

Rules

$$\int_a^b c f(x) dx = c \int_a^b f(x) dx \quad \text{for any const. } c.$$

$$\int_a^b [f(x) + g(x)] dx = \int_a^b f(x) dx + \int_a^b g(x) dx$$

$$\int_b^a f(x) dx = - \int_a^b f(x) dx \quad \therefore \int_a^a f(x) dx = 0$$

$$\int_a^b f(x) dx + \int_b^c f(x) dx = \int_a^c f(x) dx$$

