

Question number	Scheme	Marks
3	$3x^2 - 4x + 1 < 6x - 2 \Rightarrow 3x^2 - 10x + 3 < 0$ $(x-3)(3x-1) < 0 \Rightarrow \text{c.v's } x = 3, x = \frac{1}{3}$ Inside region for their values $\frac{1}{3} < x < 3$	M1 M1A1 M1A1 (5)
Notes		
M1	For multiplying out the given inequality and achieving a 3TQ. Min acceptable 3TQ is $3x^2 + bx + c$ Allow; $3x^2 + bx + c = 0$, $3x^2 + bx + c < 0$, $3x^2 + bx + c > 0$ or use of \leq or \geq or even just $3x^2 + bx + c$	
M1	For solving their 3TQ (see general guidance for the definition of an attempt) and finding two critical values	
A1	For $x = 3, x = \frac{1}{3}$	
M1	For choosing the INSIDE region for their cvs.	
A1	For a correctly defined region as shown $\frac{1}{3} < x < 3$ Accept $\frac{1}{3} < x$ AND $x < 3$ Do not accept $\frac{1}{3} < x$ OR $x < 3$ (This is M1A0) Allow use of set language $\frac{1}{3} < x \cap x < 3$ but not $\frac{1}{3} < x \cup x < 3$ (This is M1A0)	
NB: Cancelling through by $(3x-1)$ and stating $x < 3$ is M0M0A0M0A0 The question states ' using algebra '. There must be a minimal amount of working to award marks. For just $\frac{1}{3} < x < 3$ without evidence of algebra M0M0A0M0A0 Minimally acceptable attempt is as follows; $(3x-1)(x+1)$ OR $(3x-1)(x-3) \Rightarrow x = \frac{1}{3}, -1$ or 3		