

## Chapter 4 - Integration Formulas

$$\int k dx = kx + C \quad \int k \cdot f(x) dx = k \int f(x) dx$$

$$\int [f(x) \pm g(x)] dx = \int f(x) dx \pm \int g(x) dx$$

$$\int x^n dx = \frac{x^{n+1}}{n+1} + C, \quad n \neq -1$$

$$\int \cos x dx = \sin x + C$$

$$\int \sin x dx = -\cos x + C$$

$$\int \sec^2 x dx = \tan x + C$$

$$\int \sec x \cdot \tan x dx = \sec x + C$$

$$\int \csc^2 x dx = -\cot x + C$$

$$\int \csc x \cdot \cot x dx = -\csc x + C$$

$$\int [g(x)]^n \cdot g'(x) dx = \frac{[g(x)]^{n+1}}{n+1} + C, \quad n \neq -1$$