


**MARIANA GUADALUPE
GUILLEN AGUILAR
MATEMATICAS
UNIVERSIDAD DEL SURESTE
BACHILLERATO EN
ENFERMERIA**



FORMULARIO

Integrales de funciones hiperbolicas
Inversas

$$1. \sinh^{-1} x = \ln(x + \sqrt{x^2 + 1})$$

$$2. \cosh^{-1} x = \ln(x + \sqrt{x^2 - 1})$$

$$3. \tanh^{-1} x = \frac{1}{2} \ln \frac{1+x}{1-x}$$

$$4. \operatorname{csch}^{-1} x = \sinh^{-1}\left(\frac{1}{x}\right) = \ln\left(\frac{1}{x} + \frac{\sqrt{1+x^2}}{|x|}\right)$$

$$5. \operatorname{sech}^{-1} x = \operatorname{coth}^{-1}\left(\frac{1}{x}\right) = \ln\left(\frac{1 + \sqrt{1-x^2}}{x}\right)$$

$$6. \operatorname{coth}^{-1} x = \tanh^{-1}\left(\frac{1}{x}\right) = \frac{1}{2} \ln \frac{x+1}{x-1}$$