Question	Answer	Marks	Partial Marks
1	Valid method to find m $m = \frac{34-9}{3-0.5}[=10]$ oe	**M1**	
	Valid method to find c, e.g. $34 = their\ 10 \times 3 + c$	**M1**	
	$\sqrt[4]{y} = (their 10)\frac{1}{x} + their 4$	**M1**	
	$y = \left(\frac{10}{x} + 4\right)^4$ oe, cao	**A1**	
2(a)	$9\left(x - \frac{2}{3}\right)^2 + 1$ oe	**B3**	**B1** for each of p, q, r correct in correctly formatted expression; allow correct equivalent values If **B0** then **SC2** for $9\left(x - \frac{2}{3}\right) + 1$ or **SC1** for correct values but other incorrect format
2(b)	$their\left(\frac{2}{3}, 1\right)$ oe	**B1**	**FT** *their* (a)
3(a)	Finds p (– 1)	**M1**	
	24	**A1**	
3(b)(i)	p (– 2) = 15 (– 8) + 22(4) – 15 (– 2) + 2 = 0	**B1**	
3(b)(ii)	Attempt to find the quadratic factor	**M1**	
	$15x^2 - 8x + 1$	**A1**	
	$(x + 2)(3x - 1)(5x - 1)$ oe, cao	**A1**	If zero scored, **SC1** for an answer of $(x + 2)(3x - 1)(5x - 1)$ without working.
4(a)	${}^5C_2 \times {}^8C_4$ oe	**M1**	
	700	**A1**	
4(b)	$3 \times 6!$ oe	**M1**	
	2160	**A1**	
5(a)	$4\alpha - 12 = \alpha + 3$ and $4 - \beta = -2$	**M1**	
	$\alpha = 5$	**A1**	
	$\beta = 6$	**A1**	

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