

Tablas autorizadas para su utilización durante examen parcial - examen final – examen recuperatorio.

Tabla de derivadas

$y = c \quad c \in \mathbb{R}$	$y' = 0$
$y = x$	$y' = 1$
$y = u$	$y' = u'$
$y = u \pm v$	$y' = u' \pm v'$
$y = u \cdot v$	$y' = u' \cdot v + u \cdot v'$
$y = \frac{u}{v}$	$y' = \frac{u' \cdot v - u \cdot v'}{v^2}$
$y = u^n$	$y' = n \cdot u^{n-1} \cdot u'$
$y = e^u$	$y' = e^u \cdot u'$
$y = a^u$	$y' = a^u \cdot \ln a \cdot u'$
$y = \ln u$	$y' = \frac{1}{u} \cdot u'$
$y = \log_a u$	$y' = \frac{1}{u} \cdot \log_a e \cdot u'$
$y = \operatorname{sen} u$	$y' = \cos u \cdot u'$
$y = \cos u$	$y' = -\operatorname{sen} u \cdot u'$
$y = \operatorname{tg} u$	$y' = \sec^2 u \cdot u'$

Tabla de integrales

$$\int dx = x + C$$

$$\int k \cdot f(x) \cdot dx = k \cdot \int f(x) \cdot dx$$

$$\int (f(x) \pm g(x)) dx = \int f(x) dx \pm \int g(x) dx$$

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

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

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

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

$$\int \operatorname{sen} x dx = -\cos x + C$$

$$\int \cos x dx = \operatorname{sen} x + C$$

Método por partes: $\int u \cdot dv = u \cdot v - \int v \cdot du$



Mario Oscar Catalano
Jefe de Cátedra de Ciencias Exactas