

Table of indefinite integrals

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

$$\bullet \int \frac{1}{x} dx = \ln |x| + C$$

$$\bullet \int e^x dx = e^x + C$$

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

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

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

$$\bullet \int \frac{\sin x}{\cos^2 x} dx = \sec x + C = \int \sec x \tan x dx$$

$$\bullet \int \frac{1}{1+x^2} dx = \arctan x + C$$

$$\bullet \int \frac{1}{\sqrt{1-x^2}} dx = \arcsin x + C$$