

## Fórmulas de Derivación

Derivadas	Derivadas de Funciones Trigonómicas	Derivadas de las Funciones Trigonómicas Inversas
$\frac{dc}{dx} = 0$	$\frac{d}{dx}(\text{Senv}) = \text{Cosv} \cdot \frac{dv}{dx}$	$\frac{d}{dx}(\text{arcSenv}) = \frac{1}{\sqrt{1-v^2}} \cdot \frac{dv}{dx}$
$\frac{dx}{dx} = 1$	$\frac{d}{dx}(\text{Cosv}) = -\text{Senv} \cdot \frac{dv}{dx}$	$\frac{d}{dx}(\text{arcCosv}) = -\frac{1}{\sqrt{1-v^2}} \cdot \frac{dv}{dx}$
$\frac{d}{dx}(u + v - w) = \frac{du}{dx} + \frac{dv}{dx} - \frac{dw}{dx}$	$\frac{d}{dx}(\text{Tanv}) = \text{Sec}^2 v \cdot \frac{dv}{dx}$	$\frac{d}{dx}(\text{arcTanv}) = \frac{1}{1+v^2} \cdot \frac{dv}{dx}$
$\frac{d}{dx}(cv) = c \frac{dv}{dx}$	$\frac{d}{dx}(\text{Cotv}) = -\text{Csc}^2 v \cdot \frac{dv}{dx}$	$\frac{d}{dx}(\text{arcCotv}) = -\frac{1}{1+v^2} \cdot \frac{dv}{dx}$
$\frac{d}{dx}(uv) = u \cdot \frac{dv}{dx} + v \cdot \frac{du}{dx}$	$\frac{d}{dx}(\text{Secv}) = \text{Secv} \cdot \text{Tanv} \cdot \frac{dv}{dx}$	$\frac{d}{dx}(\text{arcSecv}) = \frac{1}{v\sqrt{v^2-1}} \cdot \frac{dv}{dx}$
$\frac{d}{dx}(v^n) = nv^{n-1} \cdot \frac{dv}{dx} = \frac{d}{dx}x^n = nx^{n-1}$	$\frac{d}{dx}(\text{Cscv}) = -\text{Cscv} \cdot \text{Cotv} \cdot \frac{dv}{dx}$	$\frac{d}{dx}(\text{arcCscv}) = -\frac{1}{v\sqrt{v^2-1}} \cdot \frac{dv}{dx}$
$\frac{d}{dx}\left(\frac{u}{v}\right) = \frac{v \cdot \frac{du}{dx} - u \cdot \frac{dv}{dx}}{v^2} = \frac{d}{dx}\left(\frac{u}{c}\right) = \frac{1}{c} \cdot \frac{du}{dx}$		
$\frac{d}{dx}(\log_a v) = \frac{\log_a e}{v} \cdot \frac{dv}{dx} = \frac{d}{dx}(\log_e v) = \frac{1}{v} \cdot \frac{dv}{dx}$		
$\frac{d}{dx}(a^v) = a^v \cdot \log_e a \cdot \frac{dv}{dx} = \frac{d}{dx}(e^v) = e^v \cdot \frac{dv}{dx}$		

## Fórmulas de Integrales

Integrales Racionales	Integrales trigonométricas
$\int dx = x$	$\int \text{sen } x \, dx = -\text{cos } x + C$
$\int af(x)dx = a \int f(x)dx$	$\int \text{cos } x \, dx = \text{sen } x + C$
$\int (u + v - w)dx = \int udx + \int vdx - \int wdx$	$\int \text{tan } x \, dx = -\ln  \text{cos } x  + C$
$\int x^m dx = \frac{x^{m+1}}{m+1}$ cuando $m \neq -1$	$\int \text{csc } x \, dx = -\ln  \text{csc } x + \text{cot } x  + C$
$\int \frac{1}{x} dx = \ln x$	$\int \text{cot } x \, dx = \ln  \text{sen } x  + C$
$\int (ax + b)^m dx = \frac{(ax + b)^{m+1}}{a(m+1)}$ cuando $m \neq -1$	$\int \text{sec } x \, dx = \ln  \text{sec } x + \text{tan } x  + C$
$\int \frac{1}{ax + b} dx = \frac{1}{a} \ln(ax + b)$	$\int \text{sec}^2 x dx = \text{tan } x + c$
$\int (ax + b)^m dx = \frac{(ax + b)^{m+1}}{a(m+1)}$ cuando $m \neq -1$	$\int \text{csc } x \text{ cot } x \, dx = -\text{csc } x + C$
$\int \frac{1}{ax + b} dx = \frac{1}{a} \ln(ax + b)$	$\int \text{sec } x \text{ tan } x \, dx = \text{sec } x + C$