Question			Answer	Marks	AO	Guidance
13			$\left[\frac{dy}{dx}\right] = 12x^2 + 14x - 6$	**M1**	**3.1a**	Expression of the form $\alpha x^2 + \beta x + \gamma$ where $\alpha, \beta, \gamma \in \mathbb{R}$ with **at least two terms of the correct form**
				A1	**1.1**	Fully correct derivative
			Attempt to solve $12x^2 + 14x - 6 = 0$ or any multiple e.g. $6x^2 + 7x - 3 = 0$ (accept with < 0 or > 0 etc shown)	**M1**	**1.1**	May see quadratic formula (QF) or $(2x + 3)(3x - 1)$ or completing the square or calculator method. $(2x \pm 3)(3x \pm 1)$ M1 $k(2x \pm 3)(3x \pm 1)$ M1 Solving $\alpha x^2 + \beta x + \gamma = 0$ to get $(ax + b)(cx + d)$ where $\lvert ac \rvert = \alpha$ and $\lvert bd \rvert = \gamma$ scores M1 If using QF a correctly quoted formula followed by a slip in the substitution of values scores M1, but if the formula isn't quoted and there are errors in the substitution then M0.
			$x = -\frac{3}{2}$ **and** $x = \frac{1}{3}$ only identified	**A1**	**1.1**	If these values are stated incorrectly with no method shown for solving the quadratic, then the last three marks are lost.
			$-\frac{3}{2} < x < \frac{1}{3}$	**A1**	**3.2a**	Accept strict or non-strict inequalities here. Accept $x > -\frac{3}{2}$ **and** $x < \frac{1}{3}$ or $x \in \left(-\frac{3}{2}, \frac{1}{3}\right)$ with strict or non-strict inequalities but NOT $x > -\frac{3}{2}$ or $x < \frac{1}{3}$
				[5]		