Question	Answer	Marks	Guidance
6(a)	$c=12$	**B1**	
	$\text{p}\left(\frac{1}{3}\right)$: $\frac{a}{27}+\frac{b}{9}+\frac{c}{3}-5=0$ soi	**M1**	Allow one arithmetic or sign error, may substitute in their *c*.
	$\text{p}(2)$: $8a+4b+2c-5=95$	**M1**	Allow one arithmetic or sign error, may substitute in their *c*.
	$a+3b=27$ or $\frac{a}{27}+\frac{b}{9}=1$ oe	**A1**	Allow multiples but *c* needs to have been eliminated and terms with powers evaluated.
	$2a+b=19$ oe	**A1**	Allow multiples but *c* needs to have been eliminated
	$a=6,\ b=7$	**2**	**M1**, **dep** on at least one previous **M1**, for attempt to solve *their* equations in *a* and *b* only, to find *a* or *b*. **A1** for both *a* and *b*.
6(b)	$(3x-1)(2x^2+3x+5)$ cao	**2**	**M1** for attempt at 2 terms in *their* quadratic factor. **A1** for both factors.
	For $2x^2+3x+5=0,$ discriminant is less than zero, so no solutions. [Only solution is $x=\frac{1}{3}$.]	**B1**	Allow other valid arguments, but must be using a correct quadratic factor and an attempt to evaluate the discriminant
7(a)(i)	136 080	**B1**	
7(a)(ii)	(End in 0) 15 120 or ${}^{9}\text{P}_{5}$ or $9\times8\times7\times6\times5$	**B1**	
	(End in 5) 13 440 or $8\times{}^{8}\text{P}_{4}$ or $8\times8\times7\times6\times5$	**B1**	
	Total: 28 560	**B1**	
	Alternative 1		
	(Does not start with 5:) 26 880 or $16\times{}^{8}\text{P}_{4}$	**(B1)**	
	(Starts with 5:) 1680 or ${}^{8}\text{P}_{4}$	**(B1)**	
	Total: 28 560	**(B1)**	