Question number	Scheme	Marks
1	$b^2-4ac\geq 0\Rightarrow (5k)^2-4(2k)(5k-3)[\geq 0]$	M1
	$\left[-15k^2+24k\right]\Rightarrow\ 3k(-5k+8)$	M1
	$'0'<k\leqslant '\frac{8}{5}'$	M1
	$0<k\leqslant \frac{8}{5}$	A1 (4)
		Total 4 marks

Mark	Notes
M1	For correct substitution of a, b and c into b^2-4ac Allow with any inequality, equals or even no sign at all.
M1	For solving their quadratic equation using any valid method, (provided the QE is either a 2TQ or a 3TQ). They must reach **TWO** critical values for the award of this mark. See General Guidance for the definition of a valid attempt to solve a QE If they use a calculator, then the Quadratic equation and the two critical values must be correct for the award of this mark.
M1	For forming an 'inside' region with **their** critical values. Allow use of either $<$ or $\leqslant$ here $'0'<k\leqslant '\frac{8}{5}'$ Allow for example $'0'\leqslant k\leqslant '\frac{8}{5}'$
A1	For $0<k\leqslant \frac{8}{5}$ allow $0<k<\frac{8}{5}$