$y=f(x), x=\phi(y)$	$\frac{dy}{dx}=1/(\frac{dx}{dy})$
$\sin^{-1}(x)$	$\frac{1}{\sqrt{(1-x^2)}}$
$\cos^{-1}(x)$	$\frac{-1}{\sqrt{(1-x^2)}}$
$\tan^{-1}(x)$	$\frac{1}{(1+x^2)}$
$\cot^{-1}(x)$	$\frac{-1}{(1+x^2)}$
$sec^{-1}(x)$	$\frac{1}{(x\sqrt{(x^2-1)})}$
$cosec^{-1}(x)$	$\frac{-1}{(x\sqrt{(x^2-1)})}$
$\sinh(x)$	$\cosh(x)$
$\cosh(x)$	$\sinh(x)$
$\tanh(x)$	$sech^2(x)$
$\coth(x)$	$-cosech^2(x)$
$sech(x)$	$-sech(x)\tanh(x)$
$cosech(x)$	$-cosech(x)\coth(x)$

$\sinh^{-1}(x)$	$\frac{1}{\sqrt{(x^2+1)}}$
$\cosh^{-1}(x)$	$\frac{1}{\sqrt{(x^2-1)}}, (x>1)$
$\tanh^{-1}(x)$	$\frac{1}{(1-x^2)}, (\lvert x\rvert<1)$
$\coth^{-1}(x)$	$\frac{-1}{(x^2-1)}, (\lvert x\rvert>1)$
$sech^{-1}(x)$	$\frac{-1}{(x\sqrt{(1-x^2)})}, (\lvert x\rvert<1)$
$cosech^{-1}(x)$	$\frac{-1}{(x\sqrt{(1+x^2)})}$
$x=\phi(t), y=\Psi(t)$	$\frac{dy}{dx}=\frac{dy}{dt}.\frac{dt}{dx}$