

Integration by Parts (Part 1)
Section 7.2

Warm-up: Find the antiderivatives.

1. $\int (2x^2 + 5x + 3)dx$

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

3. $\int 4\cos 2x dx$

4. $\int \frac{dx}{x}$

Integration by Parts

Integration by Parts is used for integrals in the form: _____.

<p>Integration by Parts Formula</p> $\int u dv = \underline{\hspace{2cm}}$ <p>General priority rule for choosing u: LIATE</p>

Example 1: Evaluate $\int x \cos x dx$

Example 2: Evaluate $\int \ln x dx$

Example 3: Evaluate $\int x e^x dx$