

7.1 - Integration by Parts

7.1a

ruledgap25

The integration by parts formula

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

Exercises:

Evaluate the integral.

7.1b

$$\int y e^{0.2y} \, dy$$

$$\int \ln x \, dx$$

7.1c

$$\int e^{-\theta} \cos 2\theta \, d\theta$$

7.1d

$$\int_0^1 (x^2 + 1) e^{-x} \, dx$$

7.1e

$$\int_1^{\sqrt{3}} \arctan\left(\frac{1}{x}\right) dx$$
