Primitivas Imediatas

$$\int k = kx + C \quad \forall k, C \in \mathbb{R}$$

$$\int k\,u(x) = k \int u(x) \quad \forall k \in \mathbb{R}$$

$$\int u(x)^\alpha \frac{du}{dx} = \frac{u^{\alpha+1}}{\alpha+1} + C \quad \forall C \in \mathbb{R} \quad \forall \alpha \in \mathbb{R} \setminus \{-1\}$$

$$\int \frac{1}{u} \frac{du}{dx} = \ln|u| + C \quad \forall C \in \mathbb{R}$$

$$\int e^u \frac{du}{dx} = e^u + C \quad \forall C \in \mathbb{R}$$

$$\int a^u \frac{du}{dx} = \frac{a^u}{\ln(a)} + C \quad \forall C \in \mathbb{R}, \; a > 0$$

$$\int \operatorname{sen} u \frac{du}{dx} = -\cos u + C$$

$$\int \cos u \frac{du}{dx} = \operatorname{sen} u + C$$

$$\int \sec^2 u \frac{du}{dx} = \operatorname{tg} u + C$$

$$\int \operatorname{cosec}^2 u \frac{du}{dx} = -\operatorname{cotg} u + C$$

$$\int \frac{1}{\sqrt{1-u^2}} \frac{du}{dx} = \operatorname{arcsen} u + C$$

$$\int \frac{1}{\sqrt{1-u^2}} \frac{du}{dx} = -\operatorname{arccos} u + C$$

$$\int \frac{1}{1+u^2} \frac{du}{dx} = \operatorname{arctg} u + C$$

$$\int \frac{1}{1+u^2} \frac{du}{dx} = -\operatorname{arctotg} u + C$$

$$\int \operatorname{sh} u \frac{du}{dx} = \operatorname{ch} u + C$$

$$\int \operatorname{ch} u \frac{du}{dx} = \operatorname{sh} u + C$$