Question	Scheme	Marks	AOs
6 (a)	$3x^3 - 17x^2 - 6x = 0 \Rightarrow x\left(3x^2 - 17x - 6\right) = 0$	M1	1.1a
	$\Rightarrow x(3x+1)(x-6) = 0$	dM1	1.1b
	$\Rightarrow x = 0, -\dfrac{1}{3}, 6$	A1	1.1b
		(3)	
(b)	Attempts to solve $(y-2)^2 = n$ where n is any solution $\geqslant 0$ to (a)	M1	2.2a
	Two of $2, 2 \pm \sqrt{6}$	A1ft	1.1b
	All three of $2, 2 \pm \sqrt{6}$	A1	2.1
		(3)	
		(6 marks)	

Notes

(a)

M1: Factorises out or cancels by x to form a quadratic equation.

dM1: Scored for an attempt to find x. May be awarded for factorisation of the quadratic or use of the quadratic formula.

A1: $x = 0, -\dfrac{1}{3}, 6$ and no extras

(b)

M1: Attempts to solve $(y-2)^2 = n$ where n is any solution $\geqslant 0$ to (a). At least one stage of working must be seen to award this mark. Eg $(y-2)^2 = 0 \Rightarrow y = 2$

A1ft: Two of $2, 2 \pm \sqrt{6}$ but follow through on $(y-2)^2 = n \Rightarrow y = 2 \pm \sqrt{n}$ where n is a positive solution to part (a). (Provided M1 has been scored)

A1: All three of $2, 2 \pm \sqrt{6}$ and no extra solutions. (Provided M1A1 has been scored)