

Table des Intégrales de base

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

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

$$\int u dv = uv - \int v du$$

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

$$\int a^x dx = \frac{1}{\ln a} a^x + C$$

$$\int \ln x dx = x \ln x - x + C$$

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

$$\int \cos x dx = \sin x + C$$
$$\int \frac{a}{a^2 + x^2} dx = \arctan \frac{x}{a} + C$$

$$\int \frac{a}{a^2 - x^2} dx = \frac{1}{2} \ln \left| \frac{x+a}{x-a} \right| + C$$

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