
Integration by Parts 2 - Edexcel Past Exam Questions

1. (a) Use integration by parts to find $\int x \sin 3x \, dx$. (3)

(b) Using your answer to part (a), find $\int x^2 \cos 3x \, dx$. (3)

Jan 12 Q2

2. (a) Use integration to find

$$\int \frac{1}{x^3} \ln x \, dx. \quad (5)$$

(b) Hence calculate

$$\int_1^2 \frac{1}{x^3} \ln x \, dx. \quad (2)$$

Jan 13 Q2

3. (a) Find $\int x^2 e^x \, dx$. (5)

(b) Hence find the exact value of $\int_0^1 x^2 e^x \, dx$. (2)

June 13 Q1

4. (i) Find

$$\int x e^{4x} \, dx \quad (3)$$

June 14 Q6 (edited)
