -\frac{1}{2} \quad 3 < x < 4$ ft their answers from parts (a) and (b) provided (b) is of the form $x < p$ and/or $x > q$ Note: If you have already penalised them for writing $x < -\frac{1}{2}$ and $x > 3$ in part (b) then allow $x < -\frac{1}{2}$ and $3 < x < 4$ for this mark.