

Integration by Parts

Calculus II

$$\int u dv = uv - \int v du$$

1. $\int x e^x dx; u = x, dv = e^x dx$

2. $\int x \cos(x) dx; u = x, dv = \cos(x) dx$

3. $\int x^2 \cos(3x) dx$

4. $\int \frac{x^2}{e^{2x}} dx$

5. $\int \ln(x+3) dx$

6. $\int 4x \cos(2-3x) dx$

7. $\int x^7 \sin(2x^4) dx$

8. $\int x^2 e^{4x} dx$