

Hyperbolic Sine $\left(\frac{e^x - e^{-x}}{2}\right)$	$\frac{d}{dx} [\sinh(x)] = \cosh(x)$
Hyperbolic Cosine $\left(\frac{e^x + e^{-x}}{2}\right)$	$\frac{d}{dx} [\cosh(x)] = \sinh(x)$
Hyperbolic Tangent	$\frac{d}{dx} [\tanh(x)] = \operatorname{sech}^2(x)$
Hyperbolic Cotangent	$\frac{d}{dx} [\coth(x)] = -\operatorname{csch}^2(x)$
Hyperbolic Secant	$\frac{d}{dx} [\operatorname{sech}(x)] = -\operatorname{sech}(x) \tanh(x)$
Hyperbolic Cosecant	$\frac{d}{dx} [\operatorname{csch}(x)] = -\operatorname{csch}(x) \coth(x)$

Hyperbolic Arcsine	$\frac{d}{dx} [\sinh^{-1}(x)] = \frac{1}{\sqrt{x^2 + 1}}$
Hyperbolic Arccosine	$\frac{d}{dx} [\cosh^{-1}(x)] = \frac{1}{\sqrt{x^2 - 1}}$
Hyperbolic Arctangent	$\frac{d}{dx} [\tanh^{-1}(x)] = \frac{1}{1 - x^2}$
Hyperbolic Arccotangent	$\frac{d}{dx} [\coth^{-1}(x)] = \frac{1}{1 - x^2}$
Hyperbolic Arcsecant	$\frac{d}{dx} [\operatorname{sech}^{-1}(x)] = \frac{-1}{x \sqrt{1 - x^2}}$
Hyperbolic Arccosecant	$\frac{d}{dx} [\operatorname{csch}^{-1}(x)] = \frac{-1}{ x \sqrt{1 + x^2}}$