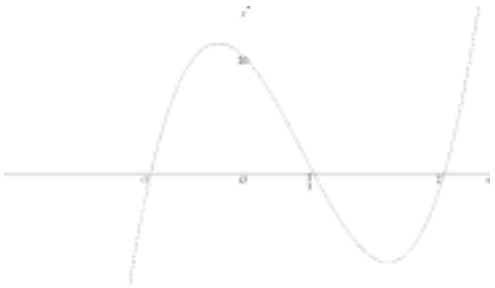
Question	Answer	Marks	Guidance
1(a)		**3**	**B1** for a well-drawn cubic graph in the correct orientation with both arms extending beyond *x*-axis **B1** for $x=-1$, $x=2$ and $x=\frac{2}{3}$ either on the graph or stated with a cubic graph **B1** for $y=20$ either on the graph or stated with a cubic graph
1(b)	$-1<x<\frac{2}{3}$	**B1**	Must be found from a cubic graph
	$x>2$	**B1**	
2	$\left[\ln(x-1)+\frac{1}{x-1}\right]_3^5$	**2**	**B1** for $\ln(x-1)$ **B1** for $+\frac{1}{x-1}$
	$\left(\ln 4+\frac{1}{4}\right)-\left(\ln 2+\frac{1}{2}\right)$	**M1**	**Dep** on at least one B mark, for correct use of limits
	$\ln 2-\frac{1}{4}$	**2**	**A1** for $\ln 2$ **A1** for $-\frac{1}{4}$ oe
3(a)	$\text{p}(2):\ 8a-36+2b-6=0$	**B1**	
	$\text{p}(3):\ 27a-81+3b-6=66$	**B1**	
		M1	**Dep** on at least one of the previous B marks, for attempt to solve *their* equations and obtain a solution for both *a* and *b*
	$a=6,\ \ b=-3$	**A1**	For both
3(b)	$(x-2)(6x^2+3x+3)$	**2**	**M1** for attempt at quadratic factor either by observation to obtain $6x^2+px+3$ or by algebraic long division to obtain at least $6x^2+3x...$ **A1** all correct