Question	Answer	Marks	Partial Marks
8(a)(iii)	$5! \times 8 \times 7!$ oe	**M1**	
	4 838 400 oe	**A1**	
8(b)(i)	${}^{9}C_{3}$	**M1**	
	84	**A1**	
8(b)(ii)	${}^{3}C_{1} \times {}^{4}C_{1} \times {}^{5}C_{1}$ oe	**M1**	
	60	**A1**	
9(a)	Identifies the correct term: ${}^{5}C_{2} \times (2k)^{3} \times \left(-\frac{1}{k}\right)^{2}$ $[\times x^{2}]$ oe, soi	**B1**	
	$10 \times \frac{8k^{3}}{k^{2}} = 160$ soi	**M1**	**FT** only for correct term with bracketing errors; condone one slip in simplification
	$k = 2$ nfww	**A1**	
9(b)(i)	$1 + 18x + 135x^{2}$	**B2**	**B1** for any 2 terms correct or for all 3 correct terms listed but not summed or **M1** for a correct unsimplified expansion e.g. : $1 + 6(3x) + 15(3x)^{2}$
9(b)(ii)	Uses constant/coefficient of x to find $a = -2$ only	**B2**	**B1** for both $a = 2$ and -2 or for both $a = \frac{17}{9}$ and -2
	$b = 469$ only	**B1**	**FT** *their* calculated value of a
10(a)(i)	Range f^{-1}: $0.5 \leqslant f^{-1} \leqslant 1.5$	**B1**	
	Domain f^{-1}: $0 \leqslant x \leqslant \frac{2\sqrt{2}}{3}$ oe	**B2**	**B1** for 0 and $\frac{2\sqrt{2}}{3}$ in an incorrect inequality or for $x \geqslant 0$ or $x \leqslant \frac{2\sqrt{2}}{3}$