$\coth^{-1} x$	$-\dfrac{1}{x^2-1}$
$\operatorname{sech}^{-1} x$	$-\dfrac{1}{x\sqrt{1-x^2}}$
$\operatorname{cosech}^{-1} x$	$-\dfrac{1}{x\sqrt{x^2+1}}$

Torthaí agus Líonta:
Products and Quotients:

$$y = uv\ ;\ \frac{dy}{dx} = u\frac{dv}{dx} + v\frac{du}{dx}$$

$$y = \frac{u}{v}\ ;\ \frac{dy}{dx} = \frac{v\dfrac{du}{dx} - u\dfrac{dv}{dx}}{v^2}$$

Foirmlí áisiúla:
Useful formulae:

$$\sinh^{-1} x = \ln\left(x + \sqrt{x^2+1}\right) \quad (-\infty < x < \infty)$$

$$\cosh^{-1} x = \ln\left(x + \sqrt{x^2-1}\right) \quad (x \geqslant 1)$$

$$\tanh^{-1} x = \tfrac{1}{2}\ln\frac{1+x}{1-x} \quad (-1 < x < 1)$$

$\sinh x$	$\cosh x$
$\cosh x$	$\sinh x$
$\tanh x$	$\ln \cosh x$
$\coth x$	$\ln \lvert \sinh x \rvert$
$\operatorname{sech} x$	$\tan^{-1}(\sinh x)$
$\operatorname{cosech} x$	$\ln \left\lvert \tanh \dfrac{x}{2} \right\rvert$
$\cos^2 x$	$\frac{1}{2}[x + \frac{1}{2}\sin 2x]$
$\sin^2 x$	$\frac{1}{2}[x - \frac{1}{2}\sin 2x]$
$\cosh^2 x$	$\frac{1}{2}[x + \frac{1}{2}\sinh 2x]$
$\sinh^2 x$	$\frac{1}{2}[-x + \frac{1}{2}\sinh 2x]$
$\dfrac{1}{x\sqrt{a^2-x^2}}$	$-\dfrac{1}{a}\operatorname{sech}^{-1}\dfrac{x}{a}$
$\dfrac{1}{x\sqrt{x^2+a^2}}$	$-\dfrac{1}{a}\operatorname{cosech}^{-1}\dfrac{x}{a}$

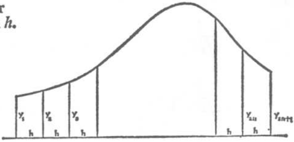
Suimeáil trí mhíreanna:
Integration by parts:

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

Teoragán Taylor (Taylor's Theorem):

$$f(x+h) = f(x) + hf'(x) + \frac{h^2}{2!}f''(x) + \dots + \frac{h^r}{r!}f^r(x) + \dots$$

Riail Shimpson (Simpson's Rule):
Corr-uimhir ordanáidí iad $y_1, y_2, \dots y_{2n+1}$ fad h óna chéile.
$y_1, y_2, \dots y_{2n+1}$ is an odd number of ordinates at intervals of length h.



Achar (Area) $\approx \frac{1}{3}h\{y_1 + y_{2n+1} + 2(y_3 + y_5 + \dots y_{2n-1}) + 4(y_2 + y_4 + \dots y_{2n})\}$