Question	Scheme	Marks	AOs
10	Realises that $k = 0$ will give no real roots as equation becomes $3 = 0$ (proof by contradiction)	B1	3.1a
	(For $k \neq 0$) quadratic has no real roots provided $b^2 < 4ac$ so $16k^2 < 12k$	M1	2.4
	$4k(4k-3) < 0$ with attempt at solution	M1	1.1b
	So $0 < k < \frac{3}{4}$, which together with $k = 0$ gives $0 \leqslant k < \frac{3}{4}$*	A1*	2.1
			(4 marks)

Notes:

B1: Explains why $k = 0$ gives no real roots

M1: Considers discriminant to give quadratic inequality – does not need the $k \neq 0$ for this mark

M1: Attempts solution of quadratic inequality

A1*: Draws conclusion, which is a printed answer, with no errors (dependent on all three previous marks)