1	$\left(\dfrac{dy}{dx}=\right)3px^2-m$			4	M1	for $3px^2$ **or** $-m$
	$3px^2-m<0$ oe				M1	ft dep on M1 for setting up an inequality with their '$3px^2$'$-$'m' must be a two-term expression in the form $apx^2\pm m$
	$\pm\sqrt{\dfrac{m}{3p}}$				B1	for both critical values
		$-\sqrt{\dfrac{m}{3p}}<x<\sqrt{\dfrac{m}{3p}}$			A1	may be seen as two separate inequalities
						Total 4 marks

2	$(3x+2)(2x-4)<3x+27$ oe eg $6x^2-8x-8<3x+27$				M1	condone incorrect symbol
	eg $6x^2-11x-35<0$				M1	expanding and rearranging to get a correct 3 term quadratic, condone incorrect symbol
	$(2x-7)(3x+5)\ (=0)$ or $\dfrac{11\pm\sqrt{(-11)^2-4\times6\times(-35)}}{2\times6}$				M1	first step to find the critical values dep on M1 for solving their 3 term quadratic using any correct method (allow one sign error and some simplification – allow as far as the equivalent of $\dfrac{11\pm\sqrt{121+840}}{12}$) or if factorising, allow brackets which expanded give 2 out of 3 terms correct)
	$-\dfrac{5}{3},\dfrac{7}{2}$				A1	oe the positive critical value only or both critical values (if both they must be correct)
		$2<x<\dfrac{7}{2}$		5	A1	accept $2\le x<\dfrac{7}{2}$ may be seen as two separate inequalities $x>2\ (x\le2)$ **and** $x<\dfrac{7}{2}$
						Total 5 marks

3	(b)	$(5y+8)(y-5)\ (\le0)$ or $(y=)\dfrac{--17\pm\sqrt{(-17)^2-4\times5\times-40}}{2\times5}$			3	M1	Correct method to solve 3 term quadratic – factorising or correct use of formula
		$-1.6,\ 5$ oe				A1	Correct critical values
			$-1.6\le y\le5$ oe			A1	Condone change of variable in place of y throughout this question.

4	$(6x-5)(x+7)(=0)$ **or** $\dfrac{-37\pm\sqrt{37^2-4\times6\times-35}}{2\times6}$ $6\left[\left(x+\dfrac{37}{12}\right)^2-\left(\dfrac{37}{12}\right)^2\right]...$ oe			3	M1	A correct method to solve the quadratic equation $6x^2+37x-35(=0)$ using any correct method (if factorising, allow brackets which expanded give 2 out of 3 terms correct) (if using formula allow one sign error in substitution and some simplification – allow as far as $\dfrac{-37\pm\sqrt{1369+840}}{12}$) or completing the square as far as shown on left
	$\dfrac{5}{6}$ oe **and** -7				A1	dep on M1 correct critical values (allow 0.83…)
	Working must be seen for both accuracy marks as asked for in question	$-7\le x\le\dfrac{5}{6}$			A1	dep on M1 oe eg $-7\le x\le0.83...$, $\left[-7,\dfrac{5}{6}\right]$ Accept $x\le\dfrac{5}{6},\ x\ge-7$
						Total 3 marks