

7	(a)	$\int (15x^4 + 11x^{\frac{8}{3}}) dx.$ $\frac{15x^5}{5} + \frac{11x^{\frac{11}{3}}}{\frac{11}{3}} [+c]$ $3x^5 + 3x^{\frac{11}{3}} + c \text{ oe}$	M1 A1 M1 A1 A1 [5]	3.1a 1.1 1.1 1.1 3.2a	Expands bracket with one term correct All correct integration with one term correct FT both terms correct coefficients must be simplified and must see + c either here or in previous step	
7	(b)	$F[8] - F[0] = 3 \times 8^5 + 3 \times 2^{11} [-0]$ $\text{eg } (3 \times 2^4 + 3) \times 2^{11}$ 51×2^{11}	M1* *M1 A1 [3]	2.1 2.4 1.1	or $3 \times 2^{15} + 3 \times 2^{11} [-0]$ ft (a) any correct intermediate step	OR $104448 \div 2^{11}$ (M2)