

Notes 2.3 Definite Integrals

Definite Integral of f from a to b

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

(take the integral and evaluate at b and evaluate at a and subtract)

Note: don't need + C
because when you
subtract the C cancels

Evaluate the definite integrals.

1. $\int_1^3 (x^2 - 2x + 4)dx$

2. $\int_{-2}^2 \frac{x^3 - 4x^2}{x} dx$

3. $\int_0^{\pi/2} \cos\theta d\theta$

4. $\int_0^4 x\sqrt{25 - x^2} dx$