Listado Integrales

- $\int 1 \, dx = x + c \qquad c \in \mathbb{R}$
- $\int x^n \, dx = \frac{x^{n+1}}{n+1} + c \qquad c \in \mathbb{R}$, para todo $n \in \mathbb{Q} - \{-1\}$
- $\int \frac{1}{2\sqrt{x}} \, dx = \sqrt{x} + c \qquad c \in \mathbb{R}$
- $\int \sin(x) \, dx = -\cos(x) + c \qquad c \in \mathbb{R}$
- $\int \cos(x) \, dx = \sin(x) + c \qquad c \in \mathbb{R}$
- $\int e^{\alpha x} \, dx = \frac{e^{\alpha x}}{\alpha} + c \qquad c \in \mathbb{R}$, para todo $\alpha \in \mathbb{R} - \{0\}$
- $\int \frac{1}{x} \, dx = \ln|x| + c \qquad c \in \mathbb{R}$
- $\int (\sec(x))^2 \, dx = \tan(x) + c \qquad c \in \mathbb{R}$
- $\int -(\csc(x))^2 \, dx = \cot(x) + c \qquad c \in \mathbb{R}$
- $\int \sec(x)\tan(x) \, dx = \sec(x) + c \qquad c \in \mathbb{R}$
- $\int -\csc(x)\cot(x) = \csc(x) + c \qquad c \in \mathbb{R}$
- $\int \frac{1}{\sqrt{1-x^2}} \, dx = \arcsin(x) + c \qquad c \in \mathbb{R}$
- $\int -\frac{1}{\sqrt{1-x^2}} \, dx = \arccos(x) + c \qquad c \in \mathbb{R}$
- $\int \frac{1}{1+x^2} \, dx = \arctan(x) + c \qquad c \in \mathbb{R}$

Teorema de Integración por Partes

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