

The Fundamental Theorem and Definite Integrals

$$\int_a^b F'(x) dx = F(b) - F(a)$$

Evaluate

$$\int_0^4 6x dx$$

$$\int_1^4 \frac{1}{\sqrt{x}} dx$$

$$\int_0^1 e^{-0.2t} dt$$

$$\int_0^2 x(x^2 + 1)^2 dx$$

$$\int_0^3 \frac{2x}{x^2 + 1} dx$$