

Q	Marking instructions	AO	Marks	Typical solution
6(a)	Uses ${}^5C_1 \times 2^4 \times (-3x) \text{ or } 2^5 \times 5 \times \left(-\frac{3}{2}x\right)$ or ${}^5C_2 \times 2^3 \times (-3x)^2 \text{ or } 2^5 \times 10 \times \left(-\frac{3}{2}x\right)^2$ with or without x PI by correct answer or $-240x$ or $720x^2$	1.1a	M1	$p = {}^5C_1 \times 2^4 \times (-3)$ $= -240$ $q = {}^5C_2 \times 2^3 \times (-3)^2$ $= 720$
	Obtains $p = -240$ and $q = 720$ Allow if seen in... $-240x + 720x^2$... Condone $p = -240x$ and $q = 720x^2$	1.1b	A1	
	Subtotal		2	

Q	Marking instructions	AO	Marks	Typical solution
6(b)	Substitutes $x = 0.02$ into $32 + px + qx^2 - 1080x^3$ with their p and q PI by correct answer Ignore any additional terms	2.2a	M1	$32 - 240 \times 0.02 + 720 \times 0.02^2 - 1080 \times 0.02^3$ $= 27.47936$
	Obtains 27.47936 CAO ISW	1.1b	A1	
	Subtotal		2	

	Question 6 Total		4	
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