f(x)	f'(x)
x^n	nx^{n-1}
$\ln x$	$\frac{1}{x}$
e^x	e^x
e^{ax}	ae^{ax}
a^x	$a^x \ln a$
cos x	$-\sin x$
$\sin x$	$\cos x$
tan x	$\sec^2 x$
$\cos^{-1}\frac{x}{a}$	$-\frac{1}{\sqrt{a^2-x^2}}$
$\sin^{-1}\frac{x}{a}$	$\frac{1}{\sqrt{a^2 - x^2}}$
$\tan^{-1}\frac{x}{a}$	$\frac{a}{a^2 + x^2}$

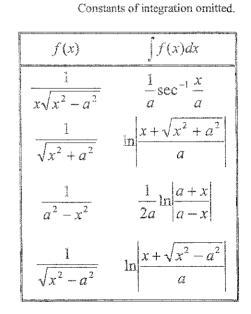
Riail an toraidh	$y = uv$ $\Rightarrow \frac{dy}{dx} = u\frac{dv}{dx} + v\frac{du}{dx}$	Product rule
Riail an lín	$\frac{dx}{y} = \frac{u}{v}$	Quotient rule
	$\Rightarrow \frac{dy}{dx} = \frac{v \frac{du}{dx} - u \frac{dv}{dx}}{v^2}$	
Cuingriail	$f(x) = u(v(x))$ $\Rightarrow f'(x) = \frac{du}{dv} \frac{dv}{dx}$	Chain rule

Suimeálaithe

Tá tairisigh na suimeála fágtha ar lár.

f(x)	$\int_{a}^{b} f(x)dx$
$x^n (n \neq -1)$	$\frac{x^{n+1}}{n+1}$
7 - X	$\ln x $
e ^x	e^{λ}
e ^{ax}	$\frac{1}{a}e^{ax}$
a^x	$\frac{a^*}{\ln a}$
$\cos x$	$\sin x$
$\sin x$	$-\cos x$
tan x	In sec x

f(x)	$\int f(x)dx$
$\cos^2 x$	$\frac{1}{2}\left[x+\frac{1}{2}\sin 2x\right]$
$\sin^2 x$	$\frac{1}{2}\left[x-\frac{1}{2}\sin 2x\right]$
$\frac{1}{\sqrt{a^2 - x^2}}$	$\sin^{-1}\frac{x}{a}$
$\frac{1}{x^2 + a^2}$	$\frac{1}{a} \tan^{-1} \frac{x}{a}$



Suimeáil na míreanna

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

Integration by parts

Integrals