

A Table of Integrals and Derivatives of Functions

Created with *Mathematica 9* by ATT

Out[17]/TraditionalForm=

f	∂	\int
x	1	$\frac{x^2}{2}$
\sqrt{x}	$\frac{1}{2\sqrt{x}}$	$\frac{2x^{3/2}}{3}$
e^x	e^x	e^x
x^2	$2x$	$\frac{x^3}{3}$
x^3	$3x^2$	$\frac{x^4}{4}$
x^4	$4x^3$	$\frac{x^5}{5}$
x^n	nx^{n-1}	$\frac{x^{n+1}}{n+1}$
n^x	$n^x \log(n)$	$\frac{n^x}{\log(n)}$
$n^{1/x}$	$-\frac{n^{1/x} \log(n)}{x^2}$	$x n^{1/x} - \log(n) \operatorname{Ei}\left(\frac{\log(n)}{x}\right)$
$\sin(x)$	$\cos(x)$	$-\cos(x)$
$\cos(x)$	$-\sin(x)$	$\sin(x)$
$\tan(x)$	$\sec^2(x)$	$-\log(\cos(x))$
$\csc(x)$	$-\cot(x) \csc(x)$	$\log\left(\sin\left(\frac{x}{2}\right)\right) - \log\left(\cos\left(\frac{x}{2}\right)\right)$
$\sec(x)$	$\tan(x) \sec(x)$	$\log\left(\sin\left(\frac{x}{2}\right) + \cos\left(\frac{x}{2}\right)\right) - \log\left(\cos\left(\frac{x}{2}\right) - \sin\left(\frac{x}{2}\right)\right)$
$\cot(x)$	$-\csc^2(x)$	$\log(\sin(x))$
$\sin^{-1}(x)$	$\frac{1}{\sqrt{1-x^2}}$	$\sqrt{1-x^2} + x \sin^{-1}(x)$
$\cos^{-1}(x)$	$-\frac{1}{\sqrt{1-x^2}}$	$x \cos^{-1}(x) - \sqrt{1-x^2}$
$\tan^{-1}(x)$	$\frac{1}{x^2+1}$	$x \tan^{-1}(x) - \frac{1}{2} \log(x^2 + 1)$
$\csc^{-1}(x)$	$-\frac{1}{\sqrt{1-\frac{1}{x^2}}}$	$\log\left(x \left(\sqrt{\frac{x^2-1}{x^2}} + 1\right)\right) + x \csc^{-1}(x)$
$\sec^{-1}(x)$	$\frac{1}{\sqrt{1-\frac{1}{x^2}}}$	$x \sec^{-1}(x) - \log\left(x \left(\sqrt{\frac{x^2-1}{x^2}} + 1\right)\right)$
$\cot^{-1}(x)$	$-\frac{1}{x^2+1}$	$\frac{1}{2} \log(x^2 + 1) + x \cot^{-1}(x)$
$\sinh(x)$	$\cosh(x)$	$\cosh(x)$
$\cosh(x)$	$\sinh(x)$	$\sinh(x)$
$\tanh(x)$	$\operatorname{sech}^2(x)$	$\log(\cosh(x))$
$\operatorname{csch}(x)$	$-\operatorname{coth}(x) \operatorname{csch}(x)$	$\log\left(\sinh\left(\frac{x}{2}\right)\right) - \log\left(\cosh\left(\frac{x}{2}\right)\right)$
$\operatorname{sech}(x)$	$\tanh(x) (-\operatorname{sech}(x))$	$2 \tan^{-1}\left(\tanh\left(\frac{x}{2}\right)\right)$
$\operatorname{coth}(x)$	$-\operatorname{csch}^2(x)$	$\log(\sinh(x))$
$\sinh^{-1}(x)$	$\frac{1}{\sqrt{x^2+1}}$	$x \sinh^{-1}(x) - \sqrt{x^2 + 1}$

$\cosh^{-1}(x)$	$\frac{1}{\sqrt{x-1} \sqrt{x+1}}$	$x \cosh^{-1}(x) - \sqrt{x-1} \sqrt{x+1}$
$\tanh^{-1}(x)$	$\frac{1}{1-x^2}$	$\frac{1}{2} \log(1-x^2) + x \tanh^{-1}(x)$
$\operatorname{csch}^{-1}(x)$	$-\frac{1}{\sqrt{\frac{1}{x^2}+1} \cdot x^2}$	$\log\left(x\left(\sqrt{\frac{x^2+1}{x^2}} + 1\right)\right) + x \operatorname{csch}^{-1}(x)$
$\operatorname{sech}^{-1}(x)$	$-\frac{1}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$x \operatorname{sech}^{-1}(x) - \tan^{-1}\left(\frac{x \sqrt{\frac{1-x}{x+1}}}{x-1}\right)$
$\operatorname{coth}^{-1}(x)$	$\frac{1}{1-x^2}$	$\frac{1}{2} \log(1-x^2) + x \operatorname{coth}^{-1}(x)$
$\log(x)$	$\frac{1}{x}$	$x \log(x) - x$
$\frac{\log(n)}{\log(x)}$	$-\frac{\log(n)}{x \log^2(x)}$	$\operatorname{li}(x) \log(n)$
$\sqrt{e^x}$	$\frac{\sqrt{e^x}}{2}$	$2 \sqrt{e^x}$
$\sqrt{x^2}$	$\frac{x}{\sqrt{x^2}}$	$\frac{x \sqrt{x^2}}{2}$
$\sqrt{x^3}$	$\frac{3x^2}{2\sqrt{x^3}}$	$\frac{2x \sqrt{x^3}}{5}$
$\sqrt{x^4}$	$\frac{2x^3}{\sqrt{x^4}}$	$\frac{x \sqrt{x^4}}{3}$
$\sqrt{x^n}$	$\frac{n x^{n-1}}{2 \sqrt{x^n}}$	$\frac{2x \sqrt{x^n}}{n+2}$
$\sqrt{n^x}$	$\frac{1}{2} \sqrt{n^x} \log(n)$	$\frac{2 \sqrt{n^x}}{\log(n)}$
$\sqrt{n^{1/x}}$	$-\frac{\sqrt{n^{1/x}} \log(n)}{2x^2}$	$\int \sqrt{n^{1/x}} dx$
$\sqrt{\sin(x)}$	$\frac{\cos(x)}{2\sqrt{\sin(x)}}$	$-2 E\left(\frac{1}{2} \left(\frac{\pi}{2} - x\right) \middle 2\right)$
$\sqrt{\cos(x)}$	$-\frac{\sin(x)}{2\sqrt{\cos(x)}}$	$2 E\left(\frac{x}{2} \middle 2\right)$
$\sqrt{\tan(x)}$	$\frac{\sec^2(x)}{2\sqrt{\tan(x)}}$	$-\frac{1}{2} \sqrt{\sin(2x)} \sqrt{\tan(x)}$ $\operatorname{csc}(x) \left(\sin^{-1}(\cos(x) - \sin(x)) + \right.$ $\left. \log\left(\sin(x) + \sqrt{\sin(2x)} + \cos(x)\right) \right)$
$\sqrt{\csc(x)}$	$-\frac{1}{2} \cos(x) \csc^{\frac{3}{2}}(x)$	$-2 F\left(\frac{1}{4} (\pi - 2x) \middle 2\right)$
$\sqrt{\sec(x)}$	$\frac{1}{2} \sin(x) \sec^{\frac{3}{2}}(x)$	$2 F\left(\frac{x}{2} \middle 2\right)$
$\sqrt{\cot(x)}$	$-\frac{\csc^2(x)}{2\sqrt{\cot(x)}}$	$-\frac{1}{2} \sqrt{\sin(2x)} \sqrt{\cot(x)}$ $\operatorname{sec}(x) \left(\sin^{-1}(\cos(x) - \sin(x)) - \right.$ $\left. \log\left(\sin(x) + \sqrt{\sin(2x)} + \cos(x)\right) \right)$
$\sqrt{\sin^{-1}(x)}$	$\frac{1}{2\sqrt{1-x^2} \sqrt{\sin^{-1}(x)}}$	$\int \sqrt{\sin^{-1}(x)} dx$
$\sqrt{\cos^{-1}(x)}$	$-\frac{1}{2\sqrt{1-x^2} \sqrt{\cos^{-1}(x)}}$	$\int \sqrt{\cos^{-1}(x)} dx$

$\sqrt{\tan^{-1}(x)}$	$\frac{1}{2(x^2+1)\sqrt{\tan^{-1}(x)}}$	$\int \sqrt{\tan^{-1}(x)} dx$
$\sqrt{\csc^{-1}(x)}$	$-\frac{1}{2\sqrt{1-\frac{1}{x^2}}x^2\sqrt{\csc^{-1}(x)}}$	$\int \sqrt{\csc^{-1}(x)} dx$
$\sqrt{\sec^{-1}(x)}$	$\frac{1}{2\sqrt{1-\frac{1}{x^2}}x^2\sqrt{\sec^{-1}(x)}}$	$\int \sqrt{\sec^{-1}(x)} dx$
$\sqrt{\cot^{-1}(x)}$	$-\frac{1}{2(x^2+1)\sqrt{\cot^{-1}(x)}}$	$\int \sqrt{\cot^{-1}(x)} dx$
$\sqrt{\sinh(x)}$	$\frac{\cosh(x)}{2\sqrt{\sinh(x)}}$	$\frac{2\sqrt{i\sinh(x)}E\left(\frac{1}{4}(\pi-2ix) 2\right)}{\sqrt{\sinh(x)}}$
$\sqrt{\cosh(x)}$	$\frac{\sinh(x)}{2\sqrt{\cosh(x)}}$	$-2iE\left(\frac{ix}{2} 2\right)$
$\sqrt{\tanh(x)}$	$\frac{\operatorname{sech}^2(x)}{2\sqrt{\tanh(x)}}$	$\tanh^{-1}\left(\sqrt{\tanh(x)}\right) - \tan^{-1}\left(\sqrt{\tanh(x)}\right)$
$\sqrt{\operatorname{csch}(x)}$	$-\frac{1}{2}\cosh(x)\operatorname{csch}^{\frac{3}{2}}(x)$	$2(i\sinh(x))^{3/2}\operatorname{csch}^{\frac{3}{2}}(x)F\left(\frac{1}{4}(\pi-2ix) 2\right)$
$\sqrt{\operatorname{sech}(x)}$	$-\frac{1}{2}\sinh(x)\operatorname{sech}^{\frac{3}{2}}(x)$	$-2iF\left(\frac{ix}{2} 2\right)$
$\sqrt{\operatorname{coth}(x)}$	$-\frac{\operatorname{csch}^2(x)}{2\sqrt{\operatorname{coth}(x)}}$	$\tanh^{-1}\left(\sqrt{\operatorname{coth}(x)}\right) - \tan^{-1}\left(\sqrt{\operatorname{coth}(x)}\right)$
$\sqrt{\sinh^{-1}(x)}$	$\frac{1}{2\sqrt{x^2+1}\sqrt{\sinh^{-1}(x)}}$	$\int \sqrt{\sinh^{-1}(x)} dx$
$\sqrt{\cosh^{-1}(x)}$	$\frac{1}{2\sqrt{x-1}\sqrt{x+1}\sqrt{\cosh^{-1}(x)}}$	$\int \sqrt{\cosh^{-1}(x)} dx$
$\sqrt{\tanh^{-1}(x)}$	$\frac{1}{2(1-x^2)\sqrt{\tanh^{-1}(x)}}$	$\int \sqrt{\tanh^{-1}(x)} dx$
$\sqrt{\operatorname{csch}^{-1}(x)}$	$-\frac{1}{2\sqrt{\frac{1}{x^2}+1}x^2\sqrt{\operatorname{csch}^{-1}(x)}}$	$\int \sqrt{\operatorname{csch}^{-1}(x)} dx$
$\sqrt{\operatorname{sech}^{-1}(x)}$	$-\frac{1}{2x\sqrt{\frac{1-x}{x+1}}(x+1)\sqrt{\operatorname{sech}^{-1}(x)}}$	$\int \sqrt{\operatorname{sech}^{-1}(x)} dx$
$\sqrt{\operatorname{coth}^{-1}(x)}$	$\frac{1}{2(1-x^2)\sqrt{\operatorname{coth}^{-1}(x)}}$	$\int \sqrt{\operatorname{coth}^{-1}(x)} dx$
$\sqrt{\log(x)}$	$\frac{1}{2x\sqrt{\log(x)}}$	$\int \sqrt{\log(x)} dx$
$\sqrt{\frac{\log(n)}{\log(x)}}$	$-\frac{\log(n)}{2x\log^2(x)\sqrt{\frac{\log(n)}{\log(x)}}$	$\int \sqrt{\frac{\log(n)}{\log(x)}} dx$
$e^{\sqrt{x}}$	$\frac{e^{\sqrt{x}}}{2\sqrt{x}}$	$e^{\sqrt{x}}(2\sqrt{x}-2)$
e^{x^2}	$2e^{x^2}x$	$\frac{1}{2}\sqrt{\pi}\operatorname{erfi}(x)$
e^{x^3}	$3e^{x^3}x^2$	$-\frac{x\Gamma\left(\frac{1}{3}-x^3\right)}{3\sqrt{-x^3}}$
e^{x^4}	$4e^{x^4}x^3$	$-\frac{x\Gamma\left(\frac{1}{4}-x^4\right)}{4\sqrt[4]{-x^4}}$
e^{x^n}	$ne^{x^n}x^{n-1}$	$-\frac{x(-x^n)^{-1/n}\Gamma\left(\frac{1}{n}-x^n\right)}{n}$

e^{n^x}	$e^{n^x} n^x \log(n)$	$\frac{\text{Ei}(n^x)}{\log(n)}$
$e^{n^{1/x}}$	$-\frac{e^{n^{1/x}} n^{1/x} \log(n)}{x^2}$	$\int e^{n^{1/x}} dx$
$e^{\sin(x)}$	$e^{\sin(x)} \cos(x)$	$\int e^{\sin(x)} dx$
$e^{\cos(x)}$	$\sin(x) (-e^{\cos(x)})$	$\int e^{\cos(x)} dx$
$e^{\tan(x)}$	$e^{\tan(x)} \sec^2(x)$	$\int e^{\tan(x)} dx$
$e^{\csc(x)}$	$\cot(x) (-e^{\csc(x)}) \csc(x)$	$\int e^{\csc(x)} dx$
$e^{\sec(x)}$	$\tan(x) e^{\sec(x)} \sec(x)$	$\int e^{\sec(x)} dx$
$e^{\cot(x)}$	$-e^{\cot(x)} \csc^2(x)$	$\int e^{\cot(x)} dx$
$e^{\sin^{-1}(x)}$	$\frac{e^{\sin^{-1}(x)}}{\sqrt{1-x^2}}$	$\int e^{\sin^{-1}(x)} dx$
$e^{\cos^{-1}(x)}$	$-\frac{e^{\cos^{-1}(x)}}{\sqrt{1-x^2}}$	$\int e^{\cos^{-1}(x)} dx$
$e^{\tan^{-1}(x)}$	$\frac{e^{\tan^{-1}(x)}}{x^2+1}$	$\int e^{\tan^{-1}(x)} dx$
$e^{\csc^{-1}(x)}$	$-\frac{e^{\csc^{-1}(x)}}{\sqrt{1-\frac{1}{x^2}}}$	$\int e^{\csc^{-1}(x)} dx$
$e^{\sec^{-1}(x)}$	$\frac{e^{\sec^{-1}(x)}}{\sqrt{1-\frac{1}{x^2}}}$	$\int e^{\sec^{-1}(x)} dx$
$e^{\cot^{-1}(x)}$	$-\frac{e^{\cot^{-1}(x)}}{x^2+1}$	$\int e^{\cot^{-1}(x)} dx$
$e^{\sinh(x)}$	$e^{\sinh(x)} \cosh(x)$	$\int e^{\sinh(x)} dx$
$e^{\cosh(x)}$	$\sinh(x) e^{\cosh(x)}$	$\int e^{\cosh(x)} dx$
$e^{\tanh(x)}$	$e^{\tanh(x)} \text{sech}^2(x)$	$\int e^{\tanh(x)} dx$
$e^{\text{csch}(x)}$	$\coth(x) (-e^{\text{csch}(x)}) \text{csch}(x)$	$\int e^{\text{csch}(x)} dx$
$e^{\text{sech}(x)}$	$\tanh(x) (-e^{\text{sech}(x)}) \text{sech}(x)$	$\int e^{\text{sech}(x)} dx$
$e^{\text{coth}(x)}$	$-e^{\text{coth}(x)} \text{csch}^2(x)$	$\int e^{\text{coth}(x)} dx$
$e^{\sinh^{-1}(x)}$	$\frac{e^{\sinh^{-1}(x)}}{\sqrt{x^2+1}}$	$\frac{1}{2} \left(x \left(\sqrt{x^2+1} + x \right) + \sinh^{-1}(x) \right)$
$e^{\cosh^{-1}(x)}$	$\frac{e^{\cosh^{-1}(x)}}{\sqrt{x-1} \sqrt{x+1}}$	$\frac{1}{2} \left(x \left(x + \sqrt{x-1} \sqrt{x+1} \right) - \log \left(x + \sqrt{x-1} \sqrt{x+1} \right) \right)$
$e^{\tanh^{-1}(x)}$	$\frac{e^{\tanh^{-1}(x)}}{1-x^2}$	$\sin^{-1}(x) - \sqrt{1-x^2}$
$e^{\text{csch}^{-1}(x)}$	$-\frac{e^{\text{csch}^{-1}(x)}}{\sqrt{\frac{1}{x^2}+1}}$	$\sqrt{\frac{1}{x^2}+1} x + \log(x) - \sinh^{-1}\left(\frac{1}{x}\right)$
$e^{\text{sech}^{-1}(x)}$	$-\frac{e^{\text{sech}^{-1}(x)}}{x \sqrt{\frac{1-x}{x+1}}}$	$\sqrt{\frac{1-x}{x+1}} (x+1) - \log \left(\sqrt{\frac{1-x}{x+1}} x + \sqrt{\frac{1-x}{x+1} + 1} \right) + 2 \log(x)$
$e^{\text{coth}^{-1}(x)}$	$\frac{e^{\text{coth}^{-1}(x)}}{1-x^2}$	$\sqrt{1-\frac{1}{x^2}} x + \log \left(\left(\sqrt{1-\frac{1}{x^2}} + 1 \right) x \right)$
x	1	$\frac{x^2}{2}$
$\frac{1}{n^{\log(x)}}$	$-\frac{\log(n) n^{\frac{1}{\log(x)}}}{x \log^2(x)}$	$\int n^{\frac{1}{\log(x)}} dx$

x	1	$\frac{x^2}{2}$
e^{2x}	$2e^{2x}$	$\frac{e^{2x}}{2}$
x^6	$6x^5$	$\frac{x^7}{7}$
x^8	$8x^7$	$\frac{x^9}{9}$
x^{2n}	$2nx^{2n-1}$	$\frac{x^{2n+1}}{2n+1}$
n^{2x}	$2n^{2x} \log(n)$	$\frac{n^{2x}}{2 \log(n)}$
$n^{2/x}$	$-\frac{2n^{2/x} \log(n)}{x^2}$	$x n^{2/x} - 2 \log(n) \operatorname{Ei}\left(\frac{2 \log(n)}{x}\right)$
$\sin^2(x)$	$2 \sin(x) \cos(x)$	$\frac{x}{2} - \frac{1}{4} \sin(2x)$
$\cos^2(x)$	$-2 \sin(x) \cos(x)$	$\frac{x}{2} + \frac{1}{4} \sin(2x)$
$\tan^2(x)$	$2 \tan(x) \sec^2(x)$	$\tan(x) - x$
$\csc^2(x)$	$-2 \cot(x) \csc^2(x)$	$-\cot(x)$
$\sec^2(x)$	$2 \tan(x) \sec^2(x)$	$\tan(x)$
$\cot^2(x)$	$-2 \cot(x) \csc^2(x)$	$-x - \cot(x)$
$\sin^{-1}(x)^2$	$\frac{2 \sin^{-1}(x)}{\sqrt{1-x^2}}$	$2 \sqrt{1-x^2} \sin^{-1}(x) - 2x + x \sin^{-1}(x)^2$
$\cos^{-1}(x)^2$	$-\frac{2 \cos^{-1}(x)}{\sqrt{1-x^2}}$	$-2 \sqrt{1-x^2} \cos^{-1}(x) - 2x + x \cos^{-1}(x)^2$
$\tan^{-1}(x)^2$	$\frac{2 \tan^{-1}(x)}{x^2+1}$	$\int \tan^{-1}(x)^2 dx$
$\csc^{-1}(x)^2$	$-\frac{2 \csc^{-1}(x)}{\sqrt{1-\frac{1}{x^2}}}$	$\int \csc^{-1}(x)^2 dx$
$\sec^{-1}(x)^2$	$\frac{2 \sec^{-1}(x)}{\sqrt{1-\frac{1}{x^2}}}$	$\int \sec^{-1}(x)^2 dx$
$\cot^{-1}(x)^2$	$-\frac{2 \cot^{-1}(x)}{x^2+1}$	$\int \cot^{-1}(x)^2 dx$
$\sinh^2(x)$	$2 \sinh(x) \cosh(x)$	$\frac{1}{4} \sinh(2x) - \frac{x}{2}$
$\cosh^2(x)$	$2 \sinh(x) \cosh(x)$	$\frac{x}{2} + \frac{1}{4} \sinh(2x)$
$\tanh^2(x)$	$2 \tanh(x) \operatorname{sech}^2(x)$	$x - \tanh(x)$
$\operatorname{csch}^2(x)$	$-2 \operatorname{coth}(x) \operatorname{csch}^2(x)$	$-\operatorname{coth}(x)$
$\operatorname{sech}^2(x)$	$-2 \tanh(x) \operatorname{sech}^2(x)$	$\tanh(x)$
$\operatorname{coth}^2(x)$	$-2 \operatorname{coth}(x) \operatorname{csch}^2(x)$	$x - \operatorname{coth}(x)$
$\sinh^{-1}(x)^2$	$\frac{2 \sinh^{-1}(x)}{\sqrt{x^2+1}}$	$-2 \sqrt{x^2+1} \sinh^{-1}(x) + 2x + x \sinh^{-1}(x)^2$
$\cosh^{-1}(x)^2$	$\frac{2 \cosh^{-1}(x)}{\sqrt{x-1} \sqrt{x+1}}$	$2x + x \cosh^{-1}(x)^2 - 2 \sqrt{x-1} \sqrt{x+1} \cosh^{-1}(x)$
$\tanh^{-1}(x)^2$	$\frac{2 \tanh^{-1}(x)}{1-x^2}$	$\int \tanh^{-1}(x)^2 dx$
$\operatorname{csch}^{-1}(x)^2$	$-\frac{2 \operatorname{csch}^{-1}(x)}{\sqrt{\frac{1}{x^2}+1}}$	$\int \operatorname{csch}^{-1}(x)^2 dx$
$\operatorname{sech}^{-1}(x)^2$	$-\frac{2 \operatorname{sech}^{-1}(x)}{x \sqrt{\frac{1-x}{x+1}}}$	$\int \operatorname{sech}^{-1}(x)^2 dx$
$\operatorname{coth}^{-1}(x)^2$	$\frac{2 \operatorname{coth}^{-1}(x)}{1-x^2}$	$\int \operatorname{coth}^{-1}(x)^2 dx$

$\log^2(x)$	$\frac{2 \log(x)}{x}$	$2x + x \log^2(x) - 2x \log(x)$
$\frac{\log^2(n)}{\log^2(x)}$	$-\frac{2 \log^2(n)}{x \log^3(x)}$	$\log^2(n) \left(\operatorname{li}(x) - \frac{x}{\log(x)} \right)$
$x^{3/2}$	$\frac{3 \sqrt{x}}{2}$	$\frac{2x^{5/2}}{5}$
e^{3x}	$3e^{3x}$	$\frac{e^{3x}}{3}$
x^6	$6x^5$	$\frac{x^7}{7}$
x^{12}	$12x^{11}$	$\frac{x^{13}}{13}$
x^{3n}	$3n x^{3n-1}$	$\frac{x^{3n+1}}{3n+1}$
n^{3x}	$3n^{3x} \log(n)$	$\frac{n^{3x}}{3 \log(n)}$
$n^{3/x}$	$-\frac{3n^{3/x} \log(n)}{x^2}$	$x n^{3/x} - 3 \log(n) \operatorname{Ei} \left(\frac{3 \log(n)}{x} \right)$
$\sin^3(x)$	$3 \sin^2(x) \cos(x)$	$\frac{1}{12} \cos(3x) - \frac{3 \cos(x)}{4}$
$\cos^3(x)$	$-3 \sin(x) \cos^2(x)$	$\frac{3 \sin(x)}{4} + \frac{1}{12} \sin(3x)$
$\tan^3(x)$	$3 \tan^2(x) \sec^2(x)$	$\frac{\sec^2(x)}{2} + \log(\cos(x))$
$\csc^3(x)$	$-3 \cot(x) \csc^3(x)$	$-\frac{1}{8} \csc^2\left(\frac{x}{2}\right) + \frac{1}{8} \sec^2\left(\frac{x}{2}\right) +$ $\frac{1}{2} \log\left(\sin\left(\frac{x}{2}\right)\right) - \frac{1}{2} \log\left(\cos\left(\frac{x}{2}\right)\right)$
$\sec^3(x)$	$3 \tan(x) \sec^3(x)$	$\frac{1}{2} \left(\tan(x) \sec(x) + \right.$ $\left. \log\left(\sin\left(\frac{x}{2}\right) + \cos\left(\frac{x}{2}\right)\right) - \log\left(\cos\left(\frac{x}{2}\right) - \sin\left(\frac{x}{2}\right)\right) \right)$
$\cot^3(x)$	$-3 \cot^2(x) \csc^2(x)$	$-\frac{1}{2} \csc^2(x) - \log(\sin(x))$
$\sin^{-1}(x)^3$	$\frac{3 \sin^{-1}(x)^2}{\sqrt{1-x^2}}$	$-6 \sqrt{1-x^2} + 3 \sqrt{1-x^2} \sin^{-1}(x)^2 +$ $x \sin^{-1}(x)^3 - 6x \sin^{-1}(x)$
$\cos^{-1}(x)^3$	$-\frac{3 \cos^{-1}(x)^2}{\sqrt{1-x^2}}$	$6 \sqrt{1-x^2} - 3 \sqrt{1-x^2} \cos^{-1}(x)^2 +$ $x \cos^{-1}(x)^3 - 6x \cos^{-1}(x)$
$\tan^{-1}(x)^3$	$\frac{3 \tan^{-1}(x)^2}{x^2+1}$	$\int \tan^{-1}(x)^3 dx$
$\csc^{-1}(x)^3$	$-\frac{3 \csc^{-1}(x)^2}{\sqrt{1-\frac{1}{x^2}}}$	$\int \csc^{-1}(x)^3 dx$
$\sec^{-1}(x)^3$	$\frac{3 \sec^{-1}(x)^2}{\sqrt{1-\frac{1}{x^2}}}$	$\int \sec^{-1}(x)^3 dx$
$\cot^{-1}(x)^3$	$-\frac{3 \cot^{-1}(x)^2}{x^2+1}$	$\int \cot^{-1}(x)^3 dx$
$\sinh^3(x)$	$3 \sinh^2(x) \cosh(x)$	$\frac{1}{12} \cosh(3x) - \frac{3 \cosh(x)}{4}$
$\cosh^3(x)$	$3 \sinh(x) \cosh^2(x)$	$\frac{3 \sinh(x)}{4} + \frac{1}{12} \sinh(3x)$
$\tanh^3(x)$	$3 \tanh^2(x) \operatorname{sech}^2(x)$	$\frac{\operatorname{sech}^2(x)}{2} + \log(\cosh(x))$
$\operatorname{csch}^3(x)$	$-3 \operatorname{coth}(x) \operatorname{csch}^3(x)$	$-\frac{1}{8} \operatorname{csch}^2\left(\frac{x}{2}\right) - \frac{1}{8} \operatorname{sech}^2\left(\frac{x}{2}\right) -$ $\frac{1}{2} \log\left(\sinh\left(\frac{x}{2}\right)\right) + \frac{1}{2} \log\left(\cosh\left(\frac{x}{2}\right)\right)$
$\operatorname{sech}^3(x)$	$-3 \tanh(x) \operatorname{sech}^3(x)$	$\tan^{-1}\left(\tanh\left(\frac{x}{2}\right)\right) + \frac{1}{2} \tanh(x) \operatorname{sech}(x)$
$\operatorname{coth}^3(x)$	$-3 \operatorname{coth}^2(x) \operatorname{csch}^2(x)$	$\log(\sinh(x)) - \frac{\operatorname{csch}^2(x)}{2}$

$\sinh^{-1}(x)^3$	$\frac{3 \sinh^{-1}(x)^2}{\sqrt{x^2+1}}$	$-6 \sqrt{x^2+1} - 3 \sqrt{x^2+1} \sinh^{-1}(x)^2 + x \sinh^{-1}(x)^3 + 6 x \sinh^{-1}(x)$
$\cosh^{-1}(x)^3$	$\frac{3 \cosh^{-1}(x)^2}{\sqrt{x-1} \sqrt{x+1}}$	$-6 \sqrt{x-1} \sqrt{x+1} + x \cosh^{-1}(x)^3 - 3 \sqrt{x-1} \sqrt{x+1} \cosh^{-1}(x)^2 + 6 x \cosh^{-1}(x)$
$\tanh^{-1}(x)^3$	$\frac{3 \tanh^{-1}(x)^2}{1-x^2}$	$\int \tanh^{-1}(x)^3 dx$
$\operatorname{csch}^{-1}(x)^3$	$-\frac{3 \operatorname{csch}^{-1}(x)^2}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\int \operatorname{csch}^{-1}(x)^3 dx$
$\operatorname{sech}^{-1}(x)^3$	$-\frac{3 \operatorname{sech}^{-1}(x)^2}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$\int \operatorname{sech}^{-1}(x)^3 dx$
$\operatorname{coth}^{-1}(x)^3$	$\frac{3 \operatorname{coth}^{-1}(x)^2}{1-x^2}$	$\int \operatorname{coth}^{-1}(x)^3 dx$
$\log^3(x)$	$\frac{3 \log^2(x)}{x}$	$-6 x + x \log^3(x) - 3 x \log^2(x) + 6 x \log(x)$
$\frac{\log^3(n)}{\log^3(x)}$	$-\frac{3 \log^2(n)}{x \log^4(x)}$	$\log^3(n) \left(\frac{\operatorname{li}(x)}{2} - \frac{x}{2 \log^2(x)} - \frac{x}{2 \log(x)} \right)$
x^2	$2 x$	$\frac{x^3}{3}$
e^{4x}	$4 e^{4x}$	$\frac{e^{4x}}{4}$
x^8	$8 x^7$	$\frac{x^9}{9}$
x^{12}	$12 x^{11}$	$\frac{x^{13}}{13}$
x^{4n}	$4 n x^{4n-1}$	$\frac{x^{4n+1}}{4n+1}$
n^{4x}	$4 n^{4x} \log(n)$	$\frac{n^{4x}}{4 \log(n)}$
$n^{4/x}$	$-\frac{4 n^{4/x} \log(n)}{x^2}$	$x n^{4/x} - 4 \log(n) \operatorname{Ei}\left(\frac{4 \log(n)}{x}\right)$
$\sin^4(x)$	$4 \sin^3(x) \cos(x)$	$\frac{3x}{8} - \frac{1}{4} \sin(2x) + \frac{1}{32} \sin(4x)$
$\cos^4(x)$	$-4 \sin(x) \cos^3(x)$	$\frac{3x}{8} + \frac{1}{4} \sin(2x) + \frac{1}{32} \sin(4x)$
$\tan^4(x)$	$4 \tan^3(x) \sec^2(x)$	$x - \frac{4 \tan(x)}{3} + \frac{1}{3} \tan(x) \sec^2(x)$
$\csc^4(x)$	$-4 \cot(x) \csc^4(x)$	$-\frac{2 \cot(x)}{3} - \frac{1}{3} \cot(x) \csc^2(x)$
$\sec^4(x)$	$4 \tan(x) \sec^4(x)$	$\frac{2 \tan(x)}{3} + \frac{1}{3} \tan(x) \sec^2(x)$
$\cot^4(x)$	$-4 \cot^3(x) \csc^2(x)$	$x + \frac{4 \cot(x)}{3} - \frac{1}{3} \cot(x) \csc^2(x)$
$\sin^{-1}(x)^4$	$\frac{4 \sin^{-1}(x)^3}{\sqrt{1-x^2}}$	$4 \sqrt{1-x^2} \sin^{-1}(x)^3 - 24 \sqrt{1-x^2} \sin^{-1}(x) + 24 x + x \sin^{-1}(x)^4 - 12 x \sin^{-1}(x)^2$
$\cos^{-1}(x)^4$	$-\frac{4 \cos^{-1}(x)^3}{\sqrt{1-x^2}}$	$-4 \sqrt{1-x^2} \cos^{-1}(x)^3 + 24 \sqrt{1-x^2} \cos^{-1}(x) + 24 x + x \cos^{-1}(x)^4 - 12 x \cos^{-1}(x)^2$
$\tan^{-1}(x)^4$	$\frac{4 \tan^{-1}(x)^3}{x^2+1}$	$\int \tan^{-1}(x)^4 dx$
$\csc^{-1}(x)^4$	$-\frac{4 \csc^{-1}(x)^3}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int \csc^{-1}(x)^4 dx$
$\sec^{-1}(x)^4$	$\frac{4 \sec^{-1}(x)^3}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int \sec^{-1}(x)^4 dx$
$\cot^{-1}(x)^4$	$-\frac{4 \cot^{-1}(x)^3}{x^2+1}$	$\int \cot^{-1}(x)^4 dx$
$\sinh^4(x)$	$4 \sinh^3(x) \cosh(x)$	$\frac{3x}{8} - \frac{1}{4} \sinh(2x) + \frac{1}{32} \sinh(4x)$

$\cosh^4(x)$	$4 \sinh(x) \cosh^3(x)$	$\frac{3x}{8} + \frac{1}{4} \sinh(2x) + \frac{1}{32} \sinh(4x)$
$\tanh^4(x)$	$4 \tanh^3(x) \operatorname{sech}^2(x)$	$x - \frac{4 \tanh(x)}{3} + \frac{1}{3} \tanh(x) \operatorname{sech}^2(x)$
$\operatorname{csch}^4(x)$	$-4 \coth(x) \operatorname{csch}^4(x)$	$\frac{2 \coth(x)}{3} - \frac{1}{3} \coth(x) \operatorname{csch}^2(x)$
$\operatorname{sech}^4(x)$	$-4 \tanh(x) \operatorname{sech}^4(x)$	$\frac{2 \tanh(x)}{3} + \frac{1}{3} \tanh(x) \operatorname{sech}^2(x)$
$\coth^4(x)$	$-4 \coth^3(x) \operatorname{csch}^2(x)$	$x - \frac{4 \coth(x)}{3} - \frac{1}{3} \coth(x) \operatorname{csch}^2(x)$
$\sinh^{-1}(x)^4$	$\frac{4 \sinh^{-1}(x)^3}{\sqrt{x^2+1}}$	$-4 \sqrt{x^2+1} \sinh^{-1}(x)^3 - 24 \sqrt{x^2+1} \sinh^{-1}(x) + 24x + x \sinh^{-1}(x)^4 + 12x \sinh^{-1}(x)^2$
$\cosh^{-1}(x)^4$	$\frac{4 \cosh^{-1}(x)^3}{\sqrt{x-1} \sqrt{x+1}}$	$24x + x \cosh^{-1}(x)^4 - 4 \sqrt{x-1} \sqrt{x+1} \cosh^{-1}(x)^3 + 12x \cosh^{-1}(x)^2 - 24 \sqrt{x-1} \sqrt{x+1} \cosh^{-1}(x)$
$\tanh^{-1}(x)^4$	$\frac{4 \tanh^{-1}(x)^3}{1-x^2}$	$\int \tanh^{-1}(x)^4 dx$
$\operatorname{csch}^{-1}(x)^4$	$-\frac{4 \operatorname{csch}^{-1}(x)^3}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\int \operatorname{csch}^{-1}(x)^4 dx$
$\operatorname{sech}^{-1}(x)^4$	$-\frac{4 \operatorname{sech}^{-1}(x)^3}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$\int \operatorname{sech}^{-1}(x)^4 dx$
$\coth^{-1}(x)^4$	$\frac{4 \coth^{-1}(x)^3}{1-x^2}$	$\int \coth^{-1}(x)^4 dx$
$\log^4(x)$	$\frac{4 \log^3(x)}{x}$	$24x + x \log^4(x) - 4x \log^3(x) + 12x \log^2(x) - 24x \log(x)$
$\frac{\log^4(n)}{\log^4(x)}$	$-\frac{4 \log^4(n)}{x \log^3(x)}$	$\log^4(n) \left(\frac{\operatorname{li}(x)}{6} - \frac{x}{3 \log^3(x)} - \frac{x}{6 \log^2(x)} - \frac{x}{6 \log(x)} \right)$
$x^{n/2}$	$\frac{1}{2} n x^{\frac{n}{2}-1}$	$\frac{2x^{\frac{n}{2}+1}}{n+2}$
$(e^x)^n$	$n (e^x)^n$	$\frac{(e^x)^n}{n}$
$(x^2)^n$	$2n x (x^2)^{n-1}$	$\frac{x(x^2)^n}{2n+1}$
$(x^3)^n$	$3n x^2 (x^3)^{n-1}$	$\int (x^3)^n dx$
$(x^4)^n$	$4n x^3 (x^4)^{n-1}$	$\frac{x(x^4)^n}{4n+1}$
$(n^x)^n$	$n^{x+1} (n^x)^{n-1} \log(n)$	$\frac{(n^x)^n}{n \log(n)}$
$(n^{1/x})^n$	$-\frac{n^{-\frac{1}{x}+1} (n^{1/x})^{n-1} \log(n)}{x^2}$	$n^{-\frac{n}{x}} (n^{1/x})^n \left(x n^{n/x} - n \log(n) \operatorname{Ei} \left(\frac{n \log(n)}{x} \right) \right)$
$\sin^n(x)$	$n \cos(x) \sin^{n-1}(x)$	$-\cos(x) \sin^{n+1}(x) + \sin^2(x)^{\frac{1}{2}(-n-1)} {}_2F_1 \left(\frac{1}{2}, \frac{1-n}{2}; \frac{3}{2}; \cos^2(x) \right)$
$\cos^n(x)$	$-n \sin(x) \cos^{n-1}(x)$	$-\left(\sin(x) \cos^{n+1}(x) {}_2F_1 \left(\frac{1}{2}, \frac{n+1}{2}; \frac{n+3}{2}; \cos^2(x) \right) \right) / \left((n+1) \sqrt{\sin^2(x)} \right)$
$\tan^n(x)$	$n \sec^2(x) \tan^{n-1}(x)$	$\frac{1}{n-1} \sin^2(x)^{\frac{1}{2}-\frac{n}{2}} \tan^{n-1}(x) {}_2F_1 \left(\frac{1-n}{2}, \frac{1-n}{2}; \frac{3-n}{2}; \cos^2(x) \right)$
$\csc^n(x)$	$-n \cos(x) \csc^{n+1}(x)$	$-\cos(x) \sin^2(x)^{\frac{n-1}{2}} \csc^{n-1}(x) {}_2F_1 \left(\frac{1}{2}, \frac{n+1}{2}; \frac{3}{2}; \cos^2(x) \right)$
$\sec^n(x)$	$n \sin(x) \sec^{n+1}(x)$	$\sin(x) \cos^2(x)^{\frac{n}{2}-\frac{1}{2}} \sec^{n-1}(x) {}_2F_1 \left(\frac{1}{2}, \frac{n+1}{2}; \frac{3}{2}; \sin^2(x) \right)$
$\cot^n(x)$	$-n \csc^2(x) \cot^{n-1}(x)$	$-\frac{1}{n+1} \sin(x) \cos(x) \sin^2(x)^{\frac{n-1}{2}} \cot^n(x) {}_2F_1 \left(\frac{n+1}{2}, \frac{n+1}{2}; \frac{n+3}{2}; \cos^2(x) \right)$

$\sin^{-1}(x)^n$	$\frac{n \sin^{-1}(x)^{n-1}}{\sqrt{1-x^2}}$	$\int \sin^{-1}(x)^n dx$
$\cos^{-1}(x)^n$	$-\frac{n \cos^{-1}(x)^{n-1}}{\sqrt{1-x^2}}$	$\int \cos^{-1}(x)^n dx$
$\tan^{-1}(x)^n$	$\frac{n \tan^{-1}(x)^{n-1}}{x^2+1}$	$\int \tan^{-1}(x)^n dx$
$\csc^{-1}(x)^n$	$-\frac{n \csc^{-1}(x)^{n-1}}{\sqrt{1-\frac{1}{x^2}}}$	$\int \csc^{-1}(x)^n dx$
$\sec^{-1}(x)^n$	$\frac{n \sec^{-1}(x)^{n-1}}{\sqrt{1-\frac{1}{x^2}}}$	$\int \sec^{-1}(x)^n dx$
$\cot^{-1}(x)^n$	$-\frac{n \cot^{-1}(x)^{n-1}}{x^2+1}$	$\int \cot^{-1}(x)^n dx$
$\sinh^n(x)$	$n \cosh(x) \sinh^{n-1}(x)$	$-\cosh(x) \sinh^{n+1}(x)$ $(-\sinh^2(x))^{\frac{1}{2}(-n-1)} {}_2F_1\left(\frac{1}{2}, \frac{1-n}{2}; \frac{3}{2}; \cosh^2(x)\right)$
$\cosh^n(x)$	$n \sinh(x) \cosh^{n-1}(x)$	$-(\sinh(x) \cosh^{n+1}(x) {}_2F_1\left(\frac{1}{2}, \frac{n+1}{2}; \frac{n+3}{2}; \cosh^2(x)\right)) /$ $(n+1) \sqrt{-\sinh^2(x)}$
$\tanh^n(x)$	$n \operatorname{sech}^2(x) \tanh^{n-1}(x)$	$\frac{1}{n-1} \sinh(x) \cosh(x) (-\sinh^2(x))^{-\frac{n}{2}-\frac{1}{2}}$ $\tanh^n(x) {}_2F_1\left(\frac{1-n}{2}, \frac{1-n}{2}; \frac{3-n}{2}; \cosh^2(x)\right)$
$\operatorname{csch}^n(x)$	$-n \cosh(x) \operatorname{csch}^{n+1}(x)$	$-\cosh(x) (-\sinh^2(x))^{\frac{n-1}{2}}$ $\operatorname{csch}^{n-1}(x) {}_2F_1\left(\frac{1}{2}, \frac{n+1}{2}; \frac{3}{2}; \cosh^2(x)\right)$
$\operatorname{sech}^n(x)$	$-n \sinh(x) \operatorname{sech}^{n+1}(x)$	$\sinh(x) \cosh^2(x)^{\frac{n}{2}-\frac{1}{2}}$ $\operatorname{sech}^{n-1}(x) {}_2F_1\left(\frac{1}{2}, \frac{n+1}{2}; \frac{3}{2}; -\sinh^2(x)\right)$
$\operatorname{coth}^n(x)$	$-n \operatorname{csch}^2(x) \operatorname{coth}^{n-1}(x)$	$\frac{1}{n+1} (-\sinh^2(x))^{\frac{n+1}{2}} \operatorname{coth}^{n+1}(x)$ ${}_2F_1\left(\frac{n+1}{2}, \frac{n+1}{2}; \frac{n+3}{2}; \cosh^2(x)\right)$
$\sinh^{-1}(x)^n$	$\frac{n \sinh^{-1}(x)^{n-1}}{\sqrt{x^2+1}}$	$\int \sinh^{-1}(x)^n dx$
$\cosh^{-1}(x)^n$	$\frac{n \cosh^{-1}(x)^{n-1}}{\sqrt{x-1} \sqrt{x+1}}$	$\int \cosh^{-1}(x)^n dx$
$\tanh^{-1}(x)^n$	$\frac{n \tanh^{-1}(x)^{n-1}}{1-x^2}$	$\int \tanh^{-1}(x)^n dx$
$\operatorname{csch}^{-1}(x)^n$	$-\frac{n \operatorname{csch}^{-1}(x)^{n-1}}{\sqrt{\frac{1}{x^2}+1}}$	$\int \operatorname{csch}^{-1}(x)^n dx$
$\operatorname{sech}^{-1}(x)^n$	$-\frac{n \operatorname{sech}^{-1}(x)^{n-1}}{x \sqrt{\frac{1-x}{x+1}}}$	$\int \operatorname{sech}^{-1}(x)^n dx$
$\operatorname{coth}^{-1}(x)^n$	$\frac{n \operatorname{coth}^{-1}(x)^{n-1}}{1-x^2}$	$\int \operatorname{coth}^{-1}(x)^n dx$
$\log^n(x)$	$\frac{n \log^{n-1}(x)}{x}$	$\int \log^n(x) dx$
$\left(\frac{\log(n)}{\log(x)}\right)^n$	$-\frac{n \log(n) \left(\frac{\log(n)}{\log(x)}\right)^{n-1}}{x \log^2(x)}$	$\int \left(\frac{\log(n)}{\log(x)}\right)^n dx$
$n\sqrt{x}$	$\frac{n\sqrt{x} \log(n)}{2\sqrt{x}}$	$\frac{2n\sqrt{x} (\sqrt{x} \log(n)-1)}{\log^2(n)}$
n^{e^x}	$e^x n^{e^x} \log(n)$	$\operatorname{Ei}(e^x \log(n))$

n^{x^2}	$2 x n^{x^2} \log(n)$	$\frac{\sqrt{\pi} \operatorname{erfi}\left(x \sqrt{\log(n)}\right)}{2 \sqrt{\log(n)}}$
n^{x^3}	$3 x^2 n^{x^3} \log(n)$	$-\frac{x \Gamma\left(\frac{1}{3}, -x^3 \log(n)\right)}{3 \sqrt[3]{-x^3 \log(n)}}$
n^{x^4}	$4 x^3 n^{x^4} \log(n)$	$-\frac{x \Gamma\left(\frac{1}{4}, -x^4 \log(n)\right)}{4 \sqrt[4]{-x^4 \log(n)}}$
n^{x^n}	$n^{x^n+1} x^{n-1} \log(n)$	$-\frac{x (-x^n \log(n))^{-1/n} \Gamma\left(\frac{1}{n}, -x^n \log(n)\right)}{n}$
$n^{n^{1/x}}$	$-\frac{n^{n^{1/x}+1} \log^2(n)}{x^2}$	$\int n^{n^{1/x}} dx$
$n^{\sin(x)}$	$\log(n) \cos(x) n^{\sin(x)}$	$\int n^{\sin(x)} dx$
$n^{\cos(x)}$	$\log(n) \sin(x) (-n^{\cos(x)})$	$\int n^{\cos(x)} dx$
$n^{\tan(x)}$	$\log(n) \sec^2(x) n^{\tan(x)}$	$\int n^{\tan(x)} dx$
$n^{\csc(x)}$	$\log(n) \cot(x) \csc(x) (-n^{\csc(x)})$	$\int n^{\csc(x)} dx$
$n^{\sec(x)}$	$\log(n) \tan(x) \sec(x) n^{\sec(x)}$	$\int n^{\sec(x)} dx$
$n^{\cot(x)}$	$\log(n) \csc^2(x) (-n^{\cot(x)})$	$\int n^{\cot(x)} dx$
$n^{\sin^{-1}(x)}$	$\frac{\log(n) n^{\sin^{-1}(x)}}{\sqrt{1-x^2}}$	$\int n^{\sin^{-1}(x)} dx$
$n^{\cos^{-1}(x)}$	$-\frac{\log(n) n^{\cos^{-1}(x)}}{\sqrt{1-x^2}}$	$\int n^{\cos^{-1}(x)} dx$
$n^{\tan^{-1}(x)}$	$\frac{\log(n) n^{\tan^{-1}(x)}}{x^2+1}$	$\int n^{\tan^{-1}(x)} dx$
$n^{\csc^{-1}(x)}$	$-\frac{\log(n) n^{\csc^{-1}(x)}}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int n^{\csc^{-1}(x)} dx$
$n^{\sec^{-1}(x)}$	$\frac{\log(n) n^{\sec^{-1}(x)}}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int n^{\sec^{-1}(x)} dx$
$n^{\cot^{-1}(x)}$	$-\frac{\log(n) n^{\cot^{-1}(x)}}{x^2+1}$	$\int n^{\cot^{-1}(x)} dx$
$n^{\sinh(x)}$	$\log(n) \cosh(x) n^{\sinh(x)}$	$\int n^{\sinh(x)} dx$
$n^{\cosh(x)}$	$\log(n) \sinh(x) n^{\cosh(x)}$	$\int n^{\cosh(x)} dx$
$n^{\tanh(x)}$	$\log(n) \operatorname{sech}^2(x) n^{\tanh(x)}$	$\int n^{\tanh(x)} dx$
$n^{\operatorname{csch}(x)}$	$\log(n) \operatorname{coth}(x) \operatorname{csch}(x) (-n^{\operatorname{csch}(x)})$	$\int n^{\operatorname{csch}(x)} dx$
$n^{\operatorname{sech}(x)}$	$\log(n) \tanh(x) \operatorname{sech}(x) (-n^{\operatorname{sech}(x)})$	$\int n^{\operatorname{sech}(x)} dx$
$n^{\operatorname{coth}(x)}$	$\log(n) \operatorname{csch}^2(x) (-n^{\operatorname{coth}(x)})$	$\int n^{\operatorname{coth}(x)} dx$
$n^{\sinh^{-1}(x)}$	$\frac{\log(n) n^{\sinh^{-1}(x)}}{\sqrt{x^2+1}}$	$\int n^{\sinh^{-1}(x)} dx$
$n^{\cosh^{-1}(x)}$	$\frac{\log(n) n^{\cosh^{-1}(x)}}{\sqrt{x-1} \sqrt{x+1}}$	$\int n^{\cosh^{-1}(x)} dx$
$n^{\tanh^{-1}(x)}$	$\frac{\log(n) n^{\tanh^{-1}(x)}}{1-x^2}$	$\int n^{\tanh^{-1}(x)} dx$
$n^{\operatorname{csch}^{-1}(x)}$	$-\frac{\log(n) n^{\operatorname{csch}^{-1}(x)}}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\int n^{\operatorname{csch}^{-1}(x)} dx$
$n^{\operatorname{sech}^{-1}(x)}$	$-\frac{\log(n) n^{\operatorname{sech}^{-1}(x)}}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$\int n^{\operatorname{sech}^{-1}(x)} dx$
$n^{\operatorname{coth}^{-1}(x)}$	$\frac{\log(n) n^{\operatorname{coth}^{-1}(x)}}{1-x^2}$	$\int n^{\operatorname{coth}^{-1}(x)} dx$

$n^{\log(x)}$	$\frac{\log(n) n^{\log(x)}}{x}$	$\frac{x n^{\log(x)}}{\log(n)+1}$
$\frac{\log(n)}{n^{\log(x)}}$	$-\frac{\log^2(n) n^{\log(x)}}{x \log^2(x)}$	$\int n^{\log(x)} dx$
$\frac{1}{n^{\sqrt{x}}}$	$-\frac{\frac{1}{n^{\sqrt{x}}} \log(n)}{2 x^{3/2}}$	$n^{\frac{1}{\sqrt{x}}} \left(\sqrt{x} \log(n) + x \right) - \log^2(n) \operatorname{Ei}\left(\frac{\log(n)}{\sqrt{x}}\right)$
$n^{e^{-x}}$	$-e^{-x} n^{e^{-x}} \log(n)$	$-\operatorname{Ei}(e^{-x} \log(n))$
$\frac{1}{n^{x^2}}$	$-\frac{2 \frac{1}{n^{x^2}} \log(n)}{x^3}$	$x n^{\frac{1}{x^2}} - \sqrt{\pi} \sqrt{\log(n)} \operatorname{erfi}\left(\frac{\sqrt{\log(n)}}{x}\right)$
$\frac{1}{n^{x^3}}$	$-\frac{3 \frac{1}{n^{x^3}} \log(n)}{x^4}$	$x \left(n^{\frac{1}{x^3}} - \sqrt[3]{-\frac{\log(n)}{x^3}} \Gamma\left(\frac{2}{3}, -\frac{\log(n)}{x^3}\right) \right)$
$\frac{1}{n^{x^4}}$	$-\frac{4 \frac{1}{n^{x^4}} \log(n)}{x^5}$	$x \left(n^{\frac{1}{x^4}} - \sqrt[4]{-\frac{\log(n)}{x^4}} \Gamma\left(\frac{3}{4}, -\frac{\log(n)}{x^4}\right) \right)$
$n^{x^{-n}}$	$-n^{x^{-n}+1} x^{-n-1} \log(n)$	$\frac{x(-x^{-n} \log(n))^{1/n} \Gamma\left(-\frac{1}{n}, -x^{-n} \log(n)\right)}{n}$
$n^{n^{-x}}$	$-n^{n^{-x}-x} \log^2(n)$	$-\frac{\operatorname{Ei}(n^{-x} \log(n))}{\log(n)}$
$n^{\csc(x)}$	$\log(n) \cot(x) \csc(x) (-n^{\csc(x)})$	$\int n^{\csc(x)} dx$
$n^{\sec(x)}$	$\log(n) \tan(x) \sec(x) n^{\sec(x)}$	$\int n^{\sec(x)} dx$
$n^{\cot(x)}$	$\log(n) \csc^2(x) (-n^{\cot(x)})$	$\int n^{\cot(x)} dx$
$n^{\sin(x)}$	$\log(n) \cos(x) n^{\sin(x)}$	$\int n^{\sin(x)} dx$
$n^{\cos(x)}$	$\log(n) \sin(x) (-n^{\cos(x)})$	$\int n^{\cos(x)} dx$
$n^{\tan(x)}$	$\log(n) \sec^2(x) n^{\tan(x)}$	$\int n^{\tan(x)} dx$
$\frac{1}{n^{\sin^{-1}(x)}}$	$-\frac{\log(n) n^{\frac{1}{\sin^{-1}(x)}}}{\sqrt{1-x^2} \sin^{-1}(x)^2}$	$\int n^{\frac{1}{\sin^{-1}(x)}} dx$
$\frac{1}{n^{\cos^{-1}(x)}}$	$\frac{\log(n) n^{\frac{1}{\cos^{-1}(x)}}}{\sqrt{1-x^2} \cos^{-1}(x)^2}$	$\int n^{\frac{1}{\cos^{-1}(x)}} dx$
$\frac{1}{n^{\tan^{-1}(x)}}$	$-\frac{\log(n) n^{\frac{1}{\tan^{-1}(x)}}}{(x^2+1) \tan^{-1}(x)^2}$	$\int n^{\frac{1}{\tan^{-1}(x)}} dx$
$\frac{1}{n^{\csc^{-1}(x)}}$	$\frac{\log(n) n^{\frac{1}{\csc^{-1}(x)}}}{\sqrt{1-\frac{1}{x^2}} x^2 \csc^{-1}(x)^2}$	$\int n^{\frac{1}{\csc^{-1}(x)}} dx$
$\frac{1}{n^{\sec^{-1}(x)}}$	$-\frac{\log(n) n^{\frac{1}{\sec^{-1}(x)}}}{\sqrt{1-\frac{1}{x^2}} x^2 \sec^{-1}(x)^2}$	$\int n^{\frac{1}{\sec^{-1}(x)}} dx$
$\frac{1}{n^{\cot^{-1}(x)}}$	$\frac{\log(n) n^{\frac{1}{\cot^{-1}(x)}}}{(x^2+1) \cot^{-1}(x)^2}$	$\int n^{\frac{1}{\cot^{-1}(x)}} dx$
$n^{\operatorname{csch}(x)}$	$\log(n) \operatorname{coth}(x) \operatorname{csch}(x) (-n^{\operatorname{csch}(x)})$	$\int n^{\operatorname{csch}(x)} dx$
$n^{\operatorname{sech}(x)}$	$\log(n) \operatorname{tanh}(x) \operatorname{sech}(x) (-n^{\operatorname{sech}(x)})$	$\int n^{\operatorname{sech}(x)} dx$
$n^{\operatorname{coth}(x)}$	$\log(n) \operatorname{csch}^2(x) (-n^{\operatorname{coth}(x)})$	$\int n^{\operatorname{coth}(x)} dx$
$n^{\operatorname{sinh}(x)}$	$\log(n) \operatorname{cosh}(x) n^{\operatorname{sinh}(x)}$	$\int n^{\operatorname{sinh}(x)} dx$
$n^{\operatorname{cosh}(x)}$	$\log(n) \operatorname{sinh}(x) n^{\operatorname{cosh}(x)}$	$\int n^{\operatorname{cosh}(x)} dx$
$n^{\operatorname{tanh}(x)}$	$\log(n) \operatorname{sech}^2(x) n^{\operatorname{tanh}(x)}$	$\int n^{\operatorname{tanh}(x)} dx$
$\frac{1}{n^{\operatorname{sinh}^{-1}(x)}}$	$-\frac{\log(n) n^{\frac{1}{\operatorname{sinh}^{-1}(x)}}}{\sqrt{x^2+1} \operatorname{sinh}^{-1}(x)^2}$	$\int n^{\frac{1}{\operatorname{sinh}^{-1}(x)}} dx$

$\frac{1}{n^{\cosh^{-1}(x)}}$	$-\frac{\log(n) n^{\frac{1}{\cosh^{-1}(x)}}}{\sqrt{x-1} \sqrt{x+1} \cosh^{-1}(x)^2}$	$\int n^{\frac{1}{\cosh^{-1}(x)}} dx$
$\frac{1}{n^{\tanh^{-1}(x)}}$	$-\frac{\log(n) n^{\frac{1}{\tanh^{-1}(x)}}}{(1-x^2) \tanh^{-1}(x)^2}$	$\int n^{\frac{1}{\tanh^{-1}(x)}} dx$
$\frac{1}{n^{\operatorname{csch}^{-1}(x)}}$	$\frac{\log(n) n^{\frac{1}{\operatorname{csch}^{-1}(x)}}}{\sqrt{\frac{1}{x^2}+1} x^2 \operatorname{csch}^{-1}(x)^2}$	$\int n^{\frac{1}{\operatorname{csch}^{-1}(x)}} dx$
$\frac{1}{n^{\operatorname{sech}^{-1}(x)}}$	$\frac{\log(n) n^{\frac{1}{\operatorname{sech}^{-1}(x)}}}{x \sqrt{\frac{1-x}{x+1}} (x+1) \operatorname{sech}^{-1}(x)^2}$	$\int n^{\frac{1}{\operatorname{sech}^{-1}(x)}} dx$
$\frac{1}{n^{\operatorname{coth}^{-1}(x)}}$	$-\frac{\log(n) n^{\frac{1}{\operatorname{coth}^{-1}(x)}}}{(1-x^2) \operatorname{coth}^{-1}(x)^2}$	$\int n^{\frac{1}{\operatorname{coth}^{-1}(x)}} dx$
$\frac{1}{n^{\log(x)}}$	$-\frac{\log(n) n^{\frac{1}{\log(x)}}}{x \log^2(x)}$	$\int n^{\frac{1}{\log(x)}} dx$
x	1	$\frac{x^2}{2}$
$\sin(\sqrt{x})$	$\frac{\cos(\sqrt{x})}{2\sqrt{x}}$	$2 \sin(\sqrt{x}) - 2\sqrt{x} \cos(\sqrt{x})$
$\sin(e^x)$	$e^x \cos(e^x)$	$\operatorname{Si}(e^x)$
$\sin(x^2)$	$2x \cos(x^2)$	$\sqrt{\frac{\pi}{2}} S\left(\sqrt{\frac{2}{\pi}} x\right)$
$\sin(x^3)$	$3x^2 \cos(x^3)$	$-\frac{1}{2} i \left(\frac{x \Gamma(\frac{1}{3}, i x^3)}{3 \sqrt[3]{i x^3}} - \frac{x \Gamma(\frac{1}{3}, -i x^3)}{3 \sqrt[3]{-i x^3}} \right)$
$\sin(x^4)$	$4x^3 \cos(x^4)$	$-\frac{1}{2} i \left(\frac{x \Gamma(\frac{1}{4}, i x^4)}{4 \sqrt[4]{i x^4}} - \frac{x \Gamma(\frac{1}{4}, -i x^4)}{4 \sqrt[4]{-i x^4}} \right)$
$\sin(x^n)$	$n x^{n-1} \cos(x^n)$	$-\frac{1}{2n} i x \left((i x^n)^{-1/n} \Gamma\left(\frac{1}{n}, i x^n\right) - (-i x^n)^{-1/n} \Gamma\left(\frac{1}{n}, -i x^n\right) \right)$
$\sin(n^x)$	$n^x \log(n) \cos(n^x)$	$\frac{\operatorname{Si}(n^x)}{\log(n)}$
$\sin(n^{1/x})$	$-\frac{n^{1/x} \log(n) \cos(n^{1/x})}{x^2}$	$\int \sin(n^{1/x}) dx$
$\sin(\cos(x))$	$\sin(x) (-\cos(\cos(x)))$	$\int \sin(\cos(x)) dx$
$\sin(\tan(x))$	$\sec^2(x) \cos(\tan(x))$	$\int \sin(\tan(x)) dx$
$\sin(\csc(x))$	$\cot(x) \csc(x) (-\cos(\csc(x)))$	$\int \sin(\csc(x)) dx$
$\sin(\sec(x))$	$\tan(x) \sec(x) \cos(\sec(x))$	$\int \sin(\sec(x)) dx$
$\sin(\cot(x))$	$\csc^2(x) (-\cos(\cot(x)))$	$\int \sin(\cot(x)) dx$
x	1	$\frac{x^2}{2}$
$\sqrt{1-x^2}$	$-\frac{x}{\sqrt{1-x^2}}$	$\frac{1}{2} \left(\sqrt{1-x^2} x + \sin^{-1}(x) \right)$
$\frac{x}{\sqrt{x^2+1}}$	$\frac{1}{\sqrt{x^2+1}} - \frac{x^2}{(x^2+1)^{3/2}}$	$\sqrt{x^2+1}$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\sqrt{1-\frac{1}{x^2}}$	$\frac{1}{\sqrt{1-\frac{1}{x^2}} x^3}$	$\sqrt{\frac{x^2-1}{x^2}} x + \sin^{-1}\left(\frac{1}{x}\right)$
$\frac{1}{\sqrt{\frac{1}{x^2}+1} x}$	$\frac{1}{\left(\frac{1}{x^2}+1\right)^{3/2} x^4} - \frac{1}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\log\left(x \left(\sqrt{\frac{x^2+1}{x^2}} + 1 \right)\right)$

$\sin(\sinh(x))$	$\cosh(x) \cos(\sinh(x))$	$\int \sin(\sinh(x)) dx$
$\sin(\cosh(x))$	$\sinh(x) \cos(\cosh(x))$	$\int \sin(\cosh(x)) dx$
$\sin(\tanh(x))$	$\operatorname{sech}^2(x) \cos(\tanh(x))$	$\int \sin(\tanh(x)) dx$
$\sin(\operatorname{csch}(x))$	$\operatorname{coth}(x) \operatorname{csch}(x) (-\cos(\operatorname{csch}(x)))$	$\int \sin(\operatorname{csch}(x)) dx$
$\sin(\operatorname{sech}(x))$	$\tanh(x) \operatorname{sech}(x) (-\cos(\operatorname{sech}(x)))$	$\int \sin(\operatorname{sech}(x)) dx$
$\sin(\operatorname{coth}(x))$	$\operatorname{csch}^2(x) (-\cos(\operatorname{coth}(x)))$	$\int \sin(\operatorname{coth}(x)) dx$
$\sin(\sinh^{-1}(x))$	$\frac{\cos(\sinh^{-1}(x))}{\sqrt{x^2+1}}$	$\int \sin(\sinh^{-1}(x)) dx$
$\sin(\cosh^{-1}(x))$	$\frac{\cos(\cosh^{-1}(x))}{\sqrt{x-1} \sqrt{x+1}}$	$\int \sin(\cosh^{-1}(x)) dx$
$\sin(\tanh^{-1}(x))$	$\frac{\cos(\tanh^{-1}(x))}{1-x^2}$	$\int \sin(\tanh^{-1}(x)) dx$
$\sin(\operatorname{csch}^{-1}(x))$	$-\frac{\cos(\operatorname{csch}^{-1}(x))}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\int \sin(\operatorname{csch}^{-1}(x)) dx$
$\sin(\operatorname{sech}^{-1}(x))$	$-\frac{\cos(\operatorname{sech}^{-1}(x))}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$\int \sin(\operatorname{sech}^{-1}(x)) dx$
$\sin(\operatorname{coth}^{-1}(x))$	$\frac{\cos(\operatorname{coth}^{-1}(x))}{1-x^2}$	$\int \sin(\operatorname{coth}^{-1}(x)) dx$
$\sin(\log(x))$	$\frac{\cos(\log(x))}{x}$	$\frac{1}{2} x \sin(\log(x)) - \frac{1}{2} x \cos(\log(x))$
$\sin\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n) \cos\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \sin\left(\frac{\log(n)}{\log(x)}\right) dx$
$\cos(\sqrt{x})$	$-\frac{\sin(\sqrt{x})}{2\sqrt{x}}$	$2\sqrt{x} \sin(\sqrt{x}) + 2\cos(\sqrt{x})$
$\cos(e^x)$	$-e^x \sin(e^x)$	$\operatorname{Ci}(e^x)$
$\cos(x^2)$	$-2x \sin(x^2)$	$\sqrt{\frac{\pi}{2}} C\left(\sqrt{\frac{2}{\pi}} x\right)$
$\cos(x^3)$	$-3x^2 \sin(x^3)$	$-\frac{1}{6\sqrt[3]{x^6}} x \left(\sqrt[3]{-ix^3} \Gamma\left(\frac{1}{3}, ix^3\right) + \sqrt[3]{ix^3} \Gamma\left(\frac{1}{3}, -ix^3\right) \right)$
$\cos(x^4)$	$-4x^3 \sin(x^4)$	$-\frac{1}{8\sqrt[4]{x^8}} x \left(\sqrt[4]{-ix^4} \Gamma\left(\frac{1}{4}, ix^4\right) + \sqrt[4]{ix^4} \Gamma\left(\frac{1}{4}, -ix^4\right) \right)$
$\cos(x^n)$	$-n x^{n-1} \sin(x^n)$	$-\frac{1}{2n} x (x^{2n})^{-1/n} \left((-ix^n)^{1/n} \Gamma\left(\frac{1}{n}, ix^n\right) + (ix^n)^{1/n} \Gamma\left(\frac{1}{n}, -ix^n\right) \right)$
$\cos(n^x)$	$-n^x \log(n) \sin(n^x)$	$\frac{\operatorname{Ci}(n^x)}{\log(n)}$
$\cos(n^{1/x})$	$\frac{n^{1/x} \log(n) \sin(n^{1/x})}{x^2}$	$\int \cos(n^{1/x}) dx$
$\cos(\sin(x))$	$\sin(\sin(x)) (-\cos(x))$	$\int \cos(\sin(x)) dx$
$\cos(\tan(x))$	$-\sec^2(x) \sin(\tan(x))$	$\int \cos(\tan(x)) dx$
$\cos(\csc(x))$	$\cot(x) \csc(x) \sin(\csc(x))$	$\int \cos(\csc(x)) dx$
$\cos(\sec(x))$	$\tan(x) (-\sec(x)) \sin(\sec(x))$	$\int \cos(\sec(x)) dx$
$\cos(\cot(x))$	$\operatorname{csc}^2(x) \sin(\cot(x))$	$\int \cos(\cot(x)) dx$
$\sqrt{1-x^2}$	$-\frac{x}{\sqrt{1-x^2}}$	$\frac{1}{2} \left(\sqrt{1-x^2} x + \sin^{-1}(x) \right)$
x	1	$\frac{x^2}{2}$
$\frac{1}{\sqrt{x^2+1}}$	$-\frac{x}{(x^2+1)^{3/2}}$	$\sin^{-1}(x)$

$\sqrt{1 - \frac{1}{x^2}}$	$\frac{1}{\sqrt{1 - \frac{1}{x^2}} x^3}$	$\sqrt{\frac{x^2-1}{x^2}} x + \sin^{-1}\left(\frac{1}{x}\right)$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\frac{1}{\sqrt{\frac{1}{x^2}+1}}$	$\frac{1}{\left(\frac{1}{x^2}+1\right)^{3/2} x^3}$	$\sqrt{\frac{1}{x^2} + 1} x$
$\cos(\sinh(x))$	$-\cosh(x) \sin(\sinh(x))$	$\int \cos(\sinh(x)) dx$
$\cos(\cosh(x))$	$\sinh(x) (-\sin(\cosh(x)))$	$\int \cos(\cosh(x)) dx$
$\cos(\tanh(x))$	$-\operatorname{sech}^2(x) \sin(\tanh(x))$	$\int \cos(\tanh(x)) dx$
$\cos(\operatorname{csch}(x))$	$\operatorname{coth}(x) \operatorname{csch}(x) \sin(\operatorname{csch}(x))$	$\int \cos(\operatorname{csch}(x)) dx$
$\cos(\operatorname{sech}(x))$	$\tanh(x) \operatorname{sech}(x) \sin(\operatorname{sech}(x))$	$\int \cos(\operatorname{sech}(x)) dx$
$\cos(\operatorname{coth}(x))$	$\operatorname{csch}^2(x) \sin(\operatorname{coth}(x))$	$\int \cos(\operatorname{coth}(x)) dx$
$\cos(\sinh^{-1}(x))$	$-\frac{\sin(\sinh^{-1}(x))}{\sqrt{x^2+1}}$	$\int \cos(\sinh^{-1}(x)) dx$
$\cos(\cosh^{-1}(x))$	$-\frac{\sin(\cosh^{-1}(x))}{\sqrt{x-1} \sqrt{x+1}}$	$\int \cos(\cosh^{-1}(x)) dx$
$\cos(\tanh^{-1}(x))$	$-\frac{\sin(\tanh^{-1}(x))}{1-x^2}$	$\int \cos(\tanh^{-1}(x)) dx$
$\cos(\operatorname{csch}^{-1}(x))$	$\frac{\sin(\operatorname{csch}^{-1}(x))}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\int \cos(\operatorname{csch}^{-1}(x)) dx$
$\cos(\operatorname{sech}^{-1}(x))$	$\frac{\sin(\operatorname{sech}^{-1}(x))}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$\int \cos(\operatorname{sech}^{-1}(x)) dx$
$\cos(\operatorname{coth}^{-1}(x))$	$-\frac{\sin(\operatorname{coth}^{-1}(x))}{1-x^2}$	$\int \cos(\operatorname{coth}^{-1}(x)) dx$
$\cos(\log(x))$	$-\frac{\sin(\log(x))}{x}$	$\frac{1}{2} x \sin(\log(x)) + \frac{1}{2} x \cos(\log(x))$
$\cos\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{\log(n) \sin\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \cos\left(\frac{\log(n)}{\log(x)}\right) dx$
$\tan(\sqrt{x})$	$\frac{\sec^2(\sqrt{x})}{2\sqrt{x}}$	$i \left(\operatorname{Li}_2(-e^{2i\sqrt{x}}) + x + 2i\sqrt{x} \log(1 + e^{2i\sqrt{x}}) \right)$
$\tan(e^x)$	$e^x \sec^2(e^x)$	$\int \tan(e^x) dx$
$\tan(x^2)$	$2x \sec^2(x^2)$	$\int \tan(x^2) dx$
$\tan(x^3)$	$3x^2 \sec^2(x^3)$	$\int \tan(x^3) dx$
$\tan(x^4)$	$4x^3 \sec^2(x^4)$	$\int \tan(x^4) dx$
$\tan(x^n)$	$n x^{n-1} \sec^2(x^n)$	$\int \tan(x^n) dx$
$\tan(n^x)$	$n^x \log(n) \sec^2(n^x)$	$\int \tan(n^x) dx$
$\tan(n^{1/x})$	$-\frac{n^{1/x} \log(n) \sec^2(n^{1/x})}{x^2}$	$\int \tan(n^{1/x}) dx$
$\tan(\sin(x))$	$\cos(x) \sec^2(\sin(x))$	$\int \tan(\sin(x)) dx$
$\tan(\cos(x))$	$\sin(x) (-\sec^2(\cos(x)))$	$\int \tan(\cos(x)) dx$
$\tan(\operatorname{csc}(x))$	$-\cot(x) \operatorname{csc}(x) \sec^2(\operatorname{csc}(x))$	$\int \tan(\operatorname{csc}(x)) dx$
$\tan(\operatorname{sec}(x))$	$\tan(x) \operatorname{sec}(x) \sec^2(\operatorname{sec}(x))$	$\int \tan(\operatorname{sec}(x)) dx$
$\tan(\operatorname{cot}(x))$	$-\operatorname{csc}^2(x) \sec^2(\operatorname{cot}(x))$	$\int \tan(\operatorname{cot}(x)) dx$
$\frac{x}{\sqrt{1-x^2}}$	$\frac{x^2}{(1-x^2)^{3/2}} + \frac{1}{\sqrt{1-x^2}}$	$-\sqrt{1-x^2}$

$\frac{\sqrt{1-x^2}}{x}$	$-\frac{\sqrt{1-x^2}}{x^2} - \frac{1}{\sqrt{1-x^2}}$	$\sqrt{1-x^2} - \log\left(\sqrt{1-x^2} + 1\right) + \log(x)$
x	1	$\frac{x^2}{2}$
$\frac{1}{\sqrt{1-\frac{1}{x^2}} x}$	$-\frac{1}{x^2 \sqrt{1-\frac{1}{x^2}}} - \frac{1}{x^4 \left(1-\frac{1}{x^2}\right)^{3/2}}$	$\log\left(x \left(\sqrt{\frac{x^2-1}{x^2} + 1}\right)\right)$
$\sqrt{1-\frac{1}{x^2}} x$	$\sqrt{1-\frac{1}{x^2}} + \frac{1}{x^2 \sqrt{1-\frac{1}{x^2}}}$	$\frac{1}{2} \sqrt{1-\frac{1}{x^2}} x^2 - \frac{1}{2} \log\left(\left(\sqrt{1-\frac{1}{x^2}} + 1\right) x\right)$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\tan(\sinh(x))$	$\cosh(x) \sec^2(\sinh(x))$	$\int \tan(\sinh(x)) dx$
$\tan(\cosh(x))$	$\sinh(x) \sec^2(\cosh(x))$	$\int \tan(\cosh(x)) dx$
$\tan(\tanh(x))$	$\operatorname{sech}^2(x) \sec^2(\tanh(x))$	$\int \tan(\tanh(x)) dx$
$\tan(\operatorname{csch}(x))$	$-\operatorname{coth}(x) \operatorname{csch}(x) \sec^2(\operatorname{csch}(x))$	$\int \tan(\operatorname{csch}(x)) dx$
$\tan(\operatorname{sech}(x))$	$\tanh(x) \operatorname{sech}(x) (-\sec^2(\operatorname{sech}(x)))$	$\int \tan(\operatorname{sech}(x)) dx$
$\tan(\operatorname{coth}(x))$	$-\operatorname{csch}^2(x) \sec^2(\operatorname{coth}(x))$	$\int \tan(\operatorname{coth}(x)) dx$
$\tan(\sinh^{-1}(x))$	$\frac{\sec^2(\sinh^{-1}(x))}{\sqrt{x^2+1}}$	$\int \tan(\sinh^{-1}(x)) dx$
$\tan(\cosh^{-1}(x))$	$\frac{\sec^2(\cosh^{-1}(x))}{\sqrt{x-1} \sqrt{x+1}}$	$\int \tan(\cosh^{-1}(x)) dx$
$\tan(\tanh^{-1}(x))$	$\frac{\sec^2(\tanh^{-1}(x))}{1-x^2}$	$\int \tan(\tanh^{-1}(x)) dx$
$\tan(\operatorname{csch}^{-1}(x))$	$-\frac{\sec^2(\operatorname{csch}^{-1}(x))}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\int \tan(\operatorname{csch}^{-1}(x)) dx$
$\tan(\operatorname{sech}^{-1}(x))$	$-\frac{\sec^2(\operatorname{sech}^{-1}(x))}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$\int \tan(\operatorname{sech}^{-1}(x)) dx$
$\tan(\operatorname{coth}^{-1}(x))$	$\frac{\sec^2(\operatorname{coth}^{-1}(x))}{1-x^2}$	$\int \tan(\operatorname{coth}^{-1}(x)) dx$
$\tan(\log(x))$	$\frac{\sec^2(\log(x))}{x}$	$\int \tan(\log(x)) dx$
$\tan\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n) \sec^2\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \tan\left(\frac{\log(n)}{\log(x)}\right) dx$
$\csc(\sqrt{x})$	$-\frac{\cot(\sqrt{x}) \csc(\sqrt{x})}{2\sqrt{x}}$	$2\left(i \left(\operatorname{Li}_2(-e^{i\sqrt{x}}) - \operatorname{Li}_2(e^{i\sqrt{x}})\right) + \sqrt{x} \left(\log(1 - e^{i\sqrt{x}}) - \log(1 + e^{i\sqrt{x}})\right)\right)$
$\csc(e^x)$	$-e^x \cot(e^x) \csc(e^x)$	$\int \csc(e^x) dx$
$\csc(x^2)$	$-2x \cot(x^2) \csc(x^2)$	$\int \csc(x^2) dx$
$\csc(x^3)$	$-3x^2 \cot(x^3) \csc(x^3)$	$\int \csc(x^3) dx$
$\csc(x^4)$	$-4x^3 \cot(x^4) \csc(x^4)$	$\int \csc(x^4) dx$
$\csc(x^n)$	$-n x^{n-1} \cot(x^n) \csc(x^n)$	$\int \csc(x^n) dx$
$\csc(n^x)$	$-n^x \log(n) \cot(n^x) \csc(n^x)$	$\int \csc(n^x) dx$
$\csc(n^{1/x})$	$\frac{n^{1/x} \log(n) \cot(n^{1/x}) \csc(n^{1/x})}{x^2}$	$\int \csc(n^{1/x}) dx$
$\csc(\sin(x))$	$-\cos(x) \cot(\sin(x)) \csc(\sin(x))$	$\int \csc(\sin(x)) dx$
$\csc(\cos(x))$	$\sin(x) \cot(\cos(x)) \csc(\cos(x))$	$\int \csc(\cos(x)) dx$
$\csc(\tan(x))$	$\sec^2(x) (-\cot(\tan(x))) \csc(\tan(x))$	$\int \csc(\tan(x)) dx$

$\csc(\sec(x))$	$\tan(x) \sec(x) (-\cot(\sec(x))) \csc(\sec(x))$	$\int \csc(\sec(x)) dx$
$\csc(\cot(x))$	$\cot(\cot(x)) \csc^2(x) \csc(\cot(x))$	$\int \csc(\cot(x)) dx$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\frac{1}{\sqrt{1-x^2}}$	$\frac{x}{(1-x^2)^{3/2}}$	$\sin^{-1}(x)$
$\frac{\sqrt{x^2+1}}{x}$	$\frac{1}{\sqrt{x^2+1}} - \frac{\sqrt{x^2+1}}{x^2}$	$\sqrt{x^2+1} - \log\left(\sqrt{x^2+1} + 1\right) + \log(x)$
x	1	$\frac{x^2}{2}$
$\frac{1}{\sqrt{1-\frac{1}{x^2}}}$	$-\frac{1}{\left(1-\frac{1}{x^2}\right)^{3/2} x^3}$	$x \sqrt{\frac{x^2-1}{x^2}}$
$\sqrt{\frac{1}{x^2} + 1} x$	$\sqrt{\frac{1}{x^2} + 1} - \frac{1}{\sqrt{\frac{1}{x^2} + 1} x^2}$	$\frac{1}{2} \left(\sqrt{\frac{1}{x^2} + 1} x^2 + \log\left(\left(\sqrt{\frac{1}{x^2} + 1} + 1\right) x\right) \right)$
$\csc(\sinh(x))$	$-\cosh(x) \cot(\sinh(x)) \csc(\sinh(x))$	$\int \csc(\sinh(x)) dx$
$\csc(\cosh(x))$	$\sinh(x) (-\cot(\cosh(x))) \csc(\cosh(x))$	$\int \csc(\cosh(x)) dx$
$\csc(\tanh(x))$	$\operatorname{sech}^2(x) (-\cot(\tanh(x))) \csc(\tanh(x))$	$\int \csc(\tanh(x)) dx$
$\csc(\operatorname{csch}(x))$	$\operatorname{coth}(x) \operatorname{csch}(x) \cot(\operatorname{csch}(x)) \csc(\operatorname{csch}(x))$	$\int \csc(\operatorname{csch}(x)) dx$
$\csc(\operatorname{sech}(x))$	$\tanh(x) \operatorname{sech}(x) \cot(\operatorname{sech}(x)) \csc(\operatorname{sech}(x))$	$\int \csc(\operatorname{sech}(x)) dx$
$\csc(\operatorname{coth}(x))$	$\operatorname{csch}^2(x) \cot(\operatorname{coth}(x)) \csc(\operatorname{coth}(x))$	$\int \csc(\operatorname{coth}(x)) dx$
$\csc(\sinh^{-1}(x))$	$-\frac{\cot(\sinh^{-1}(x)) \csc(\sinh^{-1}(x))}{\sqrt{x^2+1}}$	$\int \csc(\sinh^{-1}(x)) dx$
$\csc(\cosh^{-1}(x))$	$-\frac{\cot(\cosh^{-1}(x)) \csc(\cosh^{-1}(x))}{\sqrt{x-1} \sqrt{x+1}}$	$\int \csc(\cosh^{-1}(x)) dx$
$\csc(\tanh^{-1}(x))$	$-\frac{\cot(\tanh^{-1}(x)) \csc(\tanh^{-1}(x))}{1-x^2}$	$\int \csc(\tanh^{-1}(x)) dx$
$\csc(\operatorname{csch}^{-1}(x))$	$\frac{\cot(\operatorname{csch}^{-1}(x)) \csc(\operatorname{csch}^{-1}(x))}{\sqrt{\frac{1}{x^2} + 1} x^2}$	$\int \csc(\operatorname{csch}^{-1}(x)) dx$
$\csc(\operatorname{sech}^{-1}(x))$	$\frac{\cot(\operatorname{sech}^{-1}(x)) \csc(\operatorname{sech}^{-1}(x))}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$\int \csc(\operatorname{sech}^{-1}(x)) dx$
$\csc(\operatorname{coth}^{-1}(x))$	$-\frac{\cot(\operatorname{coth}^{-1}(x)) \csc(\operatorname{coth}^{-1}(x))}{1-x^2}$	$\int \csc(\operatorname{coth}^{-1}(x)) dx$
$\csc(\log(x))$	$-\frac{\cot(\log(x)) \csc(\log(x))}{x}$	$\int \csc(\log(x)) dx$
$\csc\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{\log(n) \cot\left(\frac{\log(n)}{\log(x)}\right) \csc\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \csc\left(\frac{\log(n)}{\log(x)}\right) dx$
$\sec(\sqrt{x})$	$\frac{\tan(\sqrt{x}) \sec(\sqrt{x})}{2\sqrt{x}}$	$2 \left(i \left(\operatorname{Li}_2(-i e^{i\sqrt{x}}) - \operatorname{Li}_2(i e^{i\sqrt{x}}) \right) + \sqrt{x} \left(\log(1 - i e^{i\sqrt{x}}) - \log(1 + i e^{i\sqrt{x}}) \right) \right)$
$\sec(e^x)$	$e^x \tan(e^x) \sec(e^x)$	$\int \sec(e^x) dx$
$\sec(x^2)$	$2x \tan(x^2) \sec(x^2)$	$\int \sec(x^2) dx$
$\sec(x^3)$	$3x^2 \tan(x^3) \sec(x^3)$	$\int \sec(x^3) dx$
$\sec(x^4)$	$4x^3 \tan(x^4) \sec(x^4)$	$\int \sec(x^4) dx$
$\sec(x^n)$	$n x^{n-1} \tan(x^n) \sec(x^n)$	$\int \sec(x^n) dx$
$\sec(n^x)$	$n^x \log(n) \tan(n^x) \sec(n^x)$	$\int \sec(n^x) dx$
$\sec(n^{1/x})$	$-\frac{n^{1/x} \log(n) \tan(n^{1/x}) \sec(n^{1/x})}{x^2}$	$\int \sec(n^{1/x}) dx$

$\sec(\sin(x))$	$\cos(x) \tan(\sin(x)) \sec(\sin(x))$	$\int \sec(\sin(x)) dx$
$\sec(\cos(x))$	$\sin(x) \tan(\cos(x)) (-\sec(\cos(x)))$	$\int \sec(\cos(x)) dx$
$\sec(\tan(x))$	$\tan(\tan(x)) \sec^2(x) \sec(\tan(x))$	$\int \sec(\tan(x)) dx$
$\sec(\csc(x))$	$-\cot(x) \csc(x) \tan(\csc(x)) \sec(\csc(x))$	$\int \sec(\csc(x)) dx$
$\sec(\cot(x))$	$-\csc^2(x) \tan(\cot(x)) \sec(\cot(x))$	$\int \sec(\cot(x)) dx$
$\frac{1}{\sqrt{1-x^2}}$	$\frac{x}{(1-x^2)^{3/2}}$	$\sin^{-1}(x)$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\sqrt{x^2+1}$	$\frac{x}{\sqrt{x^2+1}}$	$\frac{1}{2} \left(\sqrt{x^2+1} x + \sinh^{-1}(x) \right)$
$\frac{1}{\sqrt{1-\frac{1}{x^2}}}$	$-\frac{1}{\left(1-\frac{1}{x^2}\right)^{3/2}} x^3$	$x \sqrt{\frac{x^2-1}{x^2}}$
x	1	$\frac{x^2}{2}$
$\sqrt{\frac{1}{x^2}+1}$	$-\frac{1}{\sqrt{\frac{1}{x^2}+1} x^3}$	$\sqrt{\frac{1}{x^2}+1} x - \sinh^{-1}\left(\frac{1}{x}\right)$
$\sec(\sinh(x))$	$\cosh(x) \sec(\sinh(x)) \tan(\sinh(x))$	$\int \sec(\sinh(x)) dx$
$\sec(\cosh(x))$	$\sinh(x) \tan(\cosh(x)) \sec(\cosh(x))$	$\int \sec(\cosh(x)) dx$
$\sec(\tanh(x))$	$\operatorname{sech}^2(x) \tan(\tanh(x)) \sec(\tanh(x))$	$\int \sec(\tanh(x)) dx$
$\sec(\operatorname{csch}(x))$	$-\operatorname{coth}(x) \operatorname{csch}(x) \tan(\operatorname{csch}(x)) \sec(\operatorname{csch}(x))$	$\int \sec(\operatorname{csch}(x)) dx$
$\sec(\operatorname{sech}(x))$	$\tanh(x) \operatorname{sech}(x) (-\sec(\operatorname{sech}(x))) \tan(\operatorname{sech}(x))$	$\int \sec(\operatorname{sech}(x)) dx$
$\sec(\operatorname{coth}(x))$	$-\operatorname{csch}^2(x) \tan(\operatorname{coth}(x)) \sec(\operatorname{coth}(x))$	$\int \sec(\operatorname{coth}(x)) dx$
$\sec(\sinh^{-1}(x))$	$\frac{\sec(\sinh^{-1}(x)) \tan(\sinh^{-1}(x))}{\sqrt{x^2+1}}$	$\int \sec(\sinh^{-1}(x)) dx$
$\sec(\cosh^{-1}(x))$	$\frac{\tan(\cosh^{-1}(x)) \sec(\cosh^{-1}(x))}{\sqrt{x-1} \sqrt{x+1}}$	$\int \sec(\cosh^{-1}(x)) dx$
$\sec(\tanh^{-1}(x))$	$\frac{\tan(\tanh^{-1}(x)) \sec(\tanh^{-1}(x))}{1-x^2}$	$\int \sec(\tanh^{-1}(x)) dx$
$\sec(\operatorname{csch}^{-1}(x))$	$-\frac{\tan(\operatorname{csch}^{-1}(x)) \sec(\operatorname{csch}^{-1}(x))}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\int \sec(\operatorname{csch}^{-1}(x)) dx$
$\sec(\operatorname{sech}^{-1}(x))$	$-\frac{\sec(\operatorname{sech}^{-1}(x)) \tan(\operatorname{sech}^{-1}(x))}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$\int \sec(\operatorname{sech}^{-1}(x)) dx$
$\sec(\operatorname{coth}^{-1}(x))$	$\frac{\tan(\operatorname{coth}^{-1}(x)) \sec(\operatorname{coth}^{-1}(x))}{1-x^2}$	$\int \sec(\operatorname{coth}^{-1}(x)) dx$
$\sec(\log(x))$	$\frac{\tan(\log(x)) \sec(\log(x))}{x}$	$\int \sec(\log(x)) dx$
$\sec\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n) \tan\left(\frac{\log(n)}{\log(x)}\right) \sec\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \sec\left(\frac{\log(n)}{\log(x)}\right) dx$
$\cot(\sqrt{x})$	$-\frac{\csc^2(\sqrt{x})}{2\sqrt{x}}$	$2 \left(\sqrt{x} \log(1 - e^{2i\sqrt{x}}) - \frac{1}{2} i \left(x + \operatorname{Li}_2(e^{2i\sqrt{x}}) \right) \right)$
$\cot(e^x)$	$-e^x \csc^2(e^x)$	$\int \cot(e^x) dx$
$\cot(x^2)$	$-2x \csc^2(x^2)$	$\int \cot(x^2) dx$
$\cot(x^3)$	$-3x^2 \csc^2(x^3)$	$\int \cot(x^3) dx$
$\cot(x^4)$	$-4x^3 \csc^2(x^4)$	$\int \cot(x^4) dx$
$\cot(x^n)$	$-n x^{n-1} \csc^2(x^n)$	$\int \cot(x^n) dx$

$\cot(n^x)$	$-n^x \log(n) \csc^2(n^x)$	$\int \cot(n^x) dx$
$\cot(n^{1/x})$	$\frac{n^{1/x} \log(n) \csc^2(n^{1/x})}{x^2}$	$\int \cot(n^{1/x}) dx$
$\cot(\sin(x))$	$-\cos(x) \csc^2(\sin(x))$	$\int \cot(\sin(x)) dx$
$\cot(\cos(x))$	$\sin(x) \csc^2(\cos(x))$	$\int \cot(\cos(x)) dx$
$\cot(\tan(x))$	$\sec^2(x) (-\csc^2(\tan(x)))$	$\int \cot(\tan(x)) dx$
$\cot(\csc(x))$	$\cot(x) \csc(x) \csc^2(\csc(x))$	$\int \cot(\csc(x)) dx$
$\cot(\sec(x))$	$\tan(x) \sec(x) (-\csc^2(\sec(x)))$	$\int \cot(\sec(x)) dx$
$\frac{\sqrt{1-x^2}}{x}$	$-\frac{\sqrt{1-x^2}}{x^2} - \frac{1}{\sqrt{1-x^2}}$	$\sqrt{1-x^2} - \log\left(\sqrt{1-x^2} + 1\right) + \log(x)$
$\frac{x}{\sqrt{1-x^2}}$	$\frac{x^2}{(1-x^2)^{3/2}} + \frac{1}{\sqrt{1-x^2}}$	$-\sqrt{1-x^2}$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\sqrt{1 - \frac{1}{x^2}} x$	$\sqrt{1 - \frac{1}{x^2}} + \frac{1}{x^2 \sqrt{1 - \frac{1}{x^2}}}$	$\frac{1}{2} \sqrt{1 - \frac{1}{x^2}} x^2 - \frac{1}{2} \log\left(\left(\sqrt{1 - \frac{1}{x^2}} + 1\right) x\right)$
$\frac{1}{\sqrt{1 - \frac{1}{x^2}} x}$	$-\frac{1}{x^2 \sqrt{1 - \frac{1}{x^2}}} - \frac{1}{x^4 \left(1 - \frac{1}{x^2}\right)^{3/2}}$	$\log\left(x \left(\sqrt{\frac{x^2-1}{x^2}} + 1\right)\right)$
x	1	$\frac{x^2}{2}$
$\cot(\sinh(x))$	$-\cosh(x) \csc^2(\sinh(x))$	$\int \cot(\sinh(x)) dx$
$\cot(\cosh(x))$	$\sinh(x) (-\csc^2(\cosh(x)))$	$\int \cot(\cosh(x)) dx$
$\cot(\tanh(x))$	$\operatorname{sech}^2(x) (-\csc^2(\tanh(x)))$	$\int \cot(\tanh(x)) dx$
$\cot(\operatorname{csch}(x))$	$\operatorname{coth}(x) \operatorname{csch}(x) \csc^2(\operatorname{csch}(x))$	$\int \cot(\operatorname{csch}(x)) dx$
$\cot(\operatorname{sech}(x))$	$\tanh(x) \operatorname{sech}(x) \csc^2(\operatorname{sech}(x))$	$\int \cot(\operatorname{sech}(x)) dx$
$\cot(\operatorname{coth}(x))$	$\operatorname{csch}^2(x) \csc^2(\operatorname{coth}(x))$	$\int \cot(\operatorname{coth}(x)) dx$
$\cot(\sinh^{-1}(x))$	$-\frac{\csc^2(\sinh^{-1}(x))}{\sqrt{x^2+1}}$	$\int \cot(\sinh^{-1}(x)) dx$
$\cot(\cosh^{-1}(x))$	$-\frac{\csc^2(\cosh^{-1}(x))}{\sqrt{x-1} \sqrt{x+1}}$	$\int \cot(\cosh^{-1}(x)) dx$
$\cot(\tanh^{-1}(x))$	$-\frac{\csc^2(\tanh^{-1}(x))}{1-x^2}$	$\int \cot(\tanh^{-1}(x)) dx$
$\cot(\operatorname{csch}^{-1}(x))$	$\frac{\csc^2(\operatorname{csch}^{-1}(x))}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\int \cot(\operatorname{csch}^{-1}(x)) dx$
$\cot(\operatorname{sech}^{-1}(x))$	$\frac{\csc^2(\operatorname{sech}^{-1}(x))}{x \sqrt{\frac{1-x}{x+1}} (x+1)}$	$\int \cot(\operatorname{sech}^{-1}(x)) dx$
$\cot(\operatorname{coth}^{-1}(x))$	$-\frac{\csc^2(\operatorname{coth}^{-1}(x))}{1-x^2}$	$\int \cot(\operatorname{coth}^{-1}(x)) dx$
$\cot(\log(x))$	$-\frac{\csc^2(\log(x))}{x}$	$\int \cot(\log(x)) dx$
$\cot\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{\log(n) \csc^2\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \cot\left(\frac{\log(n)}{\log(x)}\right) dx$
$\sin^{-1}(\sqrt{x})$	$\frac{1}{2 \sqrt{1-x} \sqrt{x}}$	$\frac{1}{2} \left(\sqrt{-(x-1)x} + (2x-1) \sin^{-1}(\sqrt{x})\right)$

$\sin^{-1}(e^x)$	$\frac{e^x}{\sqrt{1-e^{2x}}}$	$x \sin^{-1}(e^x) + \frac{1}{2} i \left(\text{Li}_2(e^{-2i \sin^{-1}(e^x)}) + 2x \log(\sqrt{1-e^{2x}} + i e^x) + \sin^{-1}(e^x)^2 - 2i \sin^{-1}(e^x) \log(1 - e^{-2i \sin^{-1}(e^x)}) \right)$
$\sin^{-1}(x^2)$	$\frac{2x}{\sqrt{1-x^4}}$	$x \sin^{-1}(x^2) - 2(E(\sin^{-1}(x) -1) - F(\sin^{-1}(x) -1))$
$\sin^{-1}(x^3)$	$\frac{3x^2}{\sqrt{1-x^6}}$	$x \sin^{-1}(x^3) + \frac{1}{\sqrt{1-x^6}} (-1)^{2/3} 3^{3/4} \sqrt{(-1)^{5/6} (x^2 - 1)} \sqrt{x^4 + x^2 + 1} \left((-1)^{5/6} F\left(\sin^{-1}\left(\frac{\sqrt{-ix^2 - (-1)^{5/6}}}{\sqrt{3}}\right) \middle \sqrt[3]{-1}\right) + \sqrt{3} E\left(\sin^{-1}\left(\frac{\sqrt{-ix^2 - (-1)^{5/6}}}{\sqrt{3}}\right) \middle \sqrt[3]{-1}\right) \right)$
$\sin^{-1}(x^4)$	$\frac{4x^3}{\sqrt{1-x^8}}$	$x \sin^{-1}(x^4) - \frac{4}{5} x^5 {}_2F_1\left(\frac{1}{2}, \frac{5}{8}; \frac{13}{8}; x^8\right)$
$\sin^{-1}(x^n)$	$\frac{n x^{n-1}}{\sqrt{1-x^{2n}}}$	$x \sin^{-1}(x^n) - \frac{n x^{n+1} {}_2F_1\left(\frac{1}{2}, \frac{n+1}{2n}; \frac{1}{2}\left(3+\frac{1}{n}\right); x^{2n}\right)}{n+1}$
$\sin^{-1}(n^x)$	$\frac{n^x \log(n)}{\sqrt{1-n^{2x}}}$	$x \sin^{-1}(n^x) + \frac{1}{2 \log(n)} i \left(\text{Li}_2(e^{-2i \sin^{-1}(n^x)}) + \sin^{-1}(n^x)^2 - 2i \sin^{-1}(n^x) \log(1 - e^{-2i \sin^{-1}(n^x)}) + 2x \log(n) \log(\sqrt{1 - n^{2x}} + i n^x) \right)$
$\sin^{-1}(n^{1/x})$	$-\frac{n^{1/x} \log(n)}{x^2 \sqrt{1-n^{2/x}}}$	$\int \sin^{-1}(n^{1/x}) dx$
$\sin^{-1}(\sin(x))$	$\frac{\cos(x)}{\sqrt{1-\sin^2(x)}}$	$x \sin^{-1}(\sin(x)) - \frac{1}{2} x^2 \sqrt{\cos^2(x)} \sec(x)$
$\sin^{-1}(\cos(x))$	$-\frac{\sin(x)}{\sqrt{1-\cos^2(x)}}$	$\int \sin^{-1}(\cos(x)) dx$
$\sin^{-1}(\tan(x))$	$\frac{\sec^2(x)}{\sqrt{1-\tan^2(x)}}$	$\int \sin^{-1}(\tan(x)) dx$
$\sin^{-1}(\csc(x))$	$-\frac{\cot(x) \csc(x)}{\sqrt{1-\csc^2(x)}}$	$\int \sin^{-1}(\csc(x)) dx$
$\sin^{-1}(\sec(x))$	$\frac{\tan(x) \sec(x)}{\sqrt{1-\sec^2(x)}}$	$\int \sin^{-1}(\sec(x)) dx$
$\sin^{-1}(\cot(x))$	$-\frac{\csc^2(x)}{\sqrt{1-\cot^2(x)}}$	$\int \sin^{-1}(\cot(x)) dx$
$\sin^{-1}(\cos^{-1}(x))$	$-\frac{1}{\sqrt{1-x^2} \sqrt{1-\cos^{-1}(x)^2}}$	$\int \sin^{-1}(\cos^{-1}(x)) dx$
$\sin^{-1}(\tan^{-1}(x))$	$\frac{1}{(x^2+1) \sqrt{1-\tan^{-1}(x)^2}}$	$\int \sin^{-1}(\tan^{-1}(x)) dx$
$\sin^{-1}(\csc^{-1}(x))$	$-\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 \sqrt{1-\csc^{-1}(x)^2}}$	$\int \sin^{-1}(\csc^{-1}(x)) dx$
$\sin^{-1}(\sec^{-1}(x))$	$\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 \sqrt{1-\sec^{-1}(x)^2}}$	$\int \sin^{-1}(\sec^{-1}(x)) dx$
$\sin^{-1}(\cot^{-1}(x))$	$-\frac{1}{(x^2+1) \sqrt{1-\cot^{-1}(x)^2}}$	$\int \sin^{-1}(\cot^{-1}(x)) dx$

$\sin^{-1}(\sinh(x))$	$\frac{\cosh(x)}{\sqrt{1-\sinh^2(x)}}$	$x \sin^{-1}(\sinh(x)) +$ $\frac{1}{4} \left(-i \left(\text{Li}_2 \left(e^{-x} \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) \right) + \right.$ $\text{Li}_2 \left(e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) -$ $\text{Li}_2 \left(e^{-x} \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) -$ $\left. \text{Li}_2 \left(e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) +$ $i x \left(\log \left(1 - e^{-x} \left(\cosh(x) + \right. \right. \right.$ $\left. \left. i \sqrt{1-\sinh^2(x)} \right) \right) - \log \left(1 - \right.$ $\left. e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) -$ $\log \left(1 - e^{-x} \left(\cosh(x) - \right. \right.$ $\left. i \sqrt{1-\sinh^2(x)} \right) \right) + \log \left(1 - \right.$ $\left. e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) -$ $\left(\log \left(1 - e^{-x} \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) + \right.$ $\log \left(1 - \right.$ $\left. e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) \right) +$ $\log \left(1 - e^{-x} \left(\cosh(x) - \right. \right.$ $\left. i \sqrt{1-\sinh^2(x)} \right) \right) + \log \left(\right.$ $\left. 1 - e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) \right)$ $\tan^{-1} \left(\frac{\cosh(x)}{\sqrt{1-\sinh^2(x)}} \right)$
$\sin^{-1}(\cosh(x))$	$\frac{\sinh(x)}{\sqrt{1-\cosh^2(x)}}$	$\int \sin^{-1}(\cosh(x)) dx$
$\sin^{-1}(\tanh(x))$	$\frac{\text{sech}^2(x)}{\sqrt{1-\tanh^2(x)}}$	$\int \sin^{-1}(\tanh(x)) dx$
$\sin^{-1}(\text{csch}(x))$	$-\frac{\coth(x) \text{csch}(x)}{\sqrt{1-\text{csch}^2(x)}}$	$\int \sin^{-1}(\text{csch}(x)) dx$
$\sin^{-1}(\text{sech}(x))$	$-\frac{\tanh(x) \text{sech}(x)}{\sqrt{1-\text{sech}^2(x)}}$	$\int \sin^{-1}(\text{sech}(x)) dx$
$\sin^{-1}(\coth(x))$	$-\frac{\text{csch}^2(x)}{\sqrt{1-\coth^2(x)}}$	$\int \sin^{-1}(\coth(x)) dx$
$\sin^{-1}(\sinh^{-1}(x))$	$\frac{1}{\sqrt{x^2+1} \sqrt{1-\sinh^{-1}(x)^2}}$	$\int \sin^{-1}(\sinh^{-1}(x)) dx$
$\sin^{-1}(\cosh^{-1}(x))$	$\frac{1}{\sqrt{x-1} \sqrt{x+1} \sqrt{1-\cosh^{-1}(x)^2}}$	$\int \sin^{-1}(\cosh^{-1}(x)) dx$
$\sin^{-1}(\tanh^{-1}(x))$	$\frac{1}{(1-x^2) \sqrt{1-\tanh^{-1}(x)^2}}$	$\int \sin^{-1}(\tanh^{-1}(x)) dx$

$\sin^{-1}(\operatorname{csch}^{-1}(x))$	$-\frac{1}{\sqrt{\frac{1}{x^2}+1} x^2 \sqrt{1-\operatorname{csch}^{-1}(x)^2}}$	$\int \sin^{-1}(\operatorname{csch}^{-1}(x)) dx$
$\sin^{-1}(\operatorname{sech}^{-1}(x))$	$-\frac{1}{x \sqrt{\frac{1-x}{x+1}} (x+1) \sqrt{1-\operatorname{sech}^{-1}(x)^2}}$	$\int \sin^{-1}(\operatorname{sech}^{-1}(x)) dx$
$\sin^{-1}(\operatorname{coth}^{-1}(x))$	$\frac{1}{(1-x^2) \sqrt{1-\operatorname{coth}^{-1}(x)^2}}$	$\int \sin^{-1}(\operatorname{coth}^{-1}(x)) dx$
$\sin^{-1}(\log(x))$	$\frac{1}{x \sqrt{1-\log^2(x)}}$	$\int \sin^{-1}(\log(x)) dx$
$\sin^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n)}{x \log^2(x) \sqrt{1-\frac{\log^2(n)}{\log^2(x)}}}$	$\int \sin^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\cos^{-1}(\sqrt{x})$	$-\frac{1}{2 \sqrt{1-x} \sqrt{x}}$	$\frac{1}{2} \left(\sin^{-1}(\sqrt{x}) - \sqrt{-(x-1)x} \right) + x \cos^{-1}(\sqrt{x})$
$\cos^{-1}(e^x)$	$-\frac{e^x}{\sqrt{1-e^{2x}}}$	$x \cos^{-1}(e^x) - \frac{1}{2} i \left(\operatorname{Li}_2(e^{-2i \sin^{-1}(e^x)}) + 2x \log\left(\sqrt{1-e^{2x}} + i e^x\right) + \sin^{-1}(e^x)^2 - 2i \sin^{-1}(e^x) \log\left(1 - e^{-2i \sin^{-1}(e^x)}\right) \right)$
$\cos^{-1}(x^2)$	$-\frac{2x}{\sqrt{1-x^4}}$	$x \cos^{-1}(x^2) + 2 \left(E(\sin^{-1}(x) -1) - F(\sin^{-1}(x) -1) \right)$
$\cos^{-1}(x^3)$	$-\frac{3x^2}{\sqrt{1-x^6}}$	$x \cos^{-1}(x^3) + \frac{1}{\sqrt{1-x^6}} \sqrt[6]{-1} 3^{3/4} \sqrt{(-1)^{5/6} (x^2-1)} \sqrt{x^4+x^2+1} \left(\sqrt[3]{-1} F\left(\sin^{-1}\left(\frac{\sqrt{-ix^2-(-1)^{5/6}}}{\sqrt[4]{3}}\right) \middle \sqrt[3]{-1}\right) - i \sqrt{3} E\left(\sin^{-1}\left(\frac{\sqrt{-ix^2-(-1)^{5/6}}}{\sqrt[4]{3}}\right) \middle \sqrt[3]{-1}\right) \right)$
$\cos^{-1}(x^4)$	$-\frac{4x^3}{\sqrt{1-x^8}}$	$\frac{4}{5} x^5 {}_2F_1\left(\frac{1}{2}, \frac{5}{8}; \frac{13}{8}; x^8\right) + x \cos^{-1}(x^4)$
$\cos^{-1}(x^n)$	$-\frac{n x^{n-1}}{\sqrt{1-x^{2n}}}$	$\frac{n x^{n+1} {}_2F_1\left(\frac{1}{2}, \frac{n+1}{2n}; \frac{1}{2}\left(3+\frac{1}{n}\right); x^{2n}\right)}{n+1} + x \cos^{-1}(x^n)$
$\cos^{-1}(n^x)$	$-\frac{n^x \log(n)}{\sqrt{1-n^{2x}}}$	$x \cos^{-1}(n^x) - \frac{1}{2 \log(n)} i \left(\operatorname{Li}_2(e^{-2i \sin^{-1}(n^x)}) + \sin^{-1}(n^x)^2 - 2i \sin^{-1}(n^x) \log\left(1 - e^{-2i \sin^{-1}(n^x)}\right) + 2x \log(n) \log\left(\sqrt{1-n^{2x}} + i n^x\right) \right)$
$\cos^{-1}(n^{1/x})$	$\frac{n^{1/x} \log(n)}{x^2 \sqrt{1-n^{2/x}}}$	$\int \cos^{-1}(n^{1/x}) dx$
$\cos^{-1}(\sin(x))$	$-\frac{\cos(x)}{\sqrt{1-\sin^2(x)}}$	$\frac{1}{2} x^2 \sqrt{\cos^2(x)} \sec(x) + x \cos^{-1}(\sin(x))$
$\cos^{-1}(\cos(x))$	$\frac{\sin(x)}{\sqrt{1-\cos^2(x)}}$	$\int \cos^{-1}(\cos(x)) dx$
$\cos^{-1}(\tan(x))$	$-\frac{\sec^2(x)}{\sqrt{1-\tan^2(x)}}$	$\int \cos^{-1}(\tan(x)) dx$
$\cos^{-1}(\csc(x))$	$\frac{\cot(x) \csc(x)}{\sqrt{1-\csc^2(x)}}$	$\int \cos^{-1}(\csc(x)) dx$
$\cos^{-1}(\sec(x))$	$-\frac{\tan(x) \sec(x)}{\sqrt{1-\sec^2(x)}}$	$\int \cos^{-1}(\sec(x)) dx$

$\cos^{-1}(\cot(x))$	$\frac{\csc^2(x)}{\sqrt{1-\cot^2(x)}}$	$\int \cos^{-1}(\cot(x)) dx$
$\cos^{-1}(\sin^{-1}(x))$	$-\frac{1}{\sqrt{1-x^2} \sqrt{1-\sin^{-1}(x)^2}}$	$\int \cos^{-1}(\sin^{-1}(x)) dx$
$\cos^{-1}(\tan^{-1}(x))$	$-\frac{1}{(x^2+1) \sqrt{1-\tan^{-1}(x)^2}}$	$\int \cos^{-1}(\tan^{-1}(x)) dx$
$\cos^{-1}(\csc^{-1}(x))$	$\frac{1}{\sqrt{1-\frac{1}{x^2}} \sqrt{1-\csc^{-1}(x)^2}}$	$\int \cos^{-1}(\csc^{-1}(x)) dx$
$\cos^{-1}(\sec^{-1}(x))$	$-\frac{1}{\sqrt{1-\frac{1}{x^2}} \sqrt{1-\sec^{-1}(x)^2}}$	$\int \cos^{-1}(\sec^{-1}(x)) dx$
$\cos^{-1}(\cot^{-1}(x))$	$\frac{1}{(x^2+1) \sqrt{1-\cot^{-1}(x)^2}}$	$\int \cos^{-1}(\cot^{-1}(x)) dx$
$\cos^{-1}(\sinh(x))$	$-\frac{\cosh(x)}{\sqrt{1-\sinh^2(x)}}$	$x \cos^{-1}(\sinh(x)) +$ $\frac{1}{4} \left(i \left(\text{Li}_2 \left(e^{-x} \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) \right) + \right.$ $\text{Li}_2 \left(e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) -$ $\text{Li}_2 \left(e^{-x} \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) -$ $\left. \text{Li}_2 \left(e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) -$ $i x \left(\log \left(1 - e^{-x} \left(\cosh(x) + \right. \right. \right.$ $\left. \left. \left. i \sqrt{1-\sinh^2(x)} \right) \right) - \log \left(1 - \right. \right.$ $\left. \left. e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) - \right.$ $\log \left(1 - e^{-x} \left(\cosh(x) - \right. \right.$ $\left. \left. \left. i \sqrt{1-\sinh^2(x)} \right) \right) + \log \left(1 - \right. \right.$ $\left. \left. e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) +$ $\left(\log \left(1 - e^{-x} \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) + \right.$ $\log \left(1 - \right.$ $\left. \left. e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) \right) +$ $\log \left(1 - e^{-x} \left(\cosh(x) - \right. \right.$ $\left. \left. \left. i \sqrt{1-\sinh^2(x)} \right) \right) + \log \left(\right.$ $\left. \left. 1 - e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) \right)$ $\tan^{-1} \left(\frac{\cosh(x)}{\sqrt{1-\sinh^2(x)}} \right)$
$\cos^{-1}(\cosh(x))$	$-\frac{\sinh(x)}{\sqrt{1-\cosh^2(x)}}$	$\int \cos^{-1}(\cosh(x)) dx$
$\cos^{-1}(\tanh(x))$	$-\frac{\text{sech}^2(x)}{\sqrt{1-\tanh^2(x)}}$	$\int \cos^{-1}(\tanh(x)) dx$

$\cos^{-1}(\operatorname{csch}(x))$	$\frac{\operatorname{coth}(x) \operatorname{csch}(x)}{\sqrt{1-\operatorname{csch}^2(x)}}$	$\int \cos^{-1}(\operatorname{csch}(x)) dx$
$\cos^{-1}(\operatorname{sech}(x))$	$\frac{\tanh(x) \operatorname{sech}(x)}{\sqrt{1-\operatorname{sech}^2(x)}}$	$\int \cos^{-1}(\operatorname{sech}(x)) dx$
$\cos^{-1}(\operatorname{coth}(x))$	$\frac{\operatorname{csch}^2(x)}{\sqrt{1-\operatorname{coth}^2(x)}}$	$\int \cos^{-1}(\operatorname{coth}(x)) dx$
$\cos^{-1}(\sinh^{-1}(x))$	$-\frac{1}{\sqrt{x^2+1} \sqrt{1-\sinh^{-1}(x)^2}}$	$\int \cos^{-1}(\sinh^{-1}(x)) dx$
$\cos^{-1}(\cosh^{-1}(x))$	$-\frac{1}{\sqrt{x-1} \sqrt{x+1} \sqrt{1-\cosh^{-1}(x)^2}}$	$\int \cos^{-1}(\cosh^{-1}(x)) dx$
$\cos^{-1}(\tanh^{-1}(x))$	$-\frac{1}{(1-x^2) \sqrt{1-\tanh^{-1}(x)^2}}$	$\int \cos^{-1}(\tanh^{-1}(x)) dx$
$\cos^{-1}(\operatorname{csch}^{-1}(x))$	$\frac{1}{\sqrt{\frac{1}{x^2}+1} x^2 \sqrt{1-\operatorname{csch}^{-1}(x)^2}}$	$\int \cos^{-1}(\operatorname{csch}^{-1}(x)) dx$
$\cos^{-1}(\operatorname{sech}^{-1}(x))$	$\frac{1}{x \sqrt{\frac{1-x}{x+1}} (x+1) \sqrt{1-\operatorname{sech}^{-1}(x)^2}}$	$\int \cos^{-1}(\operatorname{sech}^{-1}(x)) dx$
$\cos^{-1}(\operatorname{coth}^{-1}(x))$	$-\frac{1}{(1-x^2) \sqrt{1-\operatorname{coth}^{-1}(x)^2}}$	$\int \cos^{-1}(\operatorname{coth}^{-1}(x)) dx$
$\cos^{-1}(\log(x))$	$-\frac{1}{x \sqrt{1-\log^2(x)}}$	$\int \cos^{-1}(\log(x)) dx$
$\cos^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{\log(n)}{x \log^2(x) \sqrt{1-\frac{\log^2(n)}{\log^2(x)}}$	$\int \cos^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\tan^{-1}(\sqrt{x})$	$\frac{1}{2\sqrt{x} (x+1)}$	$(x+1) \tan^{-1}(\sqrt{x}) - \sqrt{x}$
$\tan^{-1}(e^x)$	$\frac{e^x}{e^{2x}+1}$	$x \tan^{-1}(e^x) - \frac{1}{2} i (-\operatorname{Li}_2(-i e^x) + \operatorname{Li}_2(i e^x) + x (\log(1 - i e^x) - \log(1 + i e^x)))$
$\tan^{-1}(x^2)$	$\frac{2x}{x^4+1}$	$x \tan^{-1}(x^2) - \frac{1}{2\sqrt{2}} (-\log(x^2 + \sqrt{2} x + 1) + \log(x^2 - \sqrt{2} x + 1) + 2 \tan^{-1}(\sqrt{2} x + 1) - 2 \tan^{-1}(1 - \sqrt{2} x))$
$\tan^{-1}(x^3)$	$\frac{3x^2}{x^6+1}$	$x \tan^{-1}(x^3) + \frac{1}{4} (-\log(x^2 + \sqrt{3} x + 1) - \log(x^2 - \sqrt{3} x + 1) + 2 \log(x^2 + 1) + 2\sqrt{3} \tan^{-1}(2x + \sqrt{3}) + 2\sqrt{3} \tan^{-1}(\sqrt{3} - 2x))$
$\tan^{-1}(x^4)$	$\frac{4x^3}{x^8+1}$	$\frac{1}{2} (2x \tan^{-1}(x^4) - \sin(\frac{\pi}{8}) \log(x^2 - 2x \cos(\frac{\pi}{8}) + 1) - \cos(\frac{\pi}{8}) \log(x^2 + 2x \sin(\frac{\pi}{8}) + 1) + \cos(\frac{\pi}{8}) \log(x^2 - 2x \sin(\frac{\pi}{8}) + 1) + \sin(\frac{\pi}{8}) \log(x^2 + 2x \cos(\frac{\pi}{8}) + 1) + 2 \sin(\frac{\pi}{8}) \tan^{-1}(x \sec(\frac{\pi}{8}) - \tan(\frac{\pi}{8})) + 2 \sin(\frac{\pi}{8}) \tan^{-1}(x \sec(\frac{\pi}{8}) + \tan(\frac{\pi}{8})) - 2 \cos(\frac{\pi}{8}) \tan^{-1}(x \csc(\frac{\pi}{8}) + \cot(\frac{\pi}{8})) + 2 \cos(\frac{\pi}{8}) \tan^{-1}(\cot(\frac{\pi}{8}) - x \csc(\frac{\pi}{8})))$
$\tan^{-1}(x^n)$	$\frac{n x^{n-1}}{x^{2n}+1}$	$x \tan^{-1}(x^n) - \frac{n x^{n+1} {}_2F_1\left(1, \frac{n+1}{2n}; \frac{1}{2} \left(3 + \frac{1}{n}\right); -x^{2n}\right)}{n+1}$

$\tan^{-1}(n^x)$	$\frac{n^x \log(n)}{n^{2x}+1}$	$x \tan^{-1}(n^x) - \frac{1}{2 \log(n)} i (-\text{Li}_2(-i n^x) + \text{Li}_2(i n^x) + x \log(n) (\log(1 - i n^x) - \log(1 + i n^x)))$
$\tan^{-1}(n^{1/x})$	$-\frac{n^{1/x} \log(n)}{x^2 (n^{2/x}+1)}$	$\int \tan^{-1}(n^{1/x}) dx$
$\tan^{-1}(\sin(x))$	$\frac{\cos(x)}{\sin^2(x)+1}$	$\int \tan^{-1}(\sin(x)) dx$
$\tan^{-1}(\cos(x))$	$-\frac{\sin(x)}{\cos^2(x)+1}$	$\int \tan^{-1}(\cos(x)) dx$
$\tan^{-1}(\tan(x))$	$\frac{\sec^2(x)}{\tan^2(x)+1}$	$x \tan^{-1}(\tan(x)) - \frac{x^2}{2}$
$\tan^{-1}(\csc(x))$	$-\frac{\cot(x) \csc(x)}{\csc^2(x)+1}$	$\int \tan^{-1}(\csc(x)) dx$
$\tan^{-1}(\sec(x))$	$\frac{\tan(x) \sec(x)}{\sec^2(x)+1}$	$\int \tan^{-1}(\sec(x)) dx$
$\tan^{-1}(\cot(x))$	$-\frac{\csc^2(x)}{\cot^2(x)+1}$	$\frac{x^2}{2} + x \tan^{-1}(\cot(x))$
$\tan^{-1}(\sin^{-1}(x))$	$\frac{1}{\sqrt{1-x^2} (\sin^{-1}(x)^2+1)}$	$\int \tan^{-1}(\sin^{-1}(x)) dx$
$\tan^{-1}(\cos^{-1}(x))$	$-\frac{1}{\sqrt{1-x^2} (\cos^{-1}(x)^2+1)}$	$\int \tan^{-1}(\cos^{-1}(x)) dx$
$\tan^{-1}(\csc^{-1}(x))$	$-\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 (\csc^{-1}(x)^2+1)}$	$\int \tan^{-1}(\csc^{-1}(x)) dx$
$\tan^{-1}(\sec^{-1}(x))$	$\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 (\sec^{-1}(x)^2+1)}$	$\int \tan^{-1}(\sec^{-1}(x)) dx$
$\tan^{-1}(\cot^{-1}(x))$	$-\frac{1}{(x^2+1)(\cot^{-1}(x)^2+1)}$	$\int \tan^{-1}(\cot^{-1}(x)) dx$
$\tan^{-1}(\sinh(x))$	$\frac{\cosh(x)}{\sinh^2(x)+1}$	$x \tan^{-1}(\sinh(x)) + i (\text{Li}_2(-i e^{-x}) - \text{Li}_2(i e^{-x}) + x (\log(1 - i e^{-x}) - \log(1 + i e^{-x})))$
$\tan^{-1}(\cosh(x))$	$\frac{\sinh(x)}{\cosh^2(x)+1}$	$\int \tan^{-1}(\cosh(x)) dx$
$\tan^{-1}(\tanh(x))$	$\frac{\text{sech}^2(x)}{\tanh^2(x)+1}$	$x \tan^{-1}(\tanh(x)) + \frac{1}{4} i (\text{Li}_2(-i e^{-2x}) - \text{Li}_2(i e^{-2x}) + 2x (\log(1 - i e^{-2x}) - \log(1 + i e^{-2x})))$
$\tan^{-1}(\text{csch}(x))$	$-\frac{\coth(x) \text{csch}(x)}{\text{csch}^2(x)+1}$	$x \tan^{-1}(\text{csch}(x)) - i (\text{Li}_2(-i e^{-x}) - \text{Li}_2(i e^{-x}) + x (\log(1 - i e^{-x}) - \log(1 + i e^{-x})))$
$\tan^{-1}(\text{sech}(x))$	$-\frac{\tanh(x) \text{sech}(x)}{\text{sech}^2(x)+1}$	$\int \tan^{-1}(\text{sech}(x)) dx$
$\tan^{-1}(\text{coth}(x))$	$-\frac{\text{csch}^2(x)}{\text{coth}^2(x)+1}$	$x \tan^{-1}(\text{coth}(x)) - \frac{1}{4} i (\text{Li}_2(-i e^{-2x}) - \text{Li}_2(i e^{-2x}) + 2x (\log(1 - i e^{-2x}) - \log(1 + i e^{-2x})))$
$\tan^{-1}(\sinh^{-1}(x))$	$\frac{1}{\sqrt{x^2+1} (\sinh^{-1}(x)^2+1)}$	$\int \tan^{-1}(\sinh^{-1}(x)) dx$
$\tan^{-1}(\cosh^{-1}(x))$	$\frac{1}{\sqrt{x-1} \sqrt{x+1} (\cosh^{-1}(x)^2+1)}$	$\int \tan^{-1}(\cosh^{-1}(x)) dx$
$\tan^{-1}(\tanh^{-1}(x))$	$\frac{1}{(1-x^2)(\tanh^{-1}(x)^2+1)}$	$\int \tan^{-1}(\tanh^{-1}(x)) dx$
$\tan^{-1}(\text{csch}^{-1}(x))$	$-\frac{1}{\sqrt{\frac{1}{x^2}+1} x^2 (\text{csch}^{-1}(x)^2+1)}$	$\int \tan^{-1}(\text{csch}^{-1}(x)) dx$
$\tan^{-1}(\text{sech}^{-1}(x))$	$-\frac{1}{x \sqrt{\frac{1-x}{x+1}} (x+1) (\text{sech}^{-1}(x)^2+1)}$	$\int \tan^{-1}(\text{sech}^{-1}(x)) dx$
$\tan^{-1}(\text{coth}^{-1}(x))$	$\frac{1}{(1-x^2)(\text{coth}^{-1}(x)^2+1)}$	$\int \tan^{-1}(\text{coth}^{-1}(x)) dx$
$\tan^{-1}(\log(x))$	$\frac{1}{x (\log^2(x)+1)}$	$\int \tan^{-1}(\log(x)) dx$

$\tan^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n)}{x \log^2(x) \left(\frac{\log^2(n)}{\log^2(x)} + 1\right)}$	$\int \tan^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\csc^{-1}(\sqrt{x})$	$-\frac{1}{2\sqrt{1-\frac{1}{x}} x^{3/2}}$	$\sqrt{x-1} + x \csc^{-1}(\sqrt{x})$
$\csc^{-1}(e^x)$	$-\frac{e^{-x}}{\sqrt{1-e^{-2x}}}$	$x \csc^{-1}(e^x) - \frac{1}{2} i \left(\text{Li}_2\left(e^{-2i \sin^{-1}(e^{-x})}\right) - 2x \log\left(\sqrt{1-e^{-2x}} + i e^{-x}\right) + \sin^{-1}(e^{-x})^2 - 2i \sin^{-1}(e^{-x}) \log\left(1 - e^{-2i \sin^{-1}(e^{-x})}\right) \right)$
$\csc^{-1}(x^2)$	$-\frac{2}{\sqrt{1-\frac{1}{x^4}} x^3}$	$\int \csc^{-1}(x^2) dx$
$\csc^{-1}(x^3)$	$-\frac{3}{\sqrt{1-\frac{1}{x^6}} x^4}$	$\int \csc^{-1}(x^3) dx$
$\csc^{-1}(x^4)$	$-\frac{4}{\sqrt{1-\frac{1}{x^8}} x^5}$	$\int \csc^{-1}(x^4) dx$
$\csc^{-1}(x^n)$	$-\frac{n x^{-n-1}}{\sqrt{1-x^{-2n}}}$	$x \left(\csc^{-1}(x^n) - \frac{n x^{-n} {}_2F_1\left(\frac{1}{2}, \frac{n-1}{2}; \frac{3}{2}; -\frac{1}{2n}; x^{-2n}\right)}{n-1} \right)$
$\csc^{-1}(n^x)$	$-\frac{n^{-x} \log(n)}{\sqrt{1-n^{-2x}}}$	$x \csc^{-1}(n^x) - \frac{1}{2 \log(n)} i \left(\text{Li}_2\left(e^{-2i \sin^{-1}(n^{-x})}\right) - 2x \log(n) \log\left(\sqrt{1-n^{-2x}} + i n^{-x}\right) + \sin^{-1}(n^{-x})^2 - 2i \sin^{-1}(n^{-x}) \log\left(1 - e^{-2i \sin^{-1}(n^{-x})}\right) \right)$
$\csc^{-1}(n^{1/x})$	$\frac{n^{-1/x} \log(n)}{x^2 \sqrt{1-n^{-2/x}}}$	$\int \csc^{-1}(n^{1/x}) dx$
$\csc^{-1}(\sin(x))$	$-\frac{\cot(x) \csc(x)}{\sqrt{1-\csc^2(x)}}$	$\int \csc^{-1}(\sin(x)) dx$
$\csc^{-1}(\cos(x))$	$\frac{\tan(x) \sec(x)}{\sqrt{1-\sec^2(x)}}$	$\int \csc^{-1}(\cos(x)) dx$
$\csc^{-1}(\tan(x))$	$-\frac{\csc^2(x)}{\sqrt{1-\cot^2(x)}}$	$\int \csc^{-1}(\tan(x)) dx$
$\csc^{-1}(\csc(x))$	$\frac{\cos(x)}{\sqrt{1-\sin^2(x)}}$	$x \csc^{-1}(\csc(x)) - \frac{1}{2} x^2 \sqrt{\cos^2(x)} \sec(x)$
$\csc^{-1}(\sec(x))$	$-\frac{\sin(x)}{\sqrt{1-\cos^2(x)}}$	$\int \csc^{-1}(\sec(x)) dx$
$\csc^{-1}(\cot(x))$	$\frac{\sec^2(x)}{\sqrt{1-\tan^2(x)}}$	$\int \csc^{-1}(\cot(x)) dx$
$\csc^{-1}(\sin^{-1}(x))$	$-1 / \left(\sqrt{1-x^2} \sqrt{1-\frac{1}{\sin^{-1}(x)^2}} \sin^{-1}(x)^2 \right)$	$\int \csc^{-1}(\sin^{-1}(x)) dx$
$\csc^{-1}(\cos^{-1}(x))$	$\frac{1}{\sqrt{1-x^2} \sqrt{1-\frac{1}{\cos^{-1}(x)^2}} \cos^{-1}(x)^2}$	$\int \csc^{-1}(\cos^{-1}(x)) dx$
$\csc^{-1}(\tan^{-1}(x))$	$-\frac{1}{(x^2+1) \sqrt{1-\frac{1}{\tan^{-1}(x)^2}} \tan^{-1}(x)^2}$	$\int \csc^{-1}(\tan^{-1}(x)) dx$
$\csc^{-1}(\sec^{-1}(x))$	$-1 / \left(\sqrt{1-\frac{1}{x^2}} x^2 \sqrt{1-\frac{1}{\sec^{-1}(x)^2}} \sec^{-1}(x)^2 \right)$	$\int \csc^{-1}(\sec^{-1}(x)) dx$

$\csc^{-1}(\cot^{-1}(x))$	$\frac{1}{(x^2+1)\sqrt{1-\frac{1}{\cot^{-1}(x)^2}}}$	$\int \csc^{-1}(\cot^{-1}(x)) dx$
$\csc^{-1}(\sinh(x))$	$-\frac{\coth(x)\operatorname{csch}(x)}{\sqrt{1-\operatorname{csch}^2(x)}}$	$\int \csc^{-1}(\sinh(x)) dx$
$\csc^{-1}(\cosh(x))$	$-\frac{\tanh(x)\operatorname{sech}(x)}{\sqrt{1-\operatorname{sech}^2(x)}}$	$\int \csc^{-1}(\cosh(x)) dx$
$\csc^{-1}(\tanh(x))$	$-\frac{\operatorname{csch}^2(x)}{\sqrt{1-\coth^2(x)}}$	$\int \csc^{-1}(\tanh(x)) dx$
$\csc^{-1}(\operatorname{csch}(x))$	$\frac{\cosh(x)}{\sqrt{1-\sinh^2(x)}}$	$x \csc^{-1}(\operatorname{csch}(x)) +$ $\frac{1}{4} \left(-i \left(\operatorname{Li}_2 \left(e^{-x} \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) \right) + \right.$ $\left. \operatorname{Li}_2 \left(e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) - \right.$ $\left. \operatorname{Li}_2 \left(e^{-x} \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) - \right.$ $\left. \operatorname{Li}_2 \left(e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) +$ $i x \left(\log \left(1 - e^{-x} \left(\cosh(x) + \right. \right. \right.$ $\left. \left. \left. i \sqrt{1-\sinh^2(x)} \right) \right) - \log \left(1 - \right. \right.$ $\left. \left. e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) - \right.$ $\left. \log \left(1 - e^{-x} \left(\cosh(x) - \right. \right. \right.$ $\left. \left. \left. i \sqrt{1-\sinh^2(x)} \right) \right) + \log \left(1 - \right. \right.$ $\left. \left. e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) -$ $\left(\log \left(1 - e^{-x} \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) + \right.$ $\left. \log \left(1 - \right. \right.$ $\left. \left. e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) \right) +$ $\log \left(1 - e^{-x} \left(\cosh(x) - \right. \right.$ $\left. \left. \left. i \sqrt{1-\sinh^2(x)} \right) \right) + \log \left(\right.$ $\left. \left. 1 - e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) \right)$ $\tan^{-1} \left(\frac{\cosh(x)}{\sqrt{1-\sinh^2(x)}} \right)$
$\csc^{-1}(\operatorname{sech}(x))$	$\frac{\sinh(x)}{\sqrt{1-\cosh^2(x)}}$	$\int \csc^{-1}(\operatorname{sech}(x)) dx$
$\csc^{-1}(\coth(x))$	$\frac{\operatorname{sech}^2(x)}{\sqrt{1-\tanh^2(x)}}$	$\int \csc^{-1}(\coth(x)) dx$
$\csc^{-1}(\sinh^{-1}(x))$	$-1 / \left(\sqrt{x^2+1} \sqrt{1-\frac{1}{\sinh^{-1}(x)^2}} \sinh^{-1}(x)^2 \right)$	$\int \csc^{-1}(\sinh^{-1}(x)) dx$

$\csc^{-1}(\cosh^{-1}(x))$	$-1 / \left(\sqrt{x-1} \sqrt{x+1} \sqrt{1 - \frac{1}{\cosh^{-1}(x)^2}} \cosh^{-1}(x)^2 \right)$	$\int \csc^{-1}(\cosh^{-1}(x)) dx$
$\csc^{-1}(\tanh^{-1}(x))$	$-1 / \left((1-x^2) \sqrt{1 - \frac{1}{\tanh^{-1}(x)^2}} \tanh^{-1}(x)^2 \right)$	$\int \csc^{-1}(\tanh^{-1}(x)) dx$
$\csc^{-1}(\operatorname{csch}^{-1}(x))$	$1 / \left(\sqrt{\frac{1}{x^2} + 1} x^2 \sqrt{1 - \frac{1}{\operatorname{csch}^{-1}(x)^2}} \operatorname{csch}^{-1}(x)^2 \right)$	$\int \csc^{-1}(\operatorname{csch}^{-1}(x)) dx$
$\csc^{-1}(\operatorname{sech}^{-1}(x))$	$1 / \left(x \sqrt{\frac{1-x}{x+1}} (x+1) \sqrt{1 - \frac{1}{\operatorname{sech}^{-1}(x)^2}} \operatorname{sech}^{-1}(x)^2 \right)$	$\int \csc^{-1}(\operatorname{sech}^{-1}(x)) dx$
$\csc^{-1}(\operatorname{coth}^{-1}(x))$	$-1 / \left((1-x^2) \sqrt{1 - \frac{1}{\operatorname{coth}^{-1}(x)^2}} \operatorname{coth}^{-1}(x)^2 \right)$	$\int \csc^{-1}(\operatorname{coth}^{-1}(x)) dx$
$\csc^{-1}(\log(x))$	$-\frac{1}{x \sqrt{1 - \frac{1}{\log^2(x)}} \log^2(x)}$	$\int \csc^{-1}(\log(x)) dx$
$\csc^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{1}{x \log(n) \sqrt{1 - \frac{\log^2(x)}{\log^2(n)}}}$	$\int \csc^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\sec^{-1}(\sqrt{x})$	$\frac{1}{2 \sqrt{1 - \frac{1}{x}} x^{3/2}}$	$x \sec^{-1}(\sqrt{x}) - \sqrt{x-1}$
$\sec^{-1}(e^x)$	$\frac{e^{-x}}{\sqrt{1-e^{-2x}}}$	$x \sec^{-1}(e^x) + \frac{1}{2} i \left(\operatorname{Li}_2\left(e^{-2i \sin^{-1}(e^{-x})}\right) - 2x \log\left(\sqrt{1-e^{-2x}} + i e^{-x}\right) + \sin^{-1}(e^{-x})^2 - 2i \sin^{-1}(e^{-x}) \log\left(1 - e^{-2i \sin^{-1}(e^{-x})}\right) \right)$
$\sec^{-1}(x^2)$	$\frac{2}{\sqrt{1 - \frac{1}{x^4}} x^3}$	$\int \sec^{-1}(x^2) dx$
$\sec^{-1}(x^3)$	$\frac{3}{\sqrt{1 - \frac{1}{x^6}} x^4}$	$\int \sec^{-1}(x^3) dx$
$\sec^{-1}(x^4)$	$\frac{4}{\sqrt{1 - \frac{1}{x^8}} x^5}$	$\int \sec^{-1}(x^4) dx$
$\sec^{-1}(x^n)$	$\frac{n x^{n-1}}{\sqrt{1-x^{-2n}}}$	$x \left(\frac{n x^{-n} {}_2F_1\left(\frac{1}{2}, \frac{n-1}{2}, \frac{3}{2} - \frac{1}{2n}; x^{-2n}\right)}{n-1} + \sec^{-1}(x^n) \right)$
$\sec^{-1}(n^x)$	$\frac{n^{-x} \log(n)}{\sqrt{1-n^{-2x}}}$	$x \sec^{-1}(n^x) + \frac{1}{2 \log(n)} i \left(\operatorname{Li}_2\left(e^{-2i \sin^{-1}(n^{-x})}\right) - 2x \log(n) \log\left(\sqrt{1-n^{-2x}} + i n^{-x}\right) + \sin^{-1}(n^{-x})^2 - 2i \sin^{-1}(n^{-x}) \log\left(1 - e^{-2i \sin^{-1}(n^{-x})}\right) \right)$
$\sec^{-1}(n^{1/x})$	$-\frac{n^{-1/x} \log(n)}{x^2 \sqrt{1-n^{-2/x}}}$	$\int \sec^{-1}(n^{1/x}) dx$
$\sec^{-1}(\sin(x))$	$\frac{\cot(x) \csc(x)}{\sqrt{1-\csc^2(x)}}$	$\int \sec^{-1}(\sin(x)) dx$
$\sec^{-1}(\cos(x))$	$-\frac{\tan(x) \sec(x)}{\sqrt{1-\sec^2(x)}}$	$\int \sec^{-1}(\cos(x)) dx$
$\sec^{-1}(\tan(x))$	$\frac{\csc^2(x)}{\sqrt{1-\cot^2(x)}}$	$\int \sec^{-1}(\tan(x)) dx$

$\sec^{-1}(\csc(x))$	$-\frac{\cos(x)}{\sqrt{1-\sin^2(x)}}$	$\frac{1}{2}x^2\sqrt{\cos^2(x)}\sec(x) + x\sec^{-1}(\csc(x))$
$\sec^{-1}(\sec(x))$	$\frac{\sin(x)}{\sqrt{1-\cos^2(x)}}$	$\int \sec^{-1}(\sec(x)) dx$
$\sec^{-1}(\cot(x))$	$-\frac{\sec^2(x)}{\sqrt{1-\tan^2(x)}}$	$\int \sec^{-1}(\cot(x)) dx$
$\sec^{-1}(\sin^{-1}(x))$	$\frac{1}{\sqrt{1-x^2}\sqrt{1-\frac{1}{\sin^{-1}(x)^2}\sin^{-1}(x)^2}}$	$\int \sec^{-1}(\sin^{-1}(x)) dx$
$\sec^{-1}(\cos^{-1}(x))$	$-1/\left(\sqrt{1-x^2}\sqrt{1-\frac{1}{\cos^{-1}(x)^2}\cos^{-1}(x)^2}\right)$	$\int \sec^{-1}(\cos^{-1}(x)) dx$
$\sec^{-1}(\tan^{-1}(x))$	$\frac{1}{(x^2+1)\sqrt{1-\frac{1}{\tan^{-1}(x)^2}\tan^{-1}(x)^2}}$	$\int \sec^{-1}(\tan^{-1}(x)) dx$
$\sec^{-1}(\csc^{-1}(x))$	$-1/\left(\sqrt{1-\frac{1}{x^2}x^2}\sqrt{1-\frac{1}{\csc^{-1}(x)^2}\csc^{-1}(x)^2}\right)$	$\int \sec^{-1}(\csc^{-1}(x)) dx$
$\sec^{-1}(\cot^{-1}(x))$	$-\frac{1}{(x^2+1)\sqrt{1-\frac{1}{\cot^{-1}(x)^2}\cot^{-1}(x)^2}}$	$\int \sec^{-1}(\cot^{-1}(x)) dx$
$\sec^{-1}(\sinh(x))$	$\frac{\coth(x)\operatorname{csch}(x)}{\sqrt{1-\operatorname{csch}^2(x)}}$	$\int \sec^{-1}(\sinh(x)) dx$
$\sec^{-1}(\cosh(x))$	$\frac{\tanh(x)\operatorname{sech}(x)}{\sqrt{1-\operatorname{sech}^2(x)}}$	$\int \sec^{-1}(\cosh(x)) dx$
$\sec^{-1}(\tanh(x))$	$\frac{\operatorname{csch}^2(x)}{\sqrt{1-\operatorname{coth}^2(x)}}$	$\int \sec^{-1}(\tanh(x)) dx$

$\sec^{-1}(\operatorname{csch}(x))$	$-\frac{\cosh(x)}{\sqrt{1-\sinh^2(x)}}$	$x \sec^{-1}(\operatorname{csch}(x)) +$ $\frac{1}{4} \left(i \left(\operatorname{Li}_2 \left(e^{-x} \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) \right) + \right.$ $\operatorname{Li}_2 \left(e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) -$ $\operatorname{Li}_2 \left(e^{-x} \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) -$ $\left. \operatorname{Li}_2 \left(e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) -$ $i x \left(\log \left(1 - e^{-x} \left(\cosh(x) + \right. \right. \right.$ $\left. \left. i \sqrt{1-\sinh^2(x)} \right) \right) - \log \left(1 - \right.$ $\left. e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) -$ $\log \left(1 - e^{-x} \left(\cosh(x) - \right. \right.$ $\left. i \sqrt{1-\sinh^2(x)} \right) \right) + \log \left(1 - \right.$ $\left. e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) +$ $\left(\log \left(1 - e^{-x} \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) + \right.$ $\log \left(1 - \right.$ $\left. e^x \left(\cosh(x) + i \sqrt{1-\sinh^2(x)} \right) \right) +$ $\log \left(1 - e^{-x} \left(\cosh(x) - \right. \right.$ $\left. i \sqrt{1-\sinh^2(x)} \right) \right) + \log \left(\right.$ $\left. 1 - e^x \left(\cosh(x) - i \sqrt{1-\sinh^2(x)} \right) \right) \right) +$ $\tan^{-1} \left(\frac{\cosh(x)}{\sqrt{1-\sinh^2(x)}} \right)$
$\sec^{-1}(\operatorname{sech}(x))$	$-\frac{\sinh(x)}{\sqrt{1-\cosh^2(x)}}$	$\int \sec^{-1}(\operatorname{sech}(x)) dx$
$\sec^{-1}(\operatorname{coth}(x))$	$-\frac{\operatorname{sech}^2(x)}{\sqrt{1-\tanh^2(x)}}$	$\int \sec^{-1}(\operatorname{coth}(x)) dx$
$\sec^{-1}(\sinh^{-1}(x))$	$1 / \left(\sqrt{x^2 + 1} \sqrt{1 - \frac{1}{\sinh^{-1}(x)^2}} \sinh^{-1}(x)^2 \right)$	$\int \sec^{-1}(\sinh^{-1}(x)) dx$
$\sec^{-1}(\cosh^{-1}(x))$	$1 / \left(\sqrt{x-1} \sqrt{x+1} \sqrt{1 - \frac{1}{\cosh^{-1}(x)^2}} \cosh^{-1}(x)^2 \right)$	$\int \sec^{-1}(\cosh^{-1}(x)) dx$
$\sec^{-1}(\tanh^{-1}(x))$	$\frac{1}{(1-x^2) \sqrt{1 - \frac{1}{\tanh^{-1}(x)^2}} \tanh^{-1}(x)^2}$	$\int \sec^{-1}(\tanh^{-1}(x)) dx$
$\sec^{-1}(\operatorname{csch}^{-1}(x))$	$-1 / \left(\sqrt{\frac{1}{x^2} + 1} x^2 \sqrt{1 - \frac{1}{\operatorname{csch}^{-1}(x)^2}} \operatorname{csch}^{-1}(x)^2 \right)$	$\int \sec^{-1}(\operatorname{csch}^{-1}(x)) dx$
$\sec^{-1}(\operatorname{sech}^{-1}(x))$	$-1 / \left(x \sqrt{\frac{1-x}{x+1}} (x+1) \sqrt{1 - \frac{1}{\operatorname{sech}^{-1}(x)^2}} \operatorname{sech}^{-1}(x)^2 \right)$	$\int \sec^{-1}(\operatorname{sech}^{-1}(x)) dx$

$\sec^{-1}(\coth^{-1}(x))$	$\frac{1}{(1-x^2)\sqrt{1-\frac{1}{\coth^{-1}(x)^2}} \coth^{-1}(x)^2}$	$\int \sec^{-1}(\coth^{-1}(x)) dx$
$\sec^{-1}(\log(x))$	$\frac{1}{x\sqrt{1-\frac{1}{\log^2(x)}} \log^2(x)}$	$\int \sec^{-1}(\log(x)) dx$
$\sec^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{1}{x\log(n)\sqrt{1-\frac{\log^2(x)}{\log^2(n)}}}$	$\int \sec^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\cot^{-1}(\sqrt{x})$	$-\frac{1}{2\sqrt{x}(x+1)}$	$\sqrt{x} - \tan^{-1}(\sqrt{x}) + x \cot^{-1}(\sqrt{x})$
$\cot^{-1}(e^x)$	$-\frac{e^x}{e^{2x}+1}$	$x \cot^{-1}(e^x) + \frac{1}{2} i (-\text{Li}_2(-i e^x) + \text{Li}_2(i e^x) + x(\log(1 - i e^x) - \log(1 + i e^x)))$
$\cot^{-1}(x^2)$	$-\frac{2x}{x^4+1}$	$x \cot^{-1}(x^2) + \frac{1}{2\sqrt{2}} (-\log(x^2 + \sqrt{2}x + 1) + \log(x^2 - \sqrt{2}x + 1) + 2 \tan^{-1}(\sqrt{2}x + 1) - 2 \tan^{-1}(1 - \sqrt{2}x))$
$\cot^{-1}(x^3)$	$-\frac{3x^2}{x^6+1}$	$x \cot^{-1}(x^3) + \frac{1}{4} (\log(x^2 + \sqrt{3}x + 1) + \log(x^2 - \sqrt{3}x + 1) - 2 \log(x^2 + 1) - 2\sqrt{3} \tan^{-1}(2x + \sqrt{3}) - 2\sqrt{3} \tan^{-1}(\sqrt{3} - 2x))$
$\cot^{-1}(x^4)$	$-\frac{4x^3}{x^8+1}$	$\frac{1}{2} (2x \cot^{-1}(x^4) - \sin(\frac{\pi}{8}) \log(x^2 + 2x \cos(\frac{\pi}{8}) + 1) + \cos(\frac{\pi}{8}) \log(x^2 + 2x \sin(\frac{\pi}{8}) + 1) - \cos(\frac{\pi}{8}) \log(x^2 - 2x \sin(\frac{\pi}{8}) + 1) + \sin(\frac{\pi}{8}) \log(x^2 - 2x \cos(\frac{\pi}{8}) + 1) - 2 \sin(\frac{\pi}{8}) \tan^{-1}(x \sec(\frac{\pi}{8}) - \tan(\frac{\pi}{8})) - 2 \sin(\frac{\pi}{8}) \tan^{-1}(x \sec(\frac{\pi}{8}) + \tan(\frac{\pi}{8})) - 2 \cos(\frac{\pi}{8}) \tan^{-1}(\cot(\frac{\pi}{8}) - x \csc(\frac{\pi}{8})) + 2 \cos(\frac{\pi}{8}) \tan^{-1}(x \csc(\frac{\pi}{8}) + \cot(\frac{\pi}{8})))$
$\cot^{-1}(x^n)$	$-\frac{n x^{n-1}}{x^{2n}+1}$	$\frac{n x^{n+1} {}_2F_1\left(1, \frac{n+1}{2n}; \frac{1}{2}\left(3+\frac{1}{n}\right); -x^{2n}\right)}{n+1} + x \cot^{-1}(x^n)$
$\cot^{-1}(n^x)$	$-\frac{n^x \log(n)}{n^{2x}+1}$	$x \cot^{-1}(n^x) + \frac{1}{2 \log(n)} i (-\text{Li}_2(-i n^x) + \text{Li}_2(i n^x) + x \log(n) (\log(1 - i n^x) - \log(1 + i n^x)))$
$\cot^{-1}(n^{1/x})$	$\frac{n^{1/x} \log(n)}{x^2 (n^{2/x}+1)}$	$\int \cot^{-1}(n^{1/x}) dx$
$\cot^{-1}(\sin(x))$	$-\frac{\cos(x)}{\sin^2(x)+1}$	$\int \cot^{-1}(\sin(x)) dx$
$\cot^{-1}(\cos(x))$	$\frac{\sin(x)}{\cos^2(x)+1}$	$\int \cot^{-1}(\cos(x)) dx$
$\cot^{-1}(\tan(x))$	$-\frac{\sec^2(x)}{\tan^2(x)+1}$	$\frac{x^2}{2} + x \cot^{-1}(\tan(x))$
$\cot^{-1}(\csc(x))$	$\frac{\cot(x) \csc(x)}{\csc^2(x)+1}$	$\int \cot^{-1}(\csc(x)) dx$
$\cot^{-1}(\sec(x))$	$-\frac{\tan(x) \sec(x)}{\sec^2(x)+1}$	$\int \cot^{-1}(\sec(x)) dx$
$\cot^{-1}(\cot(x))$	$\frac{\csc^2(x)}{\cot^2(x)+1}$	$x \cot^{-1}(\cot(x)) - \frac{x^2}{2}$
$\cot^{-1}(\sin^{-1}(x))$	$-\frac{1}{\sqrt{1-x^2} (\sin^{-1}(x)^2+1)}$	$\int \cot^{-1}(\sin^{-1}(x)) dx$
$\cot^{-1}(\cos^{-1}(x))$	$\frac{1}{\sqrt{1-x^2} (\cos^{-1}(x)^2+1)}$	$\int \cot^{-1}(\cos^{-1}(x)) dx$

$\cot^{-1}(\tan^{-1}(x))$	$-\frac{1}{(x^2+1)(\tan^{-1}(x)^2+1)}$	$\int \cot^{-1}(\tan^{-1}(x)) dx$
$\cot^{-1}(\csc^{-1}(x))$	$\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 (\csc^{-1}(x)^2+1)}$	$\int \cot^{-1}(\csc^{-1}(x)) dx$
$\cot^{-1}(\sec^{-1}(x))$	$-\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 (\sec^{-1}(x)^2+1)}$	$\int \cot^{-1}(\sec^{-1}(x)) dx$
$\cot^{-1}(\sinh(x))$	$-\frac{\cosh(x)}{\sinh^2(x)+1}$	$x \cot^{-1}(\sinh(x)) - i (\text{Li}_2(-i e^{-x}) - \text{Li}_2(i e^{-x}) + x (\log(1 - i e^{-x}) - \log(1 + i e^{-x})))$
$\cot^{-1}(\cosh(x))$	$-\frac{\sinh(x)}{\cosh^2(x)+1}$	$\int \cot^{-1}(\cosh(x)) dx$
$\cot^{-1}(\tanh(x))$	$-\frac{\text{sech}^2(x)}{\tanh^2(x)+1}$	$x \cot^{-1}(\tanh(x)) - \frac{1}{4} i (\text{Li}_2(-i e^{-2x}) - \text{Li}_2(i e^{-2x}) + 2x (\log(1 - i e^{-2x}) - \log(1 + i e^{-2x})))$
$\cot^{-1}(\text{csch}(x))$	$\frac{\coth(x) \text{csch}(x)}{\text{csch}^2(x)+1}$	$x \cot^{-1}(\text{csch}(x)) + i (\text{Li}_2(-i e^{-x}) - \text{Li}_2(i e^{-x}) + x (\log(1 - i e^{-x}) - \log(1 + i e^{-x})))$
$\cot^{-1}(\text{sech}(x))$	$\frac{\tanh(x) \text{sech}(x)}{\text{sech}^2(x)+1}$	$\int \cot^{-1}(\text{sech}(x)) dx$
$\cot^{-1}(\text{coth}(x))$	$\frac{\text{csch}^2(x)}{\coth^2(x)+1}$	$x \cot^{-1}(\text{coth}(x)) + \frac{1}{4} i (\text{Li}_2(-i e^{-2x}) - \text{Li}_2(i e^{-2x}) + 2x (\log(1 - i e^{-2x}) - \log(1 + i e^{-2x})))$
$\cot^{-1}(\sinh^{-1}(x))$	$-\frac{1}{\sqrt{x^2+1} (\sinh^{-1}(x)^2+1)}$	$\int \cot^{-1}(\sinh^{-1}(x)) dx$
$\cot^{-1}(\cosh^{-1}(x))$	$-\frac{1}{\sqrt{x-1} \sqrt{x+1} (\cosh^{-1}(x)^2+1)}$	$\int \cot^{-1}(\cosh^{-1}(x)) dx$
$\cot^{-1}(\tanh^{-1}(x))$	$-\frac{1}{(1-x^2)(\tanh^{-1}(x)^2+1)}$	$\int \cot^{-1}(\tanh^{-1}(x)) dx$
$\cot^{-1}(\text{csch}^{-1}(x))$	$\frac{1}{\sqrt{\frac{1}{x^2}+1} x^2 (\text{csch}^{-1}(x)^2+1)}$	$\int \cot^{-1}(\text{csch}^{-1}(x)) dx$
$\cot^{-1}(\text{sech}^{-1}(x))$	$\frac{1}{x \sqrt{\frac{1-x}{x+1}} (x+1) (\text{sech}^{-1}(x)^2+1)}$	$\int \cot^{-1}(\text{sech}^{-1}(x)) dx$
$\cot^{-1}(\text{coth}^{-1}(x))$	$-\frac{1}{(1-x^2)(\text{coth}^{-1}(x)^2+1)}$	$\int \cot^{-1}(\text{coth}^{-1}(x)) dx$
$\cot^{-1}(\log(x))$	$-\frac{1}{x (\log^2(x)+1)}$	$\int \cot^{-1}(\log(x)) dx$
$\cot^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{\log(n)}{x \log^2(x) \left(\frac{\log^2(n)}{\log^2(x)}+1\right)}$	$\int \cot^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\sinh(\sqrt{x})$	$\frac{\cosh(\sqrt{x})}{2\sqrt{x}}$	$2\sqrt{x} \cosh(\sqrt{x}) - 2\sinh(\sqrt{x})$
$\sinh(e^x)$	$e^x \cosh(e^x)$	$\text{Shi}(e^x)$
$\sinh(x^2)$	$2x \cosh(x^2)$	$\frac{1}{4} \sqrt{\pi} (\text{erfi}(x) - \text{erf}(x))$
$\sinh(x^3)$	$3x^2 \cosh(x^3)$	$\frac{x \left(\sqrt[3]{-x^3} \Gamma\left(\frac{1}{3}, x^3\right) - \sqrt[3]{x^3} \Gamma\left(\frac{1}{3}, -x^3\right) \right)}{6 \sqrt[3]{-x^6}}$
$\sinh(x^4)$	$4x^3 \cosh(x^4)$	$\frac{x \left(\sqrt[4]{-x^4} \Gamma\left(\frac{1}{4}, x^4\right) - \sqrt[4]{x^4} \Gamma\left(\frac{1}{4}, -x^4\right) \right)}{8 \sqrt[4]{-x^8}}$
$\sinh(x^n)$	$n x^{n-1} \cosh(x^n)$	$\frac{1}{2n} x (-x^{2n})^{-1/n} \left((-x^n)^{1/n} \Gamma\left(\frac{1}{n}, x^n\right) - (x^n)^{1/n} \Gamma\left(\frac{1}{n}, -x^n\right) \right)$
$\sinh(n^x)$	$n^x \log(n) \cosh(n^x)$	$\frac{\text{Shi}(n^x)}{\log(n)}$
$\sinh(n^{1/x})$	$-\frac{n^{1/x} \log(n) \cosh(n^{1/x})}{x^2}$	$\int \sinh(n^{1/x}) dx$
$\sinh(\sin(x))$	$\cos(x) \cosh(\sin(x))$	$\int \sinh(\sin(x)) dx$

$\sinh(\cos(x))$	$\sin(x) (-\cosh(\cos(x)))$	$\int \sinh(\cos(x)) dx$
$\sinh(\tan(x))$	$\sec^2(x) \cosh(\tan(x))$	$\int \sinh(\tan(x)) dx$
$\sinh(\csc(x))$	$\cot(x) \csc(x) (-\cosh(\csc(x)))$	$\int \sinh(\csc(x)) dx$
$\sinh(\sec(x))$	$\tan(x) \sec(x) \cosh(\sec(x))$	$\int \sinh(\sec(x)) dx$
$\sinh(\cot(x))$	$\csc^2(x) (-\cosh(\cot(x)))$	$\int \sinh(\cot(x)) dx$
$\sinh(\sin^{-1}(x))$	$\frac{\cosh(\sin^{-1}(x))}{\sqrt{1-x^2}}$	$\int \sinh(\sin^{-1}(x)) dx$
$\sinh(\cos^{-1}(x))$	$-\frac{\cosh(\cos^{-1}(x))}{\sqrt{1-x^2}}$	$\int \sinh(\cos^{-1}(x)) dx$
$\sinh(\tan^{-1}(x))$	$\frac{\cosh(\tan^{-1}(x))}{x^2+1}$	$\int \sinh(\tan^{-1}(x)) dx$
$\sinh(\csc^{-1}(x))$	$-\frac{\cosh(\csc^{-1}(x))}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int \sinh(\csc^{-1}(x)) dx$
$\sinh(\sec^{-1}(x))$	$\frac{\cosh(\sec^{-1}(x))}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int \sinh(\sec^{-1}(x)) dx$
$\sinh(\cot^{-1}(x))$	$-\frac{\cosh(\cot^{-1}(x))}{x^2+1}$	$\int \sinh(\cot^{-1}(x)) dx$
$\sinh(\cosh(x))$	$\sinh(x) \cosh(\cosh(x))$	$\int \sinh(\cosh(x)) dx$
$\sinh(\tanh(x))$	$\operatorname{sech}^2(x) \cosh(\tanh(x))$	$\int \sinh(\tanh(x)) dx$
$\sinh(\operatorname{csch}(x))$	$\operatorname{coth}(x) \operatorname{csch}(x) (-\cosh(\operatorname{csch}(x)))$	$\int \sinh(\operatorname{csch}(x)) dx$
$\sinh(\operatorname{sech}(x))$	$\tanh(x) \operatorname{sech}(x) (-\cosh(\operatorname{sech}(x)))$	$\int \sinh(\operatorname{sech}(x)) dx$
$\sinh(\operatorname{coth}(x))$	$\operatorname{csch}^2(x) (-\cosh(\operatorname{coth}(x)))$	$\int \sinh(\operatorname{coth}(x)) dx$
x	1	$\frac{x^2}{2}$
$\sqrt{\frac{x-1}{x+1}} (x+1)$	$\frac{(x+1)\left(\frac{1}{x+1} - \frac{x-1}{(x+1)^2}\right)}{2\sqrt{\frac{x-1}{x+1}}} + \sqrt{\frac{x-1}{x+1}}$	$\frac{1}{2} \left(x \sqrt{\frac{x-1}{x+1}} (x+1) - \log \left(\sqrt{\frac{x-1}{x+1}} x + x + \sqrt{\frac{x-1}{x+1}} \right) \right)$
$\frac{x}{\sqrt{1-x^2}}$	$\frac{x^2}{(1-x^2)^{3/2}} + \frac{1}{\sqrt{1-x^2}}$	$-\sqrt{1-x^2}$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\frac{\sqrt{\frac{1-x}{x+1}} (x+1)}{x}$	$-\frac{\sqrt{\frac{1-x}{x+1}} (x+1)}{x^2} + \frac{\left(-\frac{1-x}{(x+1)^2} - \frac{1}{x+1}\right)(x+1)}{2x\sqrt{\frac{1-x}{x+1}}} + \frac{\sqrt{\frac{1-x}{x+1}}}{x}$	$\sqrt{\frac{1-x}{x+1}} (x+1) - \log \left(\sqrt{\frac{1-x}{x+1}} x + \sqrt{\frac{1-x}{x+1}} + 1 \right) + \log(x)$
$\frac{1}{\sqrt{1-\frac{1}{x^2}} x}$	$-\frac{1}{x^2\sqrt{1-\frac{1}{x^2}}} - \frac{1}{x^4\left(1-\frac{1}{x^2}\right)^{3/2}}$	$\log \left(x \left(\sqrt{\frac{x^2-1}{x^2}} + 1 \right) \right)$
$\frac{x^2-1}{2x}$	$1 - \frac{x^2-1}{2x^2}$	$\frac{1}{2} \left(\frac{x^2}{2} - \log(x) \right)$
$\sinh\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n) \cosh\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \sinh\left(\frac{\log(n)}{\log(x)}\right) dx$
$\cosh(\sqrt{x})$	$\frac{\sinh(\sqrt{x})}{2\sqrt{x}}$	$2\sqrt{x} \sinh(\sqrt{x}) - 2\cosh(\sqrt{x})$
$\cosh(e^x)$	$e^x \sinh(e^x)$	$\operatorname{Chi}(e^x)$
$\cosh(x^2)$	$2x \sinh(x^2)$	$\frac{1}{4} \sqrt{\pi} (\operatorname{erf}(x) + \operatorname{erfi}(x))$
$\cosh(x^3)$	$3x^2 \sinh(x^3)$	$-\frac{x \left(\sqrt[3]{-x^3} \Gamma\left(\frac{1}{3}, x^3\right) + \sqrt[3]{x^3} \Gamma\left(\frac{1}{3}, -x^3\right) \right)}{6\sqrt[3]{-x^6}}$

$\cosh(x^4)$	$4x^3 \sinh(x^4)$	$-\frac{x(\sqrt[4]{-x^4} \Gamma(\frac{1}{4}, x^4) + \sqrt[4]{x^4} \Gamma(\frac{1}{4}, -x^4))}{8\sqrt[4]{-x^8}}$
$\cosh(x^n)$	$nx^{n-1} \sinh(x^n)$	$-\frac{1}{2n}x(-x^{2n})^{-1/n} \left((-x^n)^{1/n} \Gamma(\frac{1}{n}, x^n) + (x^n)^{1/n} \Gamma(\frac{1}{n}, -x^n) \right)$
$\cosh(n^x)$	$n^x \log(n) \sinh(n^x)$	$\frac{\text{Chi}(n^x)}{\log(n)}$
$\cosh(n^{1/x})$	$-\frac{n^{1/x} \log(n) \sinh(n^{1/x})}{x^2}$	$\int \cosh(n^{1/x}) dx$
$\cosh(\sin(x))$	$\cos(x) \sinh(\sin(x))$	$\int \cosh(\sin(x)) dx$
$\cosh(\cos(x))$	$-\sin(x) \sinh(\cos(x))$	$\int \cosh(\cos(x)) dx$
$\cosh(\tan(x))$	$\sec^2(x) \sinh(\tan(x))$	$\int \cosh(\tan(x)) dx$
$\cosh(\csc(x))$	$-\cot(x) \csc(x) \sinh(\csc(x))$	$\int \cosh(\csc(x)) dx$
$\cosh(\sec(x))$	$\tan(x) \sec(x) \sinh(\sec(x))$	$\int \cosh(\sec(x)) dx$
$\cosh(\cot(x))$	$-\csc^2(x) \sinh(\cot(x))$	$\int \cosh(\cot(x)) dx$
$\cosh(\sin^{-1}(x))$	$\frac{\sinh(\sin^{-1}(x))}{\sqrt{1-x^2}}$	$\int \cosh(\sin^{-1}(x)) dx$
$\cosh(\cos^{-1}(x))$	$-\frac{\sinh(\cos^{-1}(x))}{\sqrt{1-x^2}}$	$\int \cosh(\cos^{-1}(x)) dx$
$\cosh(\tan^{-1}(x))$	$\frac{\sinh(\tan^{-1}(x))}{x^2+1}$	$\int \cosh(\tan^{-1}(x)) dx$
$\cosh(\csc^{-1}(x))$	$-\frac{\sinh(\csc^{-1}(x))}{\sqrt{1-\frac{1}{x^2}}}$	$\int \cosh(\csc^{-1}(x)) dx$
$\cosh(\sec^{-1}(x))$	$\frac{\sinh(\sec^{-1}(x))}{\sqrt{1-\frac{1}{x^2}}}$	$\int \cosh(\sec^{-1}(x)) dx$
$\cosh(\cot^{-1}(x))$	$-\frac{\sinh(\cot^{-1}(x))}{x^2+1}$	$\int \cosh(\cot^{-1}(x)) dx$
$\cosh(\sinh(x))$	$\sinh(\sinh(x)) \cosh(x)$	$\int \cosh(\sinh(x)) dx$
$\cosh(\tanh(x))$	$\text{sech}^2(x) \sinh(\tanh(x))$	$\int \cosh(\tanh(x)) dx$
$\cosh(\text{csch}(x))$	$-\text{coth}(x) \text{csch}(x) \sinh(\text{csch}(x))$	$\int \cosh(\text{csch}(x)) dx$
$\cosh(\text{sech}(x))$	$\tanh(x) (-\text{sech}(x)) \sinh(\text{sech}(x))$	$\int \cosh(\text{sech}(x)) dx$
$\cosh(\text{coth}(x))$	$-\text{csch}^2(x) \sinh(\text{coth}(x))$	$\int \cosh(\text{coth}(x)) dx$
$\sqrt{x^2+1}$	$\frac{x}{\sqrt{x^2+1}}$	$\frac{1}{2} \left(\sqrt{x^2+1} x + \sinh^{-1}(x) \right)$
x	1	$\frac{x^2}{2}$
$\frac{1}{\sqrt{1-x^2}}$	$\frac{x}{(1-x^2)^{3/2}}$	$\sin^{-1}(x)$
$\sqrt{\frac{1}{x^2}+1}$	$-\frac{1}{\sqrt{\frac{1}{x^2}+1} x^3}$	$\sqrt{\frac{1}{x^2}+1} x - \sinh^{-1}\left(\frac{1}{x}\right)$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\frac{1}{\sqrt{1-\frac{1}{x^2}}}$	$-\frac{1}{\left(1-\frac{1}{x^2}\right)^{3/2} x^3}$	$x \sqrt{\frac{x^2-1}{x^2}}$
$\frac{x^2+1}{2x}$	$1 - \frac{x^2+1}{2x^2}$	$\frac{1}{2} \left(\frac{x^2}{2} + \log(x) \right)$
$\cosh\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n) \sinh\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \cosh\left(\frac{\log(n)}{\log(x)}\right) dx$

$\tanh(\sqrt{x})$	$\frac{\operatorname{sech}^2(\sqrt{x})}{2\sqrt{x}}$	$-\operatorname{Li}_2(-e^{-2\sqrt{x}}) + x + 2\sqrt{x} \log(e^{-2\sqrt{x}} + 1)$
$\tanh(e^x)$	$e^x \operatorname{sech}^2(e^x)$	$\int \tanh(e^x) dx$
$\tanh(x^2)$	$2x \operatorname{sech}^2(x^2)$	$\int \tanh(x^2) dx$
$\tanh(x^3)$	$3x^2 \operatorname{sech}^2(x^3)$	$\int \tanh(x^3) dx$
$\tanh(x^4)$	$4x^3 \operatorname{sech}^2(x^4)$	$\int \tanh(x^4) dx$
$\tanh(x^n)$	$nx^{n-1} \operatorname{sech}^2(x^n)$	$\int \tanh(x^n) dx$
$\tanh(n^x)$	$n^x \log(n) \operatorname{sech}^2(n^x)$	$\int \tanh(n^x) dx$
$\tanh(n^{1/x})$	$-\frac{n^{1/x} \log(n) \operatorname{sech}^2(n^{1/x})}{x^2}$	$\int \tanh(n^{1/x}) dx$
$\tanh(\sin(x))$	$\cos(x) \operatorname{sech}^2(\sin(x))$	$\int \tanh(\sin(x)) dx$
$\tanh(\cos(x))$	$\sin(x) (-\operatorname{sech}^2(\cos(x)))$	$\int \tanh(\cos(x)) dx$
$\tanh(\tan(x))$	$\sec^2(x) \operatorname{sech}^2(\tan(x))$	$\int \tanh(\tan(x)) dx$
$\tanh(\csc(x))$	$-\cot(x) \csc(x) \operatorname{sech}^2(\csc(x))$	$\int \tanh(\csc(x)) dx$
$\tanh(\sec(x))$	$\tan(x) \sec(x) \operatorname{sech}^2(\sec(x))$	$\int \tanh(\sec(x)) dx$
$\tanh(\cot(x))$	$-\csc^2(x) \operatorname{sech}^2(\cot(x))$	$\int \tanh(\cot(x)) dx$
$\tanh(\sin^{-1}(x))$	$\frac{\operatorname{sech}^2(\sin^{-1}(x))}{\sqrt{1-x^2}}$	$\int \tanh(\sin^{-1}(x)) dx$
$\tanh(\cos^{-1}(x))$	$-\frac{\operatorname{sech}^2(\cos^{-1}(x))}{\sqrt{1-x^2}}$	$\int \tanh(\cos^{-1}(x)) dx$
$\tanh(\tan^{-1}(x))$	$\frac{\operatorname{sech}^2(\tan^{-1}(x))}{x^2+1}$	$\int \tanh(\tan^{-1}(x)) dx$
$\tanh(\csc^{-1}(x))$	$-\frac{\operatorname{sech}^2(\csc^{-1}(x))}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int \tanh(\csc^{-1}(x)) dx$
$\tanh(\sec^{-1}(x))$	$\frac{\operatorname{sech}^2(\sec^{-1}(x))}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int \tanh(\sec^{-1}(x)) dx$
$\tanh(\cot^{-1}(x))$	$-\frac{\operatorname{sech}^2(\cot^{-1}(x))}{x^2+1}$	$\int \tanh(\cot^{-1}(x)) dx$
$\tanh(\sinh(x))$	$\cosh(x) \operatorname{sech}^2(\sinh(x))$	$\int \tanh(\sinh(x)) dx$
$\tanh(\cosh(x))$	$\sinh(x) \operatorname{sech}^2(\cosh(x))$	$\int \tanh(\cosh(x)) dx$
$\tanh(\operatorname{csch}(x))$	$-\operatorname{coth}(x) \operatorname{csch}(x) \operatorname{sech}^2(\operatorname{csch}(x))$	$\int \tanh(\operatorname{csch}(x)) dx$
$\tanh(\operatorname{sech}(x))$	$\tanh(x) (-\operatorname{sech}(x)) \operatorname{sech}^2(\operatorname{sech}(x))$	$\int \tanh(\operatorname{sech}(x)) dx$
$\tanh(\operatorname{coth}(x))$	$-\operatorname{csch}^2(x) \operatorname{sech}^2(\operatorname{coth}(x))$	$\int \tanh(\operatorname{coth}(x)) dx$
$\frac{x}{\sqrt{x^2+1}}$	$\frac{1}{\sqrt{x^2+1}} - \frac{x^2}{(x^2+1)^{3/2}}$	$\sqrt{x^2+1}$
$\frac{\sqrt{\frac{x-1}{x+1}} (x+1)}{x}$	$-\frac{\sqrt{\frac{x-1}{x+1}} (x+1)}{x^2} + \frac{\left(\frac{1}{x+1} - \frac{x-1}{(x+1)^2}\right)(x+1)}{2x\sqrt{\frac{x-1}{x+1}}} + \frac{\sqrt{\frac{x-1}{x+1}}}{x}$	$\sqrt{\frac{x-1}{x+1}} (x+1) + \tan^{-1}\left(\frac{\sqrt{\frac{x-1}{x+1}}}{x-1}\right)$
x	1	$\frac{x^2}{2}$
$\frac{1}{\sqrt{\frac{1}{x^2}+1} x}$	$\frac{1}{\left(\frac{1}{x^2}+1\right)^{3/2} x^4} - \frac{1}{\sqrt{\frac{1}{x^2}+1} x^2}$	$\log\left(x\left(\sqrt{\frac{x^2+1}{x^2}} + 1\right)\right)$
$\sqrt{\frac{1-x}{x+1}} (x+1)$	$\frac{(x+1)\left(-\frac{1-x}{(x+1)^2} - \frac{1}{x+1}\right)}{2\sqrt{\frac{1-x}{x+1}}} + \sqrt{\frac{1-x}{x+1}}$	$\frac{1}{2}\left(\sqrt{\frac{1-x}{x+1}} (x+1)x + \tan^{-1}\left(\frac{x\sqrt{\frac{1-x}{x+1}}}{1-x}\right)\right)$

$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\frac{x^2-1}{x^2+1}$	$\frac{2x}{x^2+1} - \frac{2x(x^2-1)}{(x^2+1)^2}$	$x - 2 \tan^{-1}(x)$
$\tanh\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n) \operatorname{sech}^2\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \tanh\left(\frac{\log(n)}{\log(x)}\right) dx$
$\operatorname{csch}(\sqrt{x})$	$-\frac{\operatorname{coth}(\sqrt{x}) \operatorname{csch}(\sqrt{x})}{2\sqrt{x}}$	$2\left(\operatorname{Li}_2(-e^{-\sqrt{x}}) - \operatorname{Li}_2(e^{-\sqrt{x}}) + \sqrt{x} \left(\log(1 - e^{-\sqrt{x}}) - \log(e^{-\sqrt{x}} + 1)\right)\right)$
$\operatorname{csch}(e^x)$	$-e^x \operatorname{coth}(e^x) \operatorname{csch}(e^x)$	$\int \operatorname{csch}(e^x) dx$
$\operatorname{csch}(x^2)$	$-2x \operatorname{coth}(x^2) \operatorname{csch}(x^2)$	$\int \operatorname{csch}(x^2) dx$
$\operatorname{csch}(x^3)$	$-3x^2 \operatorname{coth}(x^3) \operatorname{csch}(x^3)$	$\int \operatorname{csch}(x^3) dx$
$\operatorname{csch}(x^4)$	$-4x^3 \operatorname{coth}(x^4) \operatorname{csch}(x^4)$	$\int \operatorname{csch}(x^4) dx$
$\operatorname{csch}(x^n)$	$-n x^{n-1} \operatorname{coth}(x^n) \operatorname{csch}(x^n)$	$\int \operatorname{csch}(x^n) dx$
$\operatorname{csch}(n^x)$	$-n^x \log(n) \operatorname{coth}(n^x) \operatorname{csch}(n^x)$	$\int \operatorname{csch}(n^x) dx$
$\operatorname{csch}(n^{1/x})$	$\frac{n^{1/x} \log(n) \operatorname{coth}(n^{1/x}) \operatorname{csch}(n^{1/x})}{x^2}$	$\int \operatorname{csch}(n^{1/x}) dx$
$\operatorname{csch}(\sin(x))$	$-\cos(x) \operatorname{coth}(\sin(x)) \operatorname{csch}(\sin(x))$	$\int \operatorname{csch}(\sin(x)) dx$
$\operatorname{csch}(\cos(x))$	$\sin(x) \operatorname{coth}(\cos(x)) \operatorname{csch}(\cos(x))$	$\int \operatorname{csch}(\cos(x)) dx$
$\operatorname{csch}(\tan(x))$	$\sec^2(x) (-\operatorname{coth}(\tan(x))) \operatorname{csch}(\tan(x))$	$\int \operatorname{csch}(\tan(x)) dx$
$\operatorname{csch}(\csc(x))$	$\cot(x) \csc(x) \operatorname{csch}(\csc(x)) \operatorname{coth}(\csc(x))$	$\int \operatorname{csch}(\csc(x)) dx$
$\operatorname{csch}(\sec(x))$	$\tan(x) \sec(x) (-\operatorname{coth}(\sec(x))) \operatorname{csch}(\sec(x))$	$\int \operatorname{csch}(\sec(x)) dx$
$\operatorname{csch}(\cot(x))$	$\csc^2(x) \operatorname{coth}(\cot(x)) \operatorname{csch}(\cot(x))$	$\int \operatorname{csch}(\cot(x)) dx$
$\operatorname{csch}(\sin^{-1}(x))$	$-\frac{\operatorname{coth}(\sin^{-1}(x)) \operatorname{csch}(\sin^{-1}(x))}{\sqrt{1-x^2}}$	$\int \operatorname{csch}(\sin^{-1}(x)) dx$
$\operatorname{csch}(\cos^{-1}(x))$	$\frac{\operatorname{coth}(\cos^{-1}(x)) \operatorname{csch}(\cos^{-1}(x))}{\sqrt{1-x^2}}$	$\int \operatorname{csch}(\cos^{-1}(x)) dx$
$\operatorname{csch}(\tan^{-1}(x))$	$-\frac{\operatorname{coth}(\tan^{-1}(x)) \operatorname{csch}(\tan^{-1}(x))}{x^2+1}$	$\int \operatorname{csch}(\tan^{-1}(x)) dx$
$\operatorname{csch}(\csc^{-1}(x))$	$\frac{\operatorname{csch}(\csc^{-1}(x)) \operatorname{coth}(\csc^{-1}(x))}{\sqrt{1-\frac{1}{x^2}}}$	$\int \operatorname{csch}(\csc^{-1}(x)) dx$
$\operatorname{csch}(\sec^{-1}(x))$	$-\frac{\operatorname{coth}(\sec^{-1}(x)) \operatorname{csch}(\sec^{-1}(x))}{\sqrt{1-\frac{1}{x^2}}}$	$\int \operatorname{csch}(\sec^{-1}(x)) dx$
$\operatorname{csch}(\cot^{-1}(x))$	$\frac{\operatorname{coth}(\cot^{-1}(x)) \operatorname{csch}(\cot^{-1}(x))}{x^2+1}$	$\int \operatorname{csch}(\cot^{-1}(x)) dx$
$\operatorname{csch}(\sinh(x))$	$-\cosh(x) \operatorname{coth}(\sinh(x)) \operatorname{csch}(\sinh(x))$	$\int \operatorname{csch}(\sinh(x)) dx$
$\operatorname{csch}(\cosh(x))$	$\sinh(x) (-\operatorname{coth}(\cosh(x))) \operatorname{csch}(\cosh(x))$	$\int \operatorname{csch}(\cosh(x)) dx$
$\operatorname{csch}(\tanh(x))$	$\operatorname{sech}^2(x) (-\operatorname{coth}(\tanh(x))) \operatorname{csch}(\tanh(x))$	$\int \operatorname{csch}(\tanh(x)) dx$
$\operatorname{csch}(\operatorname{sech}(x))$	$\tanh(x) \operatorname{sech}(x) \operatorname{coth}(\operatorname{sech}(x)) \operatorname{csch}(\operatorname{sech}(x))$	$\int \operatorname{csch}(\operatorname{sech}(x)) dx$
$\operatorname{csch}(\operatorname{coth}(x))$	$\operatorname{coth}(\operatorname{coth}(x)) \operatorname{csch}^2(x) \operatorname{csch}(\operatorname{coth}(x))$	$\int \operatorname{csch}(\operatorname{coth}(x)) dx$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\frac{1}{\sqrt{\frac{x-1}{x+1}} (x+1)}$	$-\frac{\frac{1}{x+1} - \frac{x-1}{(x+1)^2}}{2\left(\frac{x-1}{x+1}\right)^{3/2} (x+1)} - \frac{1}{\sqrt{\frac{x-1}{x+1}} (x+1)^2}$	$\log\left(\sqrt{\frac{x-1}{x+1}} x + x + \sqrt{\frac{x-1}{x+1}}\right)$
$\frac{\sqrt{1-x^2}}{x}$	$-\frac{\sqrt{1-x^2}}{x^2} - \frac{1}{\sqrt{1-x^2}}$	$\sqrt{1-x^2} - \log\left(\sqrt{1-x^2} + 1\right) + \log(x)$

x	1	$\frac{x^2}{2}$
$\frac{x}{\sqrt{\frac{1-x}{x+1}}(x+1)}$	$\frac{\left(-\frac{1-x}{(x+1)^2}-\frac{1}{x+1}\right)x}{2\left(\frac{1-x}{x+1}\right)^{3/2}(x+1)} - \frac{x}{\sqrt{\frac{1-x}{x+1}}(x+1)^2} + \frac{1}{\sqrt{\frac{1-x}{x+1}}(x+1)}$	$(-x-1)\sqrt{\frac{1-x}{x+1}}$
$\sqrt{1-\frac{1}{x^2}}x$	$\sqrt{1-\frac{1}{x^2}} + \frac{1}{x^2\sqrt{1-\frac{1}{x^2}}}$	$\frac{1}{2}\sqrt{1-\frac{1}{x^2}}x^2 - \frac{1}{2}\log\left(\left(\sqrt{1-\frac{1}{x^2}}+1\right)x\right)$
$\frac{2x}{x^2-1}$	$\frac{2}{x^2-1} - \frac{4x^2}{(x^2-1)^2}$	$\log(1-x^2)$
$\operatorname{csch}\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{\log(n)\coth\left(\frac{\log(n)}{\log(x)}\right)\operatorname{csch}\left(\frac{\log(n)}{\log(x)}\right)}{x\log^2(x)}$	$\int \operatorname{csch}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\operatorname{sech}(\sqrt{x})$	$-\frac{\tanh(\sqrt{x})\operatorname{sech}(\sqrt{x})}{2\sqrt{x}}$	$-2i\left(\operatorname{Li}_2(-ie^{-\sqrt{x}}) - \operatorname{Li}_2(ie^{-\sqrt{x}})\right) + \sqrt{x}\left(\log(1-ie^{-\sqrt{x}}) - \log(1+ie^{-\sqrt{x}})\right)$
$\operatorname{sech}(e^x)$	$-e^x \tanh(e^x) \operatorname{sech}(e^x)$	$\int \operatorname{sech}(e^x) dx$
$\operatorname{sech}(x^2)$	$-2x \tanh(x^2) \operatorname{sech}(x^2)$	$\int \operatorname{sech}(x^2) dx$
$\operatorname{sech}(x^3)$	$-3x^2 \tanh(x^3) \operatorname{sech}(x^3)$	$\int \operatorname{sech}(x^3) dx$
$\operatorname{sech}(x^4)$	$-4x^3 \tanh(x^4) \operatorname{sech}(x^4)$	$\int \operatorname{sech}(x^4) dx$
$\operatorname{sech}(x^n)$	$-n x^{n-1} \tanh(x^n) \operatorname{sech}(x^n)$	$\int \operatorname{sech}(x^n) dx$
$\operatorname{sech}(n^x)$	$-n^x \log(n) \tanh(n^x) \operatorname{sech}(n^x)$	$\int \operatorname{sech}(n^x) dx$
$\operatorname{sech}(n^{1/x})$	$\frac{n^{1/x} \log(n) \tanh(n^{1/x}) \operatorname{sech}(n^{1/x})}{x^2}$	$\int \operatorname{sech}(n^{1/x}) dx$
$\operatorname{sech}(\sin(x))$	$-\cos(x) \tanh(\sin(x)) \operatorname{sech}(\sin(x))$	$\int \operatorname{sech}(\sin(x)) dx$
$\operatorname{sech}(\cos(x))$	$\sin(x) \tanh(\cos(x)) \operatorname{sech}(\cos(x))$	$\int \operatorname{sech}(\cos(x)) dx$
$\operatorname{sech}(\tan(x))$	$-\sec^2(x) \tanh(\tan(x)) \operatorname{sech}(\tan(x))$	$\int \operatorname{sech}(\tan(x)) dx$
$\operatorname{sech}(\csc(x))$	$\cot(x) \csc(x) \tanh(\csc(x)) \operatorname{sech}(\csc(x))$	$\int \operatorname{sech}(\csc(x)) dx$
$\operatorname{sech}(\sec(x))$	$\tan(x) (-\sec(x)) \tanh(\sec(x)) \operatorname{sech}(\sec(x))$	$\int \operatorname{sech}(\sec(x)) dx$
$\operatorname{sech}(\cot(x))$	$\csc^2(x) \tanh(\cot(x)) \operatorname{sech}(\cot(x))$	$\int \operatorname{sech}(\cot(x)) dx$
$\operatorname{sech}(\sin^{-1}(x))$	$-\frac{\tanh(\sin^{-1}(x))\operatorname{sech}(\sin^{-1}(x))}{\sqrt{1-x^2}}$	$\int \operatorname{sech}(\sin^{-1}(x)) dx$
$\operatorname{sech}(\cos^{-1}(x))$	$\frac{\tanh(\cos^{-1}(x))\operatorname{sech}(\cos^{-1}(x))}{\sqrt{1-x^2}}$	$\int \operatorname{sech}(\cos^{-1}(x)) dx$
$\operatorname{sech}(\tan^{-1}(x))$	$-\frac{\tanh(\tan^{-1}(x))\operatorname{sech}(\tan^{-1}(x))}{x^2+1}$	$\int \operatorname{sech}(\tan^{-1}(x)) dx$
$\operatorname{sech}(\csc^{-1}(x))$	$\frac{\tanh(\csc^{-1}(x))\operatorname{sech}(\csc^{-1}(x))}{\sqrt{1-\frac{1}{x^2}}x^2}$	$\int \operatorname{sech}(\csc^{-1}(x)) dx$
$\operatorname{sech}(\sec^{-1}(x))$	$-\frac{\tanh(\sec^{-1}(x))\operatorname{sech}(\sec^{-1}(x))}{\sqrt{1-\frac{1}{x^2}}x^2}$	$\int \operatorname{sech}(\sec^{-1}(x)) dx$
$\operatorname{sech}(\cot^{-1}(x))$	$\frac{\tanh(\cot^{-1}(x))\operatorname{sech}(\cot^{-1}(x))}{x^2+1}$	$\int \operatorname{sech}(\cot^{-1}(x)) dx$
$\operatorname{sech}(\sinh(x))$	$-\cosh(x) \tanh(\sinh(x)) \operatorname{sech}(\sinh(x))$	$\int \operatorname{sech}(\sinh(x)) dx$
$\operatorname{sech}(\cosh(x))$	$\sinh(x) \tanh(\cosh(x)) (-\operatorname{sech}(\cosh(x)))$	$\int \operatorname{sech}(\cosh(x)) dx$
$\operatorname{sech}(\tanh(x))$	$\tanh(\tanh(x)) (-\operatorname{sech}^2(x)) \operatorname{sech}(\tanh(x))$	$\int \operatorname{sech}(\tanh(x)) dx$
$\operatorname{sech}(\operatorname{csch}(x))$	$\coth(x) \operatorname{csch}(x) \tanh(\operatorname{csch}(x)) \operatorname{sech}(\operatorname{csch}(x))$	$\int \operatorname{sech}(\operatorname{csch}(x)) dx$
$\operatorname{sech}(\operatorname{coth}(x))$	$\operatorname{csch}^2(x) \tanh(\operatorname{coth}(x)) \operatorname{sech}(\operatorname{coth}(x))$	$\int \operatorname{sech}(\operatorname{coth}(x)) dx$

$\frac{1}{\sqrt{x^2+1}}$	$-\frac{x}{(x^2+1)^{3/2}}$	$\sinh^{-1}(x)$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\sqrt{1-x^2}$	$-\frac{x}{\sqrt{1-x^2}}$	$\frac{1}{2} \left(\sqrt{1-x^2} x + \sin^{-1}(x) \right)$
$\frac{1}{\sqrt{\frac{1}{x^2}+1}}$	$\frac{1}{\left(\frac{1}{x^2}+1\right)^{3/2} x^3}$	$\sqrt{\frac{1}{x^2}+1} x$
x	1	$\frac{x^2}{2}$
$\sqrt{1-\frac{1}{x^2}}$	$\frac{1}{\sqrt{1-\frac{1}{x^2}} x^3}$	$\sqrt{\frac{x^2-1}{x^2}} x + \sin^{-1}\left(\frac{1}{x}\right)$
$\frac{2x}{x^2+1}$	$\frac{2}{x^2+1} - \frac{4x^2}{(x^2+1)^2}$	$\log(x^2+1)$
$\operatorname{sech}\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{\log(n) \tanh\left(\frac{\log(n)}{\log(x)}\right) \operatorname{sech}\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \operatorname{sech}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\operatorname{coth}(\sqrt{x})$	$-\frac{\operatorname{csch}^2(\sqrt{x})}{2\sqrt{x}}$	$-\operatorname{Li}_2\left(e^{-2\sqrt{x}}\right) + x + 2\sqrt{x} \log\left(1 - e^{-2\sqrt{x}}\right)$
$\operatorname{coth}(e^x)$	$-e^x \operatorname{csch}^2(e^x)$	$\int \operatorname{coth}(e^x) dx$
$\operatorname{coth}(x^2)$	$-2x \operatorname{csch}^2(x^2)$	$\int \operatorname{coth}(x^2) dx$
$\operatorname{coth}(x^3)$	$-3x^2 \operatorname{csch}^2(x^3)$	$\int \operatorname{coth}(x^3) dx$
$\operatorname{coth}(x^4)$	$-4x^3 \operatorname{csch}^2(x^4)$	$\int \operatorname{coth}(x^4) dx$
$\operatorname{coth}(x^n)$	$-n x^{n-1} \operatorname{csch}^2(x^n)$	$\int \operatorname{coth}(x^n) dx$
$\operatorname{coth}(n^x)$	$-n^x \log(n) \operatorname{csch}^2(n^x)$	$\int \operatorname{coth}(n^x) dx$
$\operatorname{coth}(n^{1/x})$	$\frac{n^{1/x} \log(n) \operatorname{csch}^2(n^{1/x})}{x^2}$	$\int \operatorname{coth}(n^{1/x}) dx$
$\operatorname{coth}(\sin(x))$	$-\cos(x) \operatorname{csch}^2(\sin(x))$	$\int \operatorname{coth}(\sin(x)) dx$
$\operatorname{coth}(\cos(x))$	$\sin(x) \operatorname{csch}^2(\cos(x))$	$\int \operatorname{coth}(\cos(x)) dx$
$\operatorname{coth}(\tan(x))$	$\sec^2(x) (-\operatorname{csch}^2(\tan(x)))$	$\int \operatorname{coth}(\tan(x)) dx$
$\operatorname{coth}(\csc(x))$	$\cot(x) \csc(x) \operatorname{csch}^2(\csc(x))$	$\int \operatorname{coth}(\csc(x)) dx$
$\operatorname{coth}(\sec(x))$	$\tan(x) \sec(x) (-\operatorname{csch}^2(\sec(x)))$	$\int \operatorname{coth}(\sec(x)) dx$
$\operatorname{coth}(\cot(x))$	$\csc^2(x) \operatorname{csch}^2(\cot(x))$	$\int \operatorname{coth}(\cot(x)) dx$
$\operatorname{coth}(\sin^{-1}(x))$	$-\frac{\operatorname{csch}^2(\sin^{-1}(x))}{\sqrt{1-x^2}}$	$\int \operatorname{coth}(\sin^{-1}(x)) dx$
$\operatorname{coth}(\cos^{-1}(x))$	$\frac{\operatorname{csch}^2(\cos^{-1}(x))}{\sqrt{1-x^2}}$	$\int \operatorname{coth}(\cos^{-1}(x)) dx$
$\operatorname{coth}(\tan^{-1}(x))$	$-\frac{\operatorname{csch}^2(\tan^{-1}(x))}{x^2+1}$	$\int \operatorname{coth}(\tan^{-1}(x)) dx$
$\operatorname{coth}(\csc^{-1}(x))$	$\frac{\operatorname{csch}^2(\csc^{-1}(x))}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int \operatorname{coth}(\csc^{-1}(x)) dx$
$\operatorname{coth}(\sec^{-1}(x))$	$-\frac{\operatorname{csch}^2(\sec^{-1}(x))}{\sqrt{1-\frac{1}{x^2}} x^2}$	$\int \operatorname{coth}(\sec^{-1}(x)) dx$
$\operatorname{coth}(\cot^{-1}(x))$	$\frac{\operatorname{csch}^2(\cot^{-1}(x))}{x^2+1}$	$\int \operatorname{coth}(\cot^{-1}(x)) dx$
$\operatorname{coth}(\sinh(x))$	$-\cosh(x) \operatorname{csch}^2(\sinh(x))$	$\int \operatorname{coth}(\sinh(x)) dx$
$\operatorname{coth}(\cosh(x))$	$\sinh(x) (-\operatorname{csch}^2(\cosh(x)))$	$\int \operatorname{coth}(\cosh(x)) dx$

$\coth(\tanh(x))$	$\operatorname{sech}^2(x) (-\operatorname{csch}^2(\tanh(x)))$	$\int \coth(\tanh(x)) dx$
$\coth(\operatorname{csch}(x))$	$\coth(x) \operatorname{csch}(x) \operatorname{csch}^2(\operatorname{csch}(x))$	$\int \coth(\operatorname{csch}(x)) dx$
$\coth(\operatorname{sech}(x))$	$\tanh(x) \operatorname{sech}(x) \operatorname{csch}^2(\operatorname{sech}(x))$	$\int \coth(\operatorname{sech}(x)) dx$
$\frac{\sqrt{x^2+1}}{x}$	$\frac{1}{\sqrt{x^2+1}} - \frac{\sqrt{x^2+1}}{x^2}$	$\sqrt{x^2+1} - \log(\sqrt{x^2+1} + 1) + \log(x)$
$\frac{x}{\sqrt{\frac{x-1}{x+1}} (x+1)}$	$-\frac{\left(\frac{1}{x+1} - \frac{x-1}{(x+1)^2}\right)x}{2\left(\frac{x-1}{x+1}\right)^{3/2} (x+1)} - \frac{x}{\sqrt{\frac{x-1}{x+1}} (x+1)^2} + \frac{1}{\sqrt{\frac{x-1}{x+1}} (x+1)}$	$\sqrt{\frac{x-1}{x+1}} (x+1)$
$\frac{1}{x}$	$-\frac{1}{x^2}$	$\log(x)$
$\sqrt{\frac{1}{x^2} + 1} x$	$\sqrt{\frac{1}{x^2} + 1} - \frac{1}{\sqrt{\frac{1}{x^2} + 1} x^2}$	$\frac{1}{2} \left(\sqrt{\frac{1}{x^2} + 1} x^2 + \log\left(\left(\sqrt{\frac{1}{x^2} + 1} + 1\right) x\right) \right)$
$\frac{1}{\sqrt{\frac{1-x}{x+1}} (x+1)}$	$-\frac{-\frac{1-x}{(x+1)^2} - \frac{1}{x+1}}{2\left(\frac{1-x}{x+1}\right)^{3/2} (x+1)} - \frac{1}{\sqrt{\frac{1-x}{x+1}} (x+1)^2}$	$-\tan^{-1}\left(\frac{x\sqrt{\frac{1-x}{x+1}}}{x-1}\right)$
x	1	$\frac{x^2}{2}$
$\frac{x^2+1}{x^2-1}$	$\frac{2x}{x^2-1} - \frac{2x(x^2+1)}{(x^2-1)^2}$	$x - \log(x+1) + \log(1-x)$
$\coth\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{\log(n) \operatorname{csch}^2\left(\frac{\log(n)}{\log(x)}\right)}{x \log^2(x)}$	$\int \coth\left(\frac{\log(n)}{\log(x)}\right) dx$
$\sinh^{-1}(\sqrt{x})$	$\frac{1}{2\sqrt{x}\sqrt{x+1}}$	$\frac{1}{4} \left(\log\left(2\left(\sqrt{\frac{x}{x+1}} + 1\right) x + 2\sqrt{\frac{x}{x+1}} + 1\right) - \frac{2x}{\sqrt{\frac{x}{x+1}}}\right) + x \sinh^{-1}(\sqrt{x})$
$\sinh^{-1}(e^x)$	$\frac{e^x}{\sqrt{e^{2x}+1}}$	$\frac{1}{2} \left(-\operatorname{Li}_2\left(e^{-2\sinh^{-1}(e^x)}\right) - 2x \log\left(\sqrt{e^{2x}+1} + e^x\right) + \sinh^{-1}(e^x)^2 + 2\sinh^{-1}(e^x)\left(x + \log\left(1 - e^{-2\sinh^{-1}(e^x)}\right)\right) \right)$
$\sinh^{-1}(x^2)$	$\frac{2x}{\sqrt{x^4+1}}$	$x \sinh^{-1}(x^2) - 2(-1)^{3/4} \left(F\left(i \sinh^{-1}\left(\sqrt[4]{-1} x\right) \middle -1\right) - E\left(i \sinh^{-1}\left(\sqrt[4]{-1} x\right) \middle -1\right) \right)$
$\sinh^{-1}(x^3)$	$\frac{3x^2}{\sqrt{x^6+1}}$	$x \sinh^{-1}(x^3) + \frac{1}{\sqrt{x^6+1}} 3^{3/4} \sqrt{-\sqrt[6]{-1} (x^2 + (-1)^{2/3})} \sqrt{(-1)^{2/3} x^4 + \sqrt[3]{-1} x^2 + 1} \left((-1)^{5/6} F\left(\sin^{-1}\left(\frac{\sqrt{-(-1)^{5/6}(x^2+1)}}{\sqrt[3]{3}}\right) \middle \sqrt[3]{-1}\right) + \sqrt{3} E\left(\sin^{-1}\left(\frac{\sqrt{-(-1)^{5/6}(x^2+1)}}{\sqrt[3]{3}}\right) \middle \sqrt[3]{-1}\right) \right)$
$\sinh^{-1}(x^4)$	$\frac{4x^3}{\sqrt{x^8+1}}$	$x \sinh^{-1}(x^4) - \frac{4}{5} x^5 {}_2F_1\left(\frac{1}{2}, \frac{5}{8}; \frac{13}{8}; -x^8\right)$
$\sinh^{-1}(x^n)$	$\frac{n x^{n-1}}{\sqrt{x^{2n}+1}}$	$x \sinh^{-1}(x^n) - \frac{n x^{n+1} {}_2F_1\left(\frac{1}{2}, \frac{n+1}{2}; \frac{1}{2}\left(3 + \frac{1}{n}\right); -x^{2n}\right)}{n+1}$

$\sinh^{-1}(n^x)$	$\frac{n^x \log(n)}{\sqrt{n^{2x}+1}}$	$x \sinh^{-1}(n^x) - \frac{1}{2 \log(n)} \left(\text{Li}_2 \left(e^{-2 \sinh^{-1}(n^x)} \right) - \sinh^{-1}(n^x)^2 - 2 \sinh^{-1}(n^x) \log \left(1 - e^{-2 \sinh^{-1}(n^x)} \right) + 2 x \log(n) \log \left(\sqrt{n^{2x} + 1} + n^x \right) \right)$
$\sinh^{-1}(n^{1/x})$	$-\frac{n^{1/x} \log(n)}{x^2 \sqrt{n^{2/x}+1}}$	$\int \sinh^{-1}(n^{1/x}) dx$
$\sinh^{-1}(\sin(x))$	$\frac{\cos(x)}{\sqrt{\sin^2(x)+1}}$	$x \sinh^{-1}(\sin(x)) + \frac{1}{4} \left(i \left(\text{Li}_2 \left(e^{-ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) + \text{Li}_2 \left(e^{ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) - \text{Li}_2 \left(e^{-ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) - \text{Li}_2 \left(e^{ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) \right) - x \left(-\log \left(1 - e^{-ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) + \log \left(1 - e^{ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) + \log \left(1 - e^{-ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) - \log \left(1 - e^{ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) \right) + \left(\log \left(1 - e^{-ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) + \log \left(1 - e^{ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) + \log \left(1 - e^{-ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) + \log \left(1 - e^{ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) \right) \right) + \tan^{-1} \left(\frac{\cos(x)}{\sqrt{\sin^2(x)+1}} \right)$

$\sinh^{-1}(\cos(x))$	$-\frac{\sin(x)}{\sqrt{\cos^2(x)+1}}$	$x \sinh^{-1}(\cos(x)) +$ $\frac{1}{4} \left(i \left(-\text{Li}_2 \left(-e^{-ix} \left(\sqrt{\cos^2(x)+1} - i \sin(x) \right) \right) \right) - \right.$ $\text{Li}_2 \left(e^{ix} \left(\sqrt{\cos^2(x)+1} - i \sin(x) \right) \right) +$ $\text{Li}_2 \left(e^{-ix} \left(i \sin(x) + \sqrt{\cos^2(x)+1} \right) \right) +$ $\left. \text{Li}_2 \left(-e^{ix} \left(i \sin(x) + \sqrt{\cos^2(x)+1} \right) \right) \right) -$ $2\pi \tanh^{-1} \left(\frac{\sqrt{2} \cos(x)}{\sqrt{\cos(2x)+3}} \right) + \frac{1}{2} (\pi - 2x)$ $\left(\log \left(\frac{1}{2} \left(e^{2ix} + 2 e^{ix} \sqrt{\cos^2(x)+1} + 1 \right) \right) - \right.$ $\log \left(\frac{1}{2} \left(e^{2ix} - 2 e^{ix} \sqrt{\cos^2(x)+1} + \right.$ $\left. \left. 1 \right) \right) - \log \left(e^{-ix} \right.$ $\left. \left(e^{ix} - i \sin(x) - \sqrt{\cos^2(x)+1} \right) \right) +$ $\log \left(e^{-ix} \left(e^{ix} - i \sin(x) + \right.$ $\left. \sqrt{\cos^2(x)+1} \right) \right) \right) -$ $\left(\log \left(\frac{1}{2} \left(e^{2ix} + 2 e^{ix} \sqrt{\cos^2(x)+1} + 1 \right) \right) + \right.$ $\log \left(\frac{1}{2} \left(e^{2ix} - 2 e^{ix} \sqrt{\cos^2(x)+1} + \right.$ $\left. \left. 1 \right) \right) + \log \left(e^{-ix} \left(e^{ix} - i \sin(x) - \right.$ $\left. \sqrt{\cos^2(x)+1} \right) \right) + \log \left(e^{-ix} \right.$ $\left. \left(e^{ix} - i \sin(x) + \sqrt{\cos^2(x)+1} \right) \right) \right) \right)$ $\tan^{-1} \left(\frac{\sin(x)}{\sqrt{\cos^2(x)+1}} \right)$
$\sinh^{-1}(\tan(x))$	$\frac{\sec^2(x)}{\sqrt{\tan^2(x)+1}}$	$\int \sinh^{-1}(\tan(x)) dx$
$\sinh^{-1}(\csc(x))$	$-\frac{\cot(x) \csc(x)}{\sqrt{\csc^2(x)+1}}$	$\int \sinh^{-1}(\csc(x)) dx$
$\sinh^{-1}(\sec(x))$	$\frac{\tan(x) \sec(x)}{\sqrt{\sec^2(x)+1}}$	$\int \sinh^{-1}(\sec(x)) dx$
$\sinh^{-1}(\cot(x))$	$-\frac{\csc^2(x)}{\sqrt{\cot^2(x)+1}}$	$\int \sinh^{-1}(\cot(x)) dx$
$\sinh^{-1}(\sin^{-1}(x))$	$\frac{1}{\sqrt{1-x^2} \sqrt{\sin^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\sin^{-1}(x)) dx$
$\sinh^{-1}(\cos^{-1}(x))$	$-\frac{1}{\sqrt{1-x^2} \sqrt{\cos^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\cos^{-1}(x)) dx$
$\sinh^{-1}(\tan^{-1}(x))$	$\frac{1}{(x^2+1) \sqrt{\tan^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\tan^{-1}(x)) dx$
$\sinh^{-1}(\csc^{-1}(x))$	$-\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 \sqrt{\csc^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\csc^{-1}(x)) dx$

$\sinh^{-1}(\sec^{-1}(x))$	$\frac{1}{\sqrt{1-\frac{1}{x^2}} \sqrt{\sec^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\sec^{-1}(x)) dx$
$\sinh^{-1}(\cot^{-1}(x))$	$-\frac{1}{(x^2+1)\sqrt{\cot^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\cot^{-1}(x)) dx$
$\sinh^{-1}(\sinh(x))$	$\frac{\cosh(x)}{\sqrt{\sinh^2(x)+1}}$	$x \sinh^{-1}(\sinh(x)) - \frac{1}{2} x^2 \sqrt{\cosh^2(x)} \operatorname{sech}(x)$

$\sinh^{-1}(\cosh(x))$	$\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}}$	$ \begin{aligned} & x \sinh^{-1}(\cosh(x)) + \\ & \frac{1}{8} \left(2 \operatorname{Li}_2 \left(e^x \left(\sqrt{\cosh^2(x)+1} - \sinh(x) \right) \right) + \right. \\ & \quad 2 \operatorname{Li}_2 \left(e^{-x} \left(\sinh(x) - \sqrt{\cosh^2(x)+1} \right) \right) - \\ & \quad 2 \operatorname{Li}_2 \left(e^{-x} \left(\sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) - \\ & \quad 2 \operatorname{Li}_2 \left(-e^x \left(\sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) + \\ & \quad 4 i \pi \tanh^{-1} \left(\frac{\sqrt{2} \cosh(x)}{\sqrt{\cosh(2x)+3}} \right) - \\ & \quad 2 x \log \left(e^x \sinh(x) + e^x \sqrt{\cosh^2(x)+1} + 1 \right) - \\ & \quad i \pi \log \left(e^x \sinh(x) + e^x \sqrt{\cosh^2(x)+1} + 1 \right) + \\ & \quad 2 x \log \left(e^x \sinh(x) - e^x \sqrt{\cosh^2(x)+1} + 1 \right) + \\ & \quad i \pi \log \left(e^x \sinh(x) - e^x \sqrt{\cosh^2(x)+1} + 1 \right) + \\ & \quad 2 x \log \left(e^{-x} \right. \\ & \quad \quad \left. \left(e^x - \sinh(x) - \sqrt{\cosh^2(x)+1} \right) \right) + i \pi \\ & \quad \log \left(e^{-x} \left(e^x - \sinh(x) - \sqrt{\cosh^2(x)+1} \right) \right) - \\ & \quad 2 x \log \left(e^{-x} \right. \\ & \quad \quad \left. \left(e^x - \sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) - i \pi \\ & \quad \log \left(e^{-x} \left(e^x - \sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) - \\ & \quad 2 \log \left(e^x \sinh(x) + e^x \sqrt{\cosh^2(x)+1} + 1 \right) \\ & \quad \tanh^{-1} \left(\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}} \right) - \\ & \quad 2 \log \left(e^x \sinh(x) - e^x \sqrt{\cosh^2(x)+1} + 1 \right) \\ & \quad \tanh^{-1} \left(\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}} \right) - \\ & \quad 2 \log \left(e^{-x} \left(e^x - \sinh(x) - \sqrt{\cosh^2(x)+1} \right) \right) \\ & \quad \tanh^{-1} \left(\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}} \right) - \\ & \quad 2 \log \left(e^{-x} \left(e^x - \sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) \\ & \quad \tanh^{-1} \left(\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}} \right) \Big) \end{aligned} $
$\sinh^{-1}(\tanh(x))$	$\frac{\operatorname{sech}^2(x)}{\sqrt{\tanh^2(x)+1}}$	$\int \sinh^{-1}(\tanh(x)) dx$

$\sinh^{-1}(\operatorname{csch}(x))$	$-\frac{\operatorname{coth}(x)\operatorname{csch}(x)}{\sqrt{\operatorname{csch}^2(x)+1}}$	$\int \sinh^{-1}(\operatorname{csch}(x)) dx$
$\sinh^{-1}(\operatorname{sech}(x))$	$-\frac{\tanh(x)\operatorname{sech}(x)}{\sqrt{\operatorname{sech}^2(x)+1}}$	$\int \sinh^{-1}(\operatorname{sech}(x)) dx$
$\sinh^{-1}(\operatorname{coth}(x))$	$-\frac{\operatorname{csch}^2(x)}{\sqrt{\operatorname{coth}^2(x)+1}}$	$\int \sinh^{-1}(\operatorname{coth}(x)) dx$
$\sinh^{-1}(\cosh^{-1}(x))$	$\frac{1}{\sqrt{x-1}\sqrt{x+1}\sqrt{\cosh^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\cosh^{-1}(x)) dx$
$\sinh^{-1}(\tanh^{-1}(x))$	$\frac{1}{(1-x^2)\sqrt{\tanh^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\tanh^{-1}(x)) dx$
$\sinh^{-1}(\operatorname{csch}^{-1}(x))$	$-\frac{1}{\sqrt{\frac{1}{x^2}+1}\sqrt{x^2}\sqrt{\operatorname{csch}^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\operatorname{csch}^{-1}(x)) dx$
$\sinh^{-1}(\operatorname{sech}^{-1}(x))$	$-\frac{1}{x\sqrt{\frac{1-x}{x+1}}(x+1)\sqrt{\operatorname{sech}^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\operatorname{sech}^{-1}(x)) dx$
$\sinh^{-1}(\operatorname{coth}^{-1}(x))$	$\frac{1}{(1-x^2)\sqrt{\operatorname{coth}^{-1}(x)^2+1}}$	$\int \sinh^{-1}(\operatorname{coth}^{-1}(x)) dx$
$\sinh^{-1}(\log(x))$	$\frac{1}{x\sqrt{\log^2(x)+1}}$	$\int \sinh^{-1}(\log(x)) dx$
$\sinh^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n)}{x\log^2(x)\sqrt{\frac{\log^2(n)}{\log^2(x)}+1}}$	$\int \sinh^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\cosh^{-1}(\sqrt{x})$	$\frac{1}{2\sqrt{\sqrt{x}-1}\sqrt{\sqrt{x}+1}\sqrt{x}}$	$\frac{1}{2}\left(-\sqrt{\sqrt{x}-1}\sqrt{\sqrt{x}+1}\sqrt{x}-\log\left(\sqrt{\sqrt{x}-1}\sqrt{\sqrt{x}+1}+\sqrt{x}\right)\right)+x\cosh^{-1}(\sqrt{x})$
$\cosh^{-1}(e^x)$	$\frac{e^x}{\sqrt{e^x-1}\sqrt{e^x+1}}$	$x\cosh^{-1}(e^x)-\frac{1}{2\sqrt{e^x+1}}\sqrt{e^x-1}\sqrt{\frac{e^x+1}{e^x-1}}\left(\operatorname{Li}_2\left(-e^{-2\cosh^{-1}(-e^x)}\right)+\cosh^{-1}(-e^x)\left(2x-\cosh^{-1}(-e^x)-2\log\left(e^{-2\cosh^{-1}(-e^x)}+1\right)\right)\right)$
$\cosh^{-1}(x^2)$	$\frac{2x}{\sqrt{x^2-1}\sqrt{x^2+1}}$	$x\cosh^{-1}(x^2)+\frac{2\sqrt{1-x^2}\left(F(\sin^{-1}(x) -1)-E(\sin^{-1}(x) -1)\right)}{\sqrt{x^2-1}}$
$\cosh^{-1}(x^3)$	$\frac{3x^2}{\sqrt{x^3-1}\sqrt{x^3+1}}$	$x\cosh^{-1}(x^3)-\frac{3x^4\sqrt{1-x^6}}{4\sqrt{x^3-1}\sqrt{x^3+1}}{}_2F_1\left(\frac{1}{2},\frac{2}{3};\frac{5}{3};x^6\right)$
$\cosh^{-1}(x^4)$	$\frac{4x^3}{\sqrt{x^4-1}\sqrt{x^4+1}}$	$x\cosh^{-1}(x^4)-\frac{4x^5\sqrt{1-x^8}}{5\sqrt{x^4-1}\sqrt{x^4+1}}{}_2F_1\left(\frac{1}{2},\frac{5}{8};\frac{13}{8};x^8\right)$
$\cosh^{-1}(x^n)$	$\frac{n x^{n-1}}{\sqrt{x^n-1}\sqrt{x^n+1}}$	$x\cosh^{-1}(x^n)-\frac{n x^{n+1}\sqrt{1-x^{2n}}}{(n+1)\sqrt{x^n-1}\sqrt{x^n+1}}{}_2F_1\left(\frac{1}{2},\frac{n+1}{2n};\frac{1}{2}\left(3+\frac{1}{n}\right);x^{2n}\right)$
$\cosh^{-1}(n^x)$	$\frac{n^x \log(n)}{\sqrt{n^x-1}\sqrt{n^x+1}}$	$x\cosh^{-1}(n^x)-\frac{1}{2\sqrt{n^x+1}\log(n)}\sqrt{n^x-1}\sqrt{\frac{n^x+1}{n^x-1}}\left(\operatorname{Li}_2\left(-e^{-2\cosh^{-1}(-n^x)}\right)+\cosh^{-1}(-n^x)\left(-\cosh^{-1}(-n^x)-2\log\left(e^{-2\cosh^{-1}(-n^x)}+1\right)+2x\log(n)\right)\right)$
$\cosh^{-1}(n^{1/x})$	$-\frac{n^{1/x}\log(n)}{x^2\sqrt{n^{1/x}-1}\sqrt{n^{1/x}+1}}$	$\int \cosh^{-1}(n^{1/x}) dx$

$\cosh^{-1}(\sin(x))$	$\frac{\cos(x)}{\sqrt{\sin(x)-1} \sqrt{\sin(x)+1}}$	$\int \cosh^{-1}(\sin(x)) dx$
$\cosh^{-1}(\cos(x))$	$-\frac{\sin(x)}{\sqrt{\cos(x)-1} \sqrt{\cos(x)+1}}$	$\int \cosh^{-1}(\cos(x)) dx$
$\cosh^{-1}(\tan(x))$	$\frac{\sec^2(x)}{\sqrt{\tan(x)-1} \sqrt{\tan(x)+1}}$	$\int \cosh^{-1}(\tan(x)) dx$
$\cosh^{-1}(\csc(x))$	$-\frac{\cot(x) \csc(x)}{\sqrt{\csc(x)-1} \sqrt{\csc(x)+1}}$	$\int \cosh^{-1}(\csc(x)) dx$
$\cosh^{-1}(\sec(x))$	$\frac{\tan(x) \sec(x)}{\sqrt{\sec(x)-1} \sqrt{\sec(x)+1}}$	$\int \cosh^{-1}(\sec(x)) dx$
$\cosh^{-1}(\cot(x))$	$-\frac{\csc^2(x)}{\sqrt{\cot(x)-1} \sqrt{\cot(x)+1}}$	$\int \cosh^{-1}(\cot(x)) dx$
$\cosh^{-1}(\sin^{-1}(x))$	$1 / \left(\sqrt{1-x^2} \sqrt{\sin^{-1}(x)-1} \sqrt{\sin^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\sin^{-1}(x)) dx$
$\cosh^{-1}(\cos^{-1}(x))$	$-1 / \left(\sqrt{1-x^2} \sqrt{\cos^{-1}(x)-1} \sqrt{\cos^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\cos^{-1}(x)) dx$
$\cosh^{-1}(\tan^{-1}(x))$	$\frac{1}{(x^2+1) \sqrt{\tan^{-1}(x)-1} \sqrt{\tan^{-1}(x)+1}}$	$\int \cosh^{-1}(\tan^{-1}(x)) dx$
$\cosh^{-1}(\csc^{-1}(x))$	$-1 / \left(\sqrt{1-\frac{1}{x^2}} x^2 \sqrt{\csc^{-1}(x)-1} \sqrt{\csc^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\csc^{-1}(x)) dx$
$\cosh^{-1}(\sec^{-1}(x))$	$1 / \left(\sqrt{1-\frac{1}{x^2}} x^2 \sqrt{\sec^{-1}(x)-1} \sqrt{\sec^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\sec^{-1}(x)) dx$
$\cosh^{-1}(\cot^{-1}(x))$	$-1 / \left((x^2+1) \sqrt{\cot^{-1}(x)-1} \sqrt{\cot^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\cot^{-1}(x)) dx$
$\cosh^{-1}(\sinh(x))$	$\frac{\cosh(x)}{\sqrt{\sinh(x)-1} \sqrt{\sinh(x)+1}}$	$\int \cosh^{-1}(\sinh(x)) dx$
$\cosh^{-1}(\cosh(x))$	$\frac{\sinh(x)}{\sqrt{\cosh(x)-1} \sqrt{\cosh(x)+1}}$	$\int \cosh^{-1}(\cosh(x)) dx$
$\cosh^{-1}(\tanh(x))$	$\frac{\operatorname{sech}^2(x)}{\sqrt{\tanh(x)-1} \sqrt{\tanh(x)+1}}$	$\int \cosh^{-1}(\tanh(x)) dx$
$\cosh^{-1}(\operatorname{csch}(x))$	$-\frac{\operatorname{coth}(x) \operatorname{csch}(x)}{\sqrt{\operatorname{csch}(x)-1} \sqrt{\operatorname{csch}(x)+1}}$	$\int \cosh^{-1}(\operatorname{csch}(x)) dx$
$\cosh^{-1}(\operatorname{sech}(x))$	$-\frac{\tanh(x) \operatorname{sech}(x)}{\sqrt{\operatorname{sech}(x)-1} \sqrt{\operatorname{sech}(x)+1}}$	$\int \cosh^{-1}(\operatorname{sech}(x)) dx$
$\cosh^{-1}(\operatorname{coth}(x))$	$-\frac{\operatorname{csch}^2(x)}{\sqrt{\operatorname{coth}(x)-1} \sqrt{\operatorname{coth}(x)+1}}$	$\int \cosh^{-1}(\operatorname{coth}(x)) dx$
$\cosh^{-1}(\sinh^{-1}(x))$	$1 / \left(\sqrt{x^2+1} \sqrt{\sinh^{-1}(x)-1} \sqrt{\sinh^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\sinh^{-1}(x)) dx$
$\cosh^{-1}(\tanh^{-1}(x))$	$1 / \left((1-x^2) \sqrt{\tanh^{-1}(x)-1} \sqrt{\tanh^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\tanh^{-1}(x)) dx$
$\cosh^{-1}(\operatorname{csch}^{-1}(x))$	$-1 / \left(\sqrt{\frac{1}{x^2}+1} x^2 \sqrt{\operatorname{csch}^{-1}(x)-1} \sqrt{\operatorname{csch}^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\operatorname{csch}^{-1}(x)) dx$
$\cosh^{-1}(\operatorname{sech}^{-1}(x))$	$-1 / \left(x \sqrt{\frac{1-x}{x+1}} (x+1) \sqrt{\operatorname{sech}^{-1}(x)-1} \sqrt{\operatorname{sech}^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\operatorname{sech}^{-1}(x)) dx$
$\cosh^{-1}(\operatorname{coth}^{-1}(x))$	$1 / \left((1-x^2) \sqrt{\operatorname{coth}^{-1}(x)-1} \sqrt{\operatorname{coth}^{-1}(x)+1} \right)$	$\int \cosh^{-1}(\operatorname{coth}^{-1}(x)) dx$
$\cosh^{-1}(\log(x))$	$\frac{1}{x \sqrt{\log(x)-1} \sqrt{\log(x)+1}}$	$\int \cosh^{-1}(\log(x)) dx$

$\cosh^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$-\log(n) / \left(x \log^2(x) \sqrt{\frac{\log(n)}{\log(x)} - 1} \sqrt{\frac{\log(n)}{\log(x)} + 1} \right)$	$\int \cosh^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\tanh^{-1}(\sqrt{x})$	$\frac{1}{2(1-x)\sqrt{x}}$	$\sqrt{x} - \frac{1}{2} \log(\sqrt{x} + 1) + \frac{1}{2} \log(1 - \sqrt{x}) + x \tanh^{-1}(\sqrt{x})$
$\tanh^{-1}(e^x)$	$\frac{e^x}{1-e^{2x}}$	$\frac{1}{2} (-\text{Li}_2(-e^x) + \text{Li}_2(e^x) - x(\log(e^x + 1) - \log(1 - e^x))) + x \tanh^{-1}(e^x)$
$\tanh^{-1}(x^2)$	$\frac{2x}{1-x^4}$	$x \tanh^{-1}(x^2) - \frac{1}{2} \log(x + 1) + \frac{1}{2} \log(1 - x) + \tan^{-1}(x)$
$\tanh^{-1}(x^3)$	$\frac{3x^2}{1-x^6}$	$x \tanh^{-1}(x^3) + \frac{1}{4} \left(-\log(x^2 - x + 1) - \log(x^2 + x + 1) + 2 \log(x + 1) + 2 \log(1 - x) + 2\sqrt{3} \tan^{-1}\left(\frac{2x-1}{\sqrt{3}}\right) - 2\sqrt{3} \tan^{-1}\left(\frac{2x+1}{\sqrt{3}}\right) \right)$
$\tanh^{-1}(x^4)$	$\frac{4x^3}{1-x^8}$	$x \tanh^{-1}(x^4) + \frac{1}{4} \left(\sqrt{2} \log(x^2 + \sqrt{2}x + 1) - \sqrt{2} \log(x^2 - \sqrt{2}x + 1) - 2 \log(x + 1) + 2 \log(1 - x) + 2\sqrt{2} \tan^{-1}(\sqrt{2}x + 1) - 4 \tan^{-1}(x) - 2\sqrt{2} \tan^{-1}(1 - \sqrt{2}x) \right)$
$\tanh^{-1}(x^n)$	$\frac{nx^{n-1}}{1-x^{2n}}$	$x \tanh^{-1}(x^n) - \frac{n x^{n+1} {}_2F_1\left(1, \frac{n+1}{2n}; \frac{1}{2} \left(3 + \frac{1}{n}\right); x^{2n}\right)}{n+1}$
$\tanh^{-1}(n^x)$	$\frac{n^x \log(n)}{1-n^{2x}}$	$x \tanh^{-1}(n^x) - \frac{1}{2 \log(n)} (\text{Li}_2(-n^x) - \text{Li}_2(n^x) + x \log(n) (\log(n^x + 1) - \log(1 - n^x)))$
$\tanh^{-1}(n^{1/x})$	$-\frac{n^{1/x} \log(n)}{x^2(1-n^{2/x})}$	$\int \tanh^{-1}(n^{1/x}) dx$
$\tanh^{-1}(\sin(x))$	$\frac{\cos(x)}{1-\sin^2(x)}$	$-i (\text{Li}_2(-i e^{ix}) - \text{Li}_2(i e^{ix})) - x (\log(1 - i e^{ix}) - \log(1 + i e^{ix})) + x \tanh^{-1}(\sin(x))$
$\tanh^{-1}(\cos(x))$	$-\frac{\sin(x)}{1-\cos^2(x)}$	$i (\text{Li}_2(-e^{ix}) - \text{Li}_2(e^{ix})) + x (\log(1 - e^{ix}) - \log(1 + e^{ix})) + x \tanh^{-1}(\cos(x))$
$\tanh^{-1}(\tan(x))$	$\frac{\sec^2(x)}{1-\tan^2(x)}$	$x \tanh^{-1}(\tan(x)) + \frac{1}{4} (-i (\text{Li}_2(-i e^{2ix}) - \text{Li}_2(i e^{2ix})) - 2x (\log(1 - i e^{2ix}) - \log(1 + i e^{2ix})))$
$\tanh^{-1}(\csc(x))$	$-\frac{\cot(x) \csc(x)}{1-\csc^2(x)}$	$-i (\text{Li}_2(-i e^{ix}) - \text{Li}_2(i e^{ix})) - x (\log(1 - i e^{ix}) - \log(1 + i e^{ix})) + x \tanh^{-1}(\csc(x))$
$\tanh^{-1}(\sec(x))$	$\frac{\tan(x) \sec(x)}{1-\sec^2(x)}$	$i (\text{Li}_2(-e^{ix}) - \text{Li}_2(e^{ix})) + x (\log(1 - e^{ix}) - \log(1 + e^{ix})) + x \tanh^{-1}(\sec(x))$
$\tanh^{-1}(\cot(x))$	$-\frac{\csc^2(x)}{1-\cot^2(x)}$	$x \tanh^{-1}(\cot(x)) + \frac{1}{4} (-i (\text{Li}_2(-i e^{2ix}) - \text{Li}_2(i e^{2ix})) - 2x (\log(1 - i e^{2ix}) - \log(1 + i e^{2ix})))$
$\tanh^{-1}(\sin^{-1}(x))$	$\frac{1}{\sqrt{1-x^2} (1-\sin^{-1}(x)^2)}$	$\int \tanh^{-1}(\sin^{-1}(x)) dx$
$\tanh^{-1}(\cos^{-1}(x))$	$-\frac{1}{\sqrt{1-x^2} (1-\cos^{-1}(x)^2)}$	$\int \tanh^{-1}(\cos^{-1}(x)) dx$
$\tanh^{-1}(\tan^{-1}(x))$	$\frac{1}{(x^2+1)(1-\tan^{-1}(x)^2)}$	$\int \tanh^{-1}(\tan^{-1}(x)) dx$
$\tanh^{-1}(\csc^{-1}(x))$	$-\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 (1-\csc^{-1}(x)^2)}$	$\int \tanh^{-1}(\csc^{-1}(x)) dx$

$\tanh^{-1}(\sec^{-1}(x))$	$\frac{1}{\sqrt{1-\frac{1}{x^2} x^2 (1-\sec^{-1}(x)^2)}}$	$\int \tanh^{-1}(\sec^{-1}(x)) dx$
$\tanh^{-1}(\cot^{-1}(x))$	$-\frac{1}{(x^2+1)(1-\cot^{-1}(x)^2)}$	$\int \tanh^{-1}(\cot^{-1}(x)) dx$
$\tanh^{-1}(\sinh(x))$	$\frac{\cosh(x)}{1-\sinh^2(x)}$	$x \tanh^{-1}(\sinh(x)) + \frac{1}{4} i \left(2 i \operatorname{Li}_2(-(-1 + \sqrt{2}) e^x) - \right.$ $2 i \operatorname{Li}_2((-1 + \sqrt{2}) e^x) -$ $2 i \operatorname{Li}_2(-(-1 + \sqrt{2}) e^x) +$ $2 i \operatorname{Li}_2((1 + \sqrt{2}) e^x) +$ $2 i x \log((\sqrt{2} - 1) e^x + 1) -$ $\pi \log((\sqrt{2} - 1) e^x + 1) -$ $2 i x \log((1 + \sqrt{2}) e^x + 1) +$ $\pi \log((1 + \sqrt{2}) e^x + 1) -$ $2 i x \log(e^x - \sqrt{2} e^x + 1) +$ $\pi \log(e^x - \sqrt{2} e^x + 1) +$ $2 i x \log(1 - (1 + \sqrt{2}) e^x) -$ $\pi \log(1 - (1 + \sqrt{2}) e^x) -$ $4 \sin^{-1} \left(\sqrt{\frac{1}{2} + \frac{i}{2}} \right) \log((\sqrt{2} - 1) e^x + 1) -$ $4 \sin^{-1} \left(\sqrt{\frac{1}{2} - \frac{i}{2}} \right) \log((1 + \sqrt{2}) e^x + 1) +$ $4 \sin^{-1} \left(\sqrt{\frac{1}{2} - \frac{i}{2}} \right) \log(e^x - \sqrt{2} e^x + 1) +$ $4 \sin^{-1} \left(\sqrt{\frac{1}{2} + \frac{i}{2}} \right) \log(1 - (1 + \sqrt{2}) e^x) +$ $\pi \log(\sinh(x) + 1) - \pi \log(1 - \sinh(x)) -$ $8 i \sin^{-1} \left(\sqrt{\frac{1}{2} + \frac{i}{2}} \right) \tan^{-1} \left(\frac{(1+i) \cot\left(\frac{1}{4}(\pi+2 i x)\right)}{\sqrt{2}} \right) +$ $8 \sin^{-1} \left(\sqrt{\frac{1}{2} - \frac{i}{2}} \right) \tanh^{-1} \left(\frac{(1+i) \cot\left(\frac{1}{4}(\pi+2 i x)\right)}{\sqrt{2}} \right) \Bigg)$
$\tanh^{-1}(\cosh(x))$	$\frac{\sinh(x)}{1-\cosh^2(x)}$	$\operatorname{Li}_2(-e^{-x}) - \operatorname{Li}_2(e^{-x}) +$ $x (\log(1 - e^{-x}) - \log(e^{-x} + 1)) + x \tanh^{-1}(\cosh(x))$
$\tanh^{-1}(\tanh(x))$	$\frac{\operatorname{sech}^2(x)}{1-\tanh^2(x)}$	$x \tanh^{-1}(\tanh(x)) - \frac{x^2}{2}$

$\tanh^{-1}(\operatorname{csch}(x))$	$-\frac{\operatorname{coth}(x)\operatorname{csch}(x)}{1-\operatorname{csch}^2(x)}$	$x \tanh^{-1}(\operatorname{csch}(x)) + \frac{1}{4} i \left(2 i \operatorname{Li}_2\left(-(-1 + \sqrt{2}) e^x\right) - \right.$ $2 i \operatorname{Li}_2\left((-1 + \sqrt{2}) e^x\right) -$ $2 i \operatorname{Li}_2\left(-\left(1 + \sqrt{2}\right) e^x\right) +$ $2 i \operatorname{Li}_2\left(\left(1 + \sqrt{2}\right) e^x\right) +$ $2 i x \log\left(\left(\sqrt{2} - 1\right) e^x + 1\right) -$ $\pi \log\left(\left(\sqrt{2} - 1\right) e^x + 1\right) -$ $2 i x \log\left(\left(1 + \sqrt{2}\right) e^x + 1\right) +$ $\pi \log\left(\left(1 + \sqrt{2}\right) e^x + 1\right) -$ $2 i x \log\left(e^x - \sqrt{2} e^x + 1\right) +$ $\pi \log\left(e^x - \sqrt{2} e^x + 1\right) +$ $2 i x \log\left(1 - \left(1 + \sqrt{2}\right) e^x\right) -$ $\pi \log\left(1 - \left(1 + \sqrt{2}\right) e^x\right) -$ $4 \sin^{-1}\left(\sqrt{\frac{1}{2} + \frac{i}{2}}\right) \log\left(\left(\sqrt{2} - 1\right) e^x + 1\right) -$ $4 \sin^{-1}\left(\sqrt{\frac{1}{2} - \frac{i}{2}}\right) \log\left(\left(1 + \sqrt{2}\right) e^x + 1\right) +$ $4 \sin^{-1}\left(\sqrt{\frac{1}{2} - \frac{i}{2}}\right) \log\left(e^x - \sqrt{2} e^x + 1\right) +$ $4 \sin^{-1}\left(\sqrt{\frac{1}{2} + \frac{i}{2}}\right) \log\left(1 - \left(1 + \sqrt{2}\right) e^x\right) +$ $\pi \log(\sinh(x) + 1) - \pi \log(1 - \sinh(x)) -$ $8 i \sin^{-1}\left(\sqrt{\frac{1}{2} + \frac{i}{2}}\right) \tan^{-1}\left(\frac{(1+i) \cot\left(\frac{1}{4}(\pi+2 i x)\right)}{\sqrt{2}}\right) +$ $8 \sin^{-1}\left(\sqrt{\frac{1}{2} - \frac{i}{2}}\right) \tanh^{-1}\left(\frac{(1+i) \cot\left(\frac{1}{4}(\pi+2 i x)\right)}{\sqrt{2}}\right) \Bigg)$
$\tanh^{-1}(\operatorname{sech}(x))$	$-\frac{\tanh(x)\operatorname{sech}(x)}{1-\operatorname{sech}^2(x)}$	$\operatorname{Li}_2(-e^{-x}) - \operatorname{Li}_2(e^{-x}) +$ $x(\log(1 - e^{-x}) - \log(e^{-x} + 1)) + x \tanh^{-1}(\operatorname{sech}(x))$
$\tanh^{-1}(\operatorname{coth}(x))$	$-\frac{\operatorname{csch}^2(x)}{1-\operatorname{coth}^2(x)}$	$x \tanh^{-1}(\operatorname{coth}(x)) - \frac{x^2}{2}$
$\tanh^{-1}(\sinh^{-1}(x))$	$\frac{1}{\sqrt{x^2+1} (1-\sinh^{-1}(x)^2)}$	$\int \tanh^{-1}(\sinh^{-1}(x)) dx$
$\tanh^{-1}(\cosh^{-1}(x))$	$\frac{1}{\sqrt{x-1} \sqrt{x+1} (1-\cosh^{-1}(x)^2)}$	$\int \tanh^{-1}(\cosh^{-1}(x)) dx$
$\tanh^{-1}(\operatorname{csch}^{-1}(x))$	$-\frac{1}{\sqrt{\frac{1}{x^2}+1} x^2 (1-\operatorname{csch}^{-1}(x)^2)}$	$\int \tanh^{-1}(\operatorname{csch}^{-1}(x)) dx$
$\tanh^{-1}(\operatorname{sech}^{-1}(x))$	$-\frac{1}{x \sqrt{\frac{1-x}{x+1}} (x+1) (1-\operatorname{sech}^{-1}(x)^2)}$	$\int \tanh^{-1}(\operatorname{sech}^{-1}(x)) dx$
$\tanh^{-1}(\operatorname{coth}^{-1}(x))$	$\frac{1}{(1-x^2)(1-\operatorname{coth}^{-1}(x)^2)}$	$\int \tanh^{-1}(\operatorname{coth}^{-1}(x)) dx$

$\tanh^{-1}(\log(x))$	$\frac{1}{x(1-\log^2(x))}$	$\int \tanh^{-1}(\log(x)) dx$
$\tanh^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n)}{x \log^2(x) \left(1 - \frac{\log^2(n)}{\log^2(x)}\right)}$	$\int \tanh^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\operatorname{csch}^{-1}(\sqrt{x})$	$-\frac{1}{2\sqrt{\frac{1}{x}+1} x^{3/2}}$	$\sqrt{\frac{x+1}{x}} \sqrt{x} + x \operatorname{csch}^{-1}(\sqrt{x})$
$\operatorname{csch}^{-1}(e^x)$	$-\frac{e^{-x}}{\sqrt{e^{-2x}+1}}$	$\frac{1}{2} \left(\operatorname{Li}_2\left(e^{-2 \sinh^{-1}(e^{-x})}\right) - 2x \log\left(\sqrt{e^{-2x}+1} + e^{-x}\right) - \sinh^{-1}(e^{-x})^2 - 2 \sinh^{-1}(e^{-x}) \log\left(1 - e^{-2 \sinh^{-1}(e^{-x})}\right) \right) + x \operatorname{csch}^{-1}(e^x)$
$\operatorname{csch}^{-1}(x^2)$	$-\frac{2}{\sqrt{\frac{1}{x^4}+1} x^3}$	$\int \operatorname{csch}^{-1}(x^2) dx$
$\operatorname{csch}^{-1}(x^3)$	$-\frac{3}{\sqrt{\frac{1}{x^6}+1} x^4}$	$\int \operatorname{csch}^{-1}(x^3) dx$
$\operatorname{csch}^{-1}(x^4)$	$-\frac{4}{\sqrt{\frac{1}{x^8}+1} x^5}$	$\int \operatorname{csch}^{-1}(x^4) dx$
$\operatorname{csch}^{-1}(x^n)$	$-\frac{n x^{-n-1}}{\sqrt{x^{-2n}+1}}$	$x \left(\operatorname{csch}^{-1}(x^n) - \frac{n x^{-n} {}_2F_1\left(\frac{1}{2}, \frac{n-1}{2}, \frac{3}{2}, -\frac{1}{2n}; -x^{-2n}\right)}{n-1} \right)$
$\operatorname{csch}^{-1}(n^x)$	$-\frac{n^{-x} \log(n)}{\sqrt{n^{-2x}+1}}$	$x \operatorname{csch}^{-1}(n^x) - \frac{1}{2 \log(n)} \left(-\operatorname{Li}_2\left(e^{-2 \sinh^{-1}(n^{-x})}\right) + 2x \log(n) \log\left(n^{-x} + \sqrt{n^{-2x}+1}\right) + \sinh^{-1}(n^{-x})^2 + 2 \sinh^{-1}(n^{-x}) \log\left(1 - e^{-2 \sinh^{-1}(n^{-x})}\right) \right)$
$\operatorname{csch}^{-1}(n^{1/x})$	$\frac{n^{-1/x} \log(n)}{x^2 \sqrt{n^{-2/x}+1}}$	$\int \operatorname{csch}^{-1}(n^{1/x}) dx$
$\operatorname{csch}^{-1}(\sin(x))$	$-\frac{\cot(x) \operatorname{csc}(x)}{\sqrt{\csc^2(x)+1}}$	$\int \operatorname{csch}^{-1}(\sin(x)) dx$
$\operatorname{csch}^{-1}(\cos(x))$	$\frac{\tan(x) \sec(x)}{\sqrt{\sec^2(x)+1}}$	$\int \operatorname{csch}^{-1}(\cos(x)) dx$
$\operatorname{csch}^{-1}(\tan(x))$	$-\frac{\csc^2(x)}{\sqrt{\cot^2(x)+1}}$	$\int \operatorname{csch}^{-1}(\tan(x)) dx$

$\operatorname{csch}^{-1}(\csc(x))$	$\frac{\cos(x)}{\sqrt{\sin^2(x)+1}}$	$ \begin{aligned} &x \operatorname{csch}^{-1}(\csc(x)) + \\ &\frac{1}{4} \left(i \left(\operatorname{Li}_2 \left(e^{-ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) \right) + \right. \\ &\quad \operatorname{Li}_2 \left(e^{ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) - \\ &\quad \operatorname{Li}_2 \left(e^{-ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) - \\ &\quad \left. \operatorname{Li}_2 \left(e^{ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) \right) - \\ &x \left(-\log \left(1 - e^{-ix} \left(\cos(x) + \right. \right. \right. \\ &\quad \left. \left. \left. i \sqrt{\sin^2(x) + 1} \right) \right) \right) + \log \left(\right. \\ &\quad \left. 1 - e^{ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) + \\ &\log \left(1 - e^{-ix} \left(\cos(x) - \right. \right. \\ &\quad \left. \left. i \sqrt{\sin^2(x) + 1} \right) \right) - \log \left(\right. \\ &\quad \left. 1 - e^{ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) \right) + \\ &\left(\log \left(1 - e^{-ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) \right) + \\ &\log \left(\right. \\ &\quad \left. 1 - e^{ix} \left(\cos(x) + i \sqrt{\sin^2(x) + 1} \right) \right) + \\ &\log \left(1 - e^{-ix} \left(\cos(x) - \right. \right. \\ &\quad \left. \left. i \sqrt{\sin^2(x) + 1} \right) \right) \right) + \log \left(\right. \\ &\quad \left. 1 - e^{ix} \left(\cos(x) - i \sqrt{\sin^2(x) + 1} \right) \right) \right) \\ &\tan^{-1} \left(\frac{\cos(x)}{\sqrt{\sin^2(x)+1}} \right) \end{aligned} $
-------------------------------------	--------------------------------------	--

$\operatorname{csch}^{-1}(\sec(x))$	$-\frac{\sin(x)}{\sqrt{\cos^2(x)+1}}$	$x \operatorname{csch}^{-1}(\sec(x)) +$ $\frac{1}{4} \left(i \left(-\operatorname{Li}_2 \left(-e^{-ix} \left(\sqrt{\cos^2(x)+1} - i \sin(x) \right) \right) - \right.$ $\operatorname{Li}_2 \left(e^{ix} \left(\sqrt{\cos^2(x)+1} - i \sin(x) \right) \right) +$ $\operatorname{Li}_2 \left(e^{-ix} \left(i \sin(x) + \sqrt{\cos^2(x)+1} \right) \right) +$ $\left. \operatorname{Li}_2 \left(-e^{ix} \left(i \sin(x) + \sqrt{\cos^2(x)+1} \right) \right) \right) -$ $2\pi \tanh^{-1} \left(\frac{\sqrt{2} \cos(x)}{\sqrt{\cos(2x)+3}} \right) + \frac{1}{2} (\pi - 2x)$ $\left(\log \left(\frac{1}{2} \left(e^{2ix} + 2 e^{ix} \sqrt{\cos^2(x)+1} + 1 \right) \right) - \right.$ $\log \left(\frac{1}{2} \left(e^{2ix} - 2 e^{ix} \sqrt{\cos^2(x)+1} + \right.$ $\left. \left. 1 \right) \right) - \log \left(e^{-ix} \right.$ $\left. \left(e^{ix} - i \sin(x) - \sqrt{\cos^2(x)+1} \right) \right) +$ $\log \left(e^{-ix} \left(e^{ix} - i \sin(x) + \right.$ $\left. \sqrt{\cos^2(x)+1} \right) \right) -$ $\left(\log \left(\frac{1}{2} \left(e^{2ix} + 2 e^{ix} \sqrt{\cos^2(x)+1} + 1 \right) \right) + \right.$ $\log \left(\frac{1}{2} \left(e^{2ix} - 2 e^{ix} \sqrt{\cos^2(x)+1} + \right.$ $\left. 1 \right) \right) + \log \left(e^{-ix} \left(e^{ix} - i \sin(x) - \right.$ $\left. \sqrt{\cos^2(x)+1} \right) \right) + \log \left(e^{-ix} \right.$ $\left. \left(e^{ix} - i \sin(x) + \sqrt{\cos^2(x)+1} \right) \right) \right)$ $\tan^{-1} \left(\frac{\sin(x)}{\sqrt{\cos^2(x)+1}} \right)$
$\operatorname{csch}^{-1}(\cot(x))$	$\frac{\sec^2(x)}{\sqrt{\tan^2(x)+1}}$	$\int \operatorname{csch}^{-1}(\cot(x)) dx$
$\operatorname{csch}^{-1}(\sin^{-1}(x))$	$-1 / \left(\sqrt{1-x^2} \sqrt{\frac{1}{\sin^{-1}(x)^2} + 1} \sin^{-1}(x)^2 \right)$	$\int \operatorname{csch}^{-1}(\sin^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\cos^{-1}(x))$	$\frac{1}{\sqrt{1-x^2} \sqrt{\frac{1}{\cos^{-1}(x)^2} + 1} \cos^{-1}(x)^2}$	$\int \operatorname{csch}^{-1}(\cos^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\tan^{-1}(x))$	$-\frac{1}{(x^2+1) \sqrt{\frac{1}{\tan^{-1}(x)^2} + 1} \tan^{-1}(x)^2}$	$\int \operatorname{csch}^{-1}(\tan^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\csc^{-1}(x))$	$1 / \left(\sqrt{1-\frac{1}{x^2}} x^2 \sqrt{\frac{1}{\csc^{-1}(x)^2} + 1} \csc^{-1}(x)^2 \right)$	$\int \operatorname{csch}^{-1}(\csc^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\sec^{-1}(x))$	$-1 / \left(\sqrt{1-\frac{1}{x^2}} x^2 \sqrt{\frac{1}{\sec^{-1}(x)^2} + 1} \sec^{-1}(x)^2 \right)$	$\int \operatorname{csch}^{-1}(\sec^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\cot^{-1}(x))$	$\frac{1}{(x^2+1) \sqrt{\frac{1}{\cot^{-1}(x)^2} + 1} \cot^{-1}(x)^2}$	$\int \operatorname{csch}^{-1}(\cot^{-1}(x)) dx$

$\operatorname{csch}^{-1}(\sinh(x))$	$-\frac{\operatorname{coth}(x) \operatorname{csch}(x)}{\sqrt{\operatorname{csch}^2(x)+1}}$	$\int \operatorname{csch}^{-1}(\sinh(x)) dx$
$\operatorname{csch}^{-1}(\cosh(x))$	$-\frac{\tanh(x) \operatorname{sech}(x)}{\sqrt{\operatorname{sech}^2(x)+1}}$	$\int \operatorname{csch}^{-1}(\cosh(x)) dx$
$\operatorname{csch}^{-1}(\tanh(x))$	$-\frac{\operatorname{csch}^2(x)}{\sqrt{\operatorname{coth}^2(x)+1}}$	$\int \operatorname{csch}^{-1}(\tanh(x)) dx$
$\operatorname{csch}^{-1}(\operatorname{csch}(x))$	$\frac{\operatorname{cosh}(x)}{\sqrt{\sinh^2(x)+1}}$	$x \operatorname{csch}^{-1}(\operatorname{csch}(x)) - \frac{1}{2} x^2 \sqrt{\cosh^2(x) \operatorname{sech}(x)}$

$\operatorname{csch}^{-1}(\operatorname{sech}(x))$	$\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}}$	$ \begin{aligned} & x \operatorname{csch}^{-1}(\operatorname{sech}(x)) + \\ & \frac{1}{8} \left(2 \operatorname{Li}_2 \left(e^x \left(\sqrt{\cosh^2(x)+1} - \sinh(x) \right) \right) + \right. \\ & \quad 2 \operatorname{Li}_2 \left(e^{-x} \left(\sinh(x) - \sqrt{\cosh^2(x)+1} \right) \right) - \\ & \quad 2 \operatorname{Li}_2 \left(e^{-x} \left(\sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) - \\ & \quad 2 \operatorname{Li}_2 \left(-e^x \left(\sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) + \\ & \quad 4 i \pi \tanh^{-1} \left(\frac{\sqrt{2} \cosh(x)}{\sqrt{\cosh(2x)+3}} \right) - \\ & \quad 2 x \log \left(e^x \sinh(x) + e^x \sqrt{\cosh^2(x)+1} + 1 \right) - \\ & \quad i \pi \log \left(e^x \sinh(x) + e^x \sqrt{\cosh^2(x)+1} + 1 \right) + \\ & \quad 2 x \log \left(e^x \sinh(x) - e^x \sqrt{\cosh^2(x)+1} + 1 \right) + \\ & \quad i \pi \log \left(e^x \sinh(x) - e^x \sqrt{\cosh^2(x)+1} + 1 \right) + \\ & \quad 2 x \log \left(e^{-x} \right. \\ & \quad \quad \left. \left(e^x - \sinh(x) - \sqrt{\cosh^2(x)+1} \right) \right) + i \pi \\ & \quad \log \left(e^{-x} \left(e^x - \sinh(x) - \sqrt{\cosh^2(x)+1} \right) \right) - \\ & \quad 2 x \log \left(e^{-x} \right. \\ & \quad \quad \left. \left(e^x - \sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) - i \pi \\ & \quad \log \left(e^{-x} \left(e^x - \sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) - \\ & \quad 2 \log \left(e^x \sinh(x) + e^x \sqrt{\cosh^2(x)+1} + 1 \right) \\ & \quad \tanh^{-1} \left(\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}} \right) - \\ & \quad 2 \log \left(e^x \sinh(x) - e^x \sqrt{\cosh^2(x)+1} + 1 \right) \\ & \quad \tanh^{-1} \left(\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}} \right) - \\ & \quad 2 \log \left(e^{-x} \left(e^x - \sinh(x) - \sqrt{\cosh^2(x)+1} \right) \right) \\ & \quad \tanh^{-1} \left(\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}} \right) - \\ & \quad 2 \log \left(e^{-x} \left(e^x - \sinh(x) + \sqrt{\cosh^2(x)+1} \right) \right) \\ & \quad \tanh^{-1} \left(\frac{\sinh(x)}{\sqrt{\cosh^2(x)+1}} \right) \Big) \end{aligned} $
$\operatorname{csch}^{-1}(\operatorname{coth}(x))$	$\frac{\operatorname{sech}^2(x)}{\sqrt{\tanh^2(x)+1}}$	$\int \operatorname{csch}^{-1}(\operatorname{coth}(x)) dx$

$\operatorname{csch}^{-1}(\sinh^{-1}(x))$	$-1 / \left(\sqrt{x^2 + 1} \sqrt{\frac{1}{\sinh^{-1}(x)^2} + 1} \sinh^{-1}(x)^2 \right)$	$\int \operatorname{csch}^{-1}(\sinh^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\cosh^{-1}(x))$	$-1 / \left(\sqrt{x-1} \sqrt{x+1} \sqrt{\frac{1}{\cosh^{-1}(x)^2} + 1} \cosh^{-1}(x)^2 \right)$	$\int \operatorname{csch}^{-1}(\cosh^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\tanh^{-1}(x))$	$-1 / \left((1-x^2) \sqrt{\frac{1}{\tanh^{-1}(x)^2} + 1} \tanh^{-1}(x)^2 \right)$	$\int \operatorname{csch}^{-1}(\tanh^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\operatorname{sech}^{-1}(x))$	$1 / \left(x \sqrt{\frac{1-x}{x+1}} (x+1) \sqrt{\frac{1}{\operatorname{sech}^{-1}(x)^2} + 1} \operatorname{sech}^{-1}(x)^2 \right)$	$\int \operatorname{csch}^{-1}(\operatorname{sech}^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\operatorname{coth}^{-1}(x))$	$-1 / \left((1-x^2) \sqrt{\frac{1}{\operatorname{coth}^{-1}(x)^2} + 1} \operatorname{coth}^{-1}(x)^2 \right)$	$\int \operatorname{csch}^{-1}(\operatorname{coth}^{-1}(x)) dx$
$\operatorname{csch}^{-1}(\log(x))$	$-\frac{1}{x \sqrt{\frac{1}{\log^2(x)} + 1} \log^2(x)}$	$\int \operatorname{csch}^{-1}(\log(x)) dx$
$\operatorname{csch}^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{1}{x \log(n) \sqrt{\frac{\log^2(x)}{\log^2(n)} + 1}}$	$\int \operatorname{csch}^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\operatorname{sech}^{-1}(\sqrt{x})$	$-\frac{1}{2 \sqrt{\frac{1-\sqrt{x}}{\sqrt{x}+1}} (\sqrt{x}+1)x}$	$x \operatorname{sech}^{-1}(\sqrt{x}) - \sqrt{\frac{1-\sqrt{x}}{\sqrt{x}+1}} (\sqrt{x}+1)$
$\operatorname{sech}^{-1}(e^x)$	$-\frac{1}{\sqrt{\frac{1-e^x}{e^x+1}} (e^x+1)}$	$\frac{1}{2(1-e^x) \sqrt{\frac{e^x+1}{1-e^x}}}$ $\sqrt{\frac{1-e^x}{e^x+1}} (e^x+1) \left(\operatorname{Li}_2(-e^{-2 \operatorname{sech}^{-1}(-e^x)}) - \operatorname{sech}^{-1}(-e^x) \right.$ $\left. \left(\operatorname{sech}^{-1}(-e^x) + 2 \left(x + \log(e^{-2 \operatorname{sech}^{-1}(-e^x)} + 1) \right) \right) \right) + x \operatorname{sech}^{-1}(e^x)$
$\operatorname{sech}^{-1}(x^2)$	$-\frac{2}{x \sqrt{\frac{1-x^2}{x^2+1}} (x^2+1)}$	$x \operatorname{sech}^{-1}(x^2) - \frac{2 \sqrt{\frac{1-x^2}{x^2+1}} \sqrt{1-x^4} F(\sin^{-1}(x) -1)}{x^2-1}$
$\operatorname{sech}^{-1}(x^3)$	$-\frac{3}{x \sqrt{\frac{1-x^3}{x^3+1}} (x^3+1)}$	$\int \operatorname{sech}^{-1}(x^3) dx$
$\operatorname{sech}^{-1}(x^4)$	$-\frac{4}{x \sqrt{\frac{1-x^4}{x^4+1}} (x^4+1)}$	$\int \operatorname{sech}^{-1}(x^4) dx$
$\operatorname{sech}^{-1}(x^n)$	$-\frac{n}{x \sqrt{\frac{1-x^n}{x^n+1}} (x^n+1)}$	$x \operatorname{sech}^{-1}(x^n) - \frac{1}{x^n-1}$ $n x \sqrt{\frac{1-x^n}{x^n+1}} \sqrt{1-x^{2n}} {}_2F_1\left(\frac{1}{2}, \frac{1}{2n}; 1 + \frac{1}{2n}; x^{2n}\right)$

$\operatorname{sech}^{-1}(n^x)$	$-\frac{\log(n)}{\sqrt{\frac{1-n^x}{n^x+1}} (n^x+1)}$	$\left(\sqrt{\frac{1-n^x}{n^x+1}} (n^x+1) \right. \\ \left. \left(\operatorname{Li}_2\left(-e^{-2 \operatorname{sech}^{-1}(-n^x)}\right) - \operatorname{sech}^{-1}(-n^x) \left(\operatorname{sech}^{-1}(-n^x) + 2 \left(\log\left(e^{-2 \operatorname{sech}^{-1}(-n^x)} + 1\right) + x \log(n) \right) \right) \right) \right) / \\ \left. \left(2(1-n^x) \sqrt{\frac{n^x+1}{1-n^x}} \log(n) \right) + \right. \\ \left. x \operatorname{sech}^{-1}(n^x) \right)$
$\operatorname{sech}^{-1}(n^{1/x})$	$\frac{\log(n)}{x^2 \sqrt{\frac{1-n^{1/x}}{n^{1/x}+1}} (n^{1/x}+1)}$	$\int \operatorname{sech}^{-1}(n^{1/x}) dx$
$\operatorname{sech}^{-1}(\sin(x))$	$-\frac{\cot(x)}{\sqrt{\frac{1-\sin(x)}{\sin(x)+1}} (\sin(x)+1)}$	$\int \operatorname{sech}^{-1}(\sin(x)) dx$
$\operatorname{sech}^{-1}(\cos(x))$	$\frac{\tan(x)}{\sqrt{\frac{1-\cos(x)}{\cos(x)+1}} (\cos(x)+1)}$	$\int \operatorname{sech}^{-1}(\cos(x)) dx$
$\operatorname{sech}^{-1}(\tan(x))$	$-\frac{\csc(x) \sec(x)}{\sqrt{\frac{1-\tan(x)}{\tan(x)+1}} (\tan(x)+1)}$	$\int \operatorname{sech}^{-1}(\tan(x)) dx$
$\operatorname{sech}^{-1}(\csc(x))$	$\frac{\cot(x)}{\sqrt{\frac{1-\csc(x)}{\csc(x)+1}} (\csc(x)+1)}$	$\int \operatorname{sech}^{-1}(\csc(x)) dx$
$\operatorname{sech}^{-1}(\sec(x))$	$-\frac{\tan(x)}{\sqrt{\frac{1-\sec(x)}{\sec(x)+1}} (\sec(x)+1)}$	$\int \operatorname{sech}^{-1}(\sec(x)) dx$
$\operatorname{sech}^{-1}(\cot(x))$	$\frac{\csc(x) \sec(x)}{\sqrt{\frac{1-\cot(x)}{\cot(x)+1}} (\cot(x)+1)}$	$\int \operatorname{sech}^{-1}(\cot(x)) dx$
$\operatorname{sech}^{-1}(\sin^{-1}(x))$	$-1 / \left(\sqrt{1-x^2} \sin^{-1}(x) \sqrt{\frac{1-\sin^{-1}(x)}{\sin^{-1}(x)+1}} (\sin^{-1}(x)+1) \right)$	$\int \operatorname{sech}^{-1}(\sin^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\cos^{-1}(x))$	$1 / \left(\sqrt{1-x^2} \cos^{-1}(x) \sqrt{\frac{1-\cos^{-1}(x)}{\cos^{-1}(x)+1}} (\cos^{-1}(x)+1) \right)$	$\int \operatorname{sech}^{-1}(\cos^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\tan^{-1}(x))$	$-1 / \left((x^2+1) \tan^{-1}(x) \sqrt{\frac{1-\tan^{-1}(x)}{\tan^{-1}(x)+1}} (\tan^{-1}(x)+1) \right)$	$\int \operatorname{sech}^{-1}(\tan^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\csc^{-1}(x))$	$1 / \left(\sqrt{1-\frac{1}{x^2}} x^2 \csc^{-1}(x) \sqrt{\frac{1-\csc^{-1}(x)}{\csc^{-1}(x)+1}} (\csc^{-1}(x)+1) \right)$	$\int \operatorname{sech}^{-1}(\csc^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\sec^{-1}(x))$	$-1 / \left(\sqrt{1-\frac{1}{x^2}} x^2 \sec^{-1}(x) \sqrt{\frac{1-\sec^{-1}(x)}{\sec^{-1}(x)+1}} (\sec^{-1}(x)+1) \right)$	$\int \operatorname{sech}^{-1}(\sec^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\cot^{-1}(x))$	$1 / \left((x^2+1) \cot^{-1}(x) \sqrt{\frac{1-\cot^{-1}(x)}{\cot^{-1}(x)+1}} (\cot^{-1}(x)+1) \right)$	$\int \operatorname{sech}^{-1}(\cot^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\sinh(x))$	$-\frac{\coth(x)}{\sqrt{\frac{1-\sinh(x)}{\sinh(x)+1}} (\sinh(x)+1)}$	$\int \operatorname{sech}^{-1}(\sinh(x)) dx$

$\operatorname{sech}^{-1}(\cosh(x))$	$-\frac{\tanh(x)}{\sqrt{\frac{1-\cosh(x)}{\cosh(x)+1}}(\cosh(x)+1)}$	$\int \operatorname{sech}^{-1}(\cosh(x)) dx$
$\operatorname{sech}^{-1}(\tanh(x))$	$-\frac{\operatorname{csch}(x) \operatorname{sech}(x)}{\sqrt{\frac{1-\tanh(x)}{\tanh(x)+1}}(\tanh(x)+1)}$	$\int \operatorname{sech}^{-1}(\tanh(x)) dx$
$\operatorname{sech}^{-1}(\operatorname{csch}(x))$	$\frac{\operatorname{coth}(x)}{\sqrt{\frac{1-\operatorname{csch}(x)}{\operatorname{csch}(x)+1}}(\operatorname{csch}(x)+1)}$	$\int \operatorname{sech}^{-1}(\operatorname{csch}(x)) dx$
$\operatorname{sech}^{-1}(\operatorname{sech}(x))$	$\frac{\tanh(x)}{\sqrt{\frac{1-\operatorname{sech}(x)}{\operatorname{sech}(x)+1}}(\operatorname{sech}(x)+1)}$	$\int \operatorname{sech}^{-1}(\operatorname{sech}(x)) dx$
$\operatorname{sech}^{-1}(\operatorname{coth}(x))$	$\frac{\operatorname{csch}(x) \operatorname{sech}(x)}{\sqrt{\frac{1-\operatorname{coth}(x)}{\operatorname{coth}(x)+1}}(\operatorname{coth}(x)+1)}$	$\int \operatorname{sech}^{-1}(\operatorname{coth}(x)) dx$
$\operatorname{sech}^{-1}(\sinh^{-1}(x))$	$-1 / \left(\sqrt{x^2 + 1} \sinh^{-1}(x) \sqrt{\frac{1-\sinh^{-1}(x)}{\sinh^{-1}(x)+1}} (\sinh^{-1}(x) + 1) \right)$	$\int \operatorname{sech}^{-1}(\sinh^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\cosh^{-1}(x))$	$-1 / \left(\sqrt{x-1} \sqrt{x+1} \cosh^{-1}(x) \sqrt{\frac{1-\cosh^{-1}(x)}{\cosh^{-1}(x)+1}} (\cosh^{-1}(x) + 1) \right)$	$\int \operatorname{sech}^{-1}(\cosh^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\tanh^{-1}(x))$	$-1 / \left((1-x^2) \tanh^{-1}(x) \sqrt{\frac{1-\tanh^{-1}(x)}{\tanh^{-1}(x)+1}} (\tanh^{-1}(x) + 1) \right)$	$\int \operatorname{sech}^{-1}(\tanh^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\operatorname{csch}^{-1}(x))$	$1 / \left(\sqrt{\frac{1}{x^2} + 1} x^2 \operatorname{csch}^{-1}(x) \sqrt{\frac{1-\operatorname{csch}^{-1}(x)}{\operatorname{csch}^{-1}(x)+1}} (\operatorname{csch}^{-1}(x) + 1) \right)$	$\int \operatorname{sech}^{-1}(\operatorname{csch}^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\operatorname{coth}^{-1}(x))$	$-1 / \left((1-x^2) \operatorname{coth}^{-1}(x) \sqrt{\frac{1-\operatorname{coth}^{-1}(x)}{\operatorname{coth}^{-1}(x)+1}} (\operatorname{coth}^{-1}(x) + 1) \right)$	$\int \operatorname{sech}^{-1}(\operatorname{coth}^{-1}(x)) dx$
$\operatorname{sech}^{-1}(\log(x))$	$-\frac{1}{x \log(x) \sqrt{\frac{1-\log(x)}{\log(x)+1}}(\log(x)+1)}$	$\int \operatorname{sech}^{-1}(\log(x)) dx$
$\operatorname{sech}^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$\frac{1}{x \log(x) \sqrt{\frac{1-\frac{\log(n)}{\log(x)}}{\frac{\log(n)}{\log(x)}+1}}\left(\frac{\log(n)}{\log(x)}+1\right)}$	$\int \operatorname{sech}^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\operatorname{coth}^{-1}(\sqrt{x})$	$\frac{1}{2(1-x)\sqrt{x}}$	$\sqrt{x} - \frac{1}{2} \log(\sqrt{x} + 1) + \frac{1}{2} \log(1 - \sqrt{x}) + x \operatorname{coth}^{-1}(\sqrt{x})$
$\operatorname{coth}^{-1}(e^x)$	$\frac{e^x}{1-e^{2x}}$	$\frac{1}{2} (-\operatorname{Li}_2(-e^x) + \operatorname{Li}_2(e^x) - x(\log(e^x + 1) - \log(1 - e^x))) + x \operatorname{coth}^{-1}(e^x)$
$\operatorname{coth}^{-1}(x^2)$	$\frac{2x}{1-x^4}$	$x \operatorname{coth}^{-1}(x^2) - \frac{1}{2} \log(x+1) + \frac{1}{2} \log(1-x) + \tan^{-1}(x)$
$\operatorname{coth}^{-1}(x^3)$	$\frac{3x^2}{1-x^6}$	$x \operatorname{coth}^{-1}(x^3) + \frac{1}{4} \left(-\log(x^2 - x + 1) - \log(x^2 + x + 1) + 2 \log(x+1) + 2 \log(1-x) + 2\sqrt{3} \tan^{-1}\left(\frac{2x-1}{\sqrt{3}}\right) - 2\sqrt{3} \tan^{-1}\left(\frac{2x+1}{\sqrt{3}}\right) \right)$

$\coth^{-1}(x^4)$	$\frac{4x^3}{1-x^8}$	$x \coth^{-1}(x^4) + \frac{1}{4} \left(\sqrt{2} \log(x^2 + \sqrt{2}x + 1) - \sqrt{2} \log(x^2 - \sqrt{2}x + 1) - 2 \log(x+1) + 2 \log(1-x) + 2\sqrt{2} \tan^{-1}(\sqrt{2}x+1) - 4 \tan^{-1}(x) - 2\sqrt{2} \tan^{-1}(1-\sqrt{2}x) \right)$
$\coth^{-1}(x^n)$	$\frac{nx^{n-1}}{1-x^{2n}}$	$x \coth^{-1}(x^n) - \frac{nx^{n+1} {}_2F_1\left(1, \frac{n+1}{2n}; \frac{1}{2} \left(3 + \frac{1}{n}\right); x^{2n}\right)}{n+1}$
$\coth^{-1}(n^x)$	$\frac{n^x \log(n)}{1-n^{2x}}$	$x \coth^{-1}(n^x) - \frac{1}{2 \log(n)} (\text{Li}_2(-n^x) - \text{Li}_2(n^x) + x \log(n) (\log(n^x + 1) - \log(1 - n^x)))$
$\coth^{-1}(n^{1/x})$	$-\frac{n^{1/x} \log(n)}{x^2 (1-n^{2/x})}$	$\int \coth^{-1}(n^{1/x}) dx$
$\coth^{-1}(\sin(x))$	$\frac{\cos(x)}{1-\sin^2(x)}$	$-i (\text{Li}_2(-i e^{ix}) - \text{Li}_2(i e^{ix})) - x (\log(1 - i e^{ix}) - \log(1 + i e^{ix})) + x \coth^{-1}(\sin(x))$
$\coth^{-1}(\cos(x))$	$-\frac{\sin(x)}{1-\cos^2(x)}$	$i (\text{Li}_2(-e^{ix}) - \text{Li}_2(e^{ix})) + x (\log(1 - e^{ix}) - \log(1 + e^{ix})) + x \coth^{-1}(\cos(x))$
$\coth^{-1}(\tan(x))$	$\frac{\sec^2(x)}{1-\tan^2(x)}$	$x \coth^{-1}(\tan(x)) + \frac{1}{4} (-i (\text{Li}_2(-i e^{2ix}) - \text{Li}_2(i e^{2ix})) - 2x (\log(1 - i e^{2ix}) - \log(1 + i e^{2ix})))$
$\coth^{-1}(\csc(x))$	$-\frac{\cot(x) \csc(x)}{1-\csc^2(x)}$	$-i (\text{Li}_2(-i e^{ix}) - \text{Li}_2(i e^{ix})) - x (\log(1 - i e^{ix}) - \log(1 + i e^{ix})) + x \coth^{-1}(\csc(x))$
$\coth^{-1}(\sec(x))$	$\frac{\tan(x) \sec(x)}{1-\sec^2(x)}$	$i (\text{Li}_2(-e^{ix}) - \text{Li}_2(e^{ix})) + x (\log(1 - e^{ix}) - \log(1 + e^{ix})) + x \coth^{-1}(\sec(x))$
$\coth^{-1}(\cot(x))$	$-\frac{\csc^2(x)}{1-\cot^2(x)}$	$x \coth^{-1}(\cot(x)) + \frac{1}{4} (-i (\text{Li}_2(-i e^{2ix}) - \text{Li}_2(i e^{2ix})) - 2x (\log(1 - i e^{2ix}) - \log(1 + i e^{2ix})))$
$\coth^{-1}(\sin^{-1}(x))$	$\frac{1}{\sqrt{1-x^2} (1-\sin^{-1}(x)^2)}$	$\int \coth^{-1}(\sin^{-1}(x)) dx$
$\coth^{-1}(\cos^{-1}(x))$	$-\frac{1}{\sqrt{1-x^2} (1-\cos^{-1}(x)^2)}$	$\int \coth^{-1}(\cos^{-1}(x)) dx$
$\coth^{-1}(\tan^{-1}(x))$	$\frac{1}{(x^2+1)(1-\tan^{-1}(x)^2)}$	$\int \coth^{-1}(\tan^{-1}(x)) dx$
$\coth^{-1}(\csc^{-1}(x))$	$-\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 (1-\csc^{-1}(x)^2)}$	$\int \coth^{-1}(\csc^{-1}(x)) dx$
$\coth^{-1}(\sec^{-1}(x))$	$\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 (1-\sec^{-1}(x)^2)}$	$\int \coth^{-1}(\sec^{-1}(x)) dx$
$\coth^{-1}(\cot^{-1}(x))$	$-\frac{1}{(x^2+1)(1-\cot^{-1}(x)^2)}$	$\int \coth^{-1}(\cot^{-1}(x)) dx$

$\coth^{-1}(\sinh(x))$	$\frac{\cosh(x)}{1-\sinh^2(x)}$	$ \begin{aligned} & x \coth^{-1}(\sinh(x)) + \frac{1}{4} i \left(2 i \operatorname{Li}_2(-(-1 + \sqrt{2}) e^x) - \right. \\ & 2 i \operatorname{Li}_2((-1 + \sqrt{2}) e^x) - \\ & 2 i \operatorname{Li}_2(-(1 + \sqrt{2}) e^x) + \\ & 2 i \operatorname{Li}_2((1 + \sqrt{2}) e^x) + \\ & 2 i x \log((\sqrt{2} - 1) e^x + 1) - \\ & \pi \log((\sqrt{2} - 1) e^x + 1) - \\ & 2 i x \log((1 + \sqrt{2}) e^x + 1) + \\ & \pi \log((1 + \sqrt{2}) e^x + 1) - \\ & 2 i x \log(e^x - \sqrt{2} e^x + 1) + \\ & \pi \log(e^x - \sqrt{2} e^x + 1) + \\ & 2 i x \log(1 - (1 + \sqrt{2}) e^x) - \\ & \left. \pi \log(1 - (1 + \sqrt{2}) e^x) - \right. \\ & 4 \sin^{-1} \left(\sqrt{\frac{1}{2} + \frac{i}{2}} \right) \log((\sqrt{2} - 1) e^x + 1) - \\ & 4 \sin^{-1} \left(\sqrt{\frac{1}{2} - \frac{i}{2}} \right) \log((1 + \sqrt{2}) e^x + 1) + \\ & 4 \sin^{-1} \left(\sqrt{\frac{1}{2} - \frac{i}{2}} \right) \log(e^x - \sqrt{2} e^x + 1) + \\ & 4 \sin^{-1} \left(\sqrt{\frac{1}{2} + \frac{i}{2}} \right) \log(1 - (1 + \sqrt{2}) e^x) + \\ & \pi \log(\sinh(x) + 1) - \pi \log(1 - \sinh(x)) - \\ & 8 i \sin^{-1} \left(\sqrt{\frac{1}{2} + \frac{i}{2}} \right) \tan^{-1} \left(\frac{(1+i) \cot\left(\frac{1}{4}(\pi+2 i x)\right)}{\sqrt{2}} \right) + \\ & \left. \left. 8 \sin^{-1} \left(\sqrt{\frac{1}{2} - \frac{i}{2}} \right) \tanh^{-1} \left(\frac{(1+i) \cot\left(\frac{1}{4}(\pi+2 i x)\right)}{\sqrt{2}} \right) \right) \right) \end{aligned} $
$\coth^{-1}(\cosh(x))$	$\frac{\sinh(x)}{1-\cosh^2(x)}$	$ \begin{aligned} & \operatorname{Li}_2(-e^{-x}) - \operatorname{Li}_2(e^{-x}) + \\ & x (\log(1 - e^{-x}) - \log(e^{-x} + 1)) + x \coth^{-1}(\cosh(x)) \end{aligned} $
$\coth^{-1}(\tanh(x))$	$\frac{\operatorname{sech}^2(x)}{1-\tanh^2(x)}$	$ x \coth^{-1}(\tanh(x)) - \frac{x^2}{2} $

$\coth^{-1}(\operatorname{csch}(x))$	$-\frac{\coth(x)\operatorname{csch}(x)}{1-\operatorname{csch}^2(x)}$	$x \coth^{-1}(\operatorname{csch}(x)) + \frac{1}{4} i \left(2 i \operatorname{Li}_2(-(-1 + \sqrt{2}) e^x) - \right.$ $2 i \operatorname{Li}_2((-1 + \sqrt{2}) e^x) -$ $2 i \operatorname{Li}_2(-(1 + \sqrt{2}) e^x) +$ $2 i \operatorname{Li}_2((1 + \sqrt{2}) e^x) +$ $2 i x \log((\sqrt{2} - 1) e^x + 1) -$ $\pi \log((\sqrt{2} - 1) e^x + 1) -$ $2 i x \log((1 + \sqrt{2}) e^x + 1) +$ $\pi \log((1 + \sqrt{2}) e^x + 1) -$ $2 i x \log(e^x - \sqrt{2} e^x + 1) +$ $\pi \log(e^x - \sqrt{2} e^x + 1) +$ $2 i x \log(1 - (1 + \sqrt{2}) e^x) -$ $\pi \log(1 - (1 + \sqrt{2}) e^x) -$ $4 \sin^{-1}\left(\sqrt{\frac{1}{2} + \frac{i}{2}}\right) \log((\sqrt{2} - 1) e^x + 1) -$ $4 \sin^{-1}\left(\sqrt{\frac{1}{2} - \frac{i}{2}}\right) \log((1 + \sqrt{2}) e^x + 1) +$ $4 \sin^{-1}\left(\sqrt{\frac{1}{2} - \frac{i}{2}}\right) \log(e^x - \sqrt{2} e^x + 1) +$ $4 \sin^{-1}\left(\sqrt{\frac{1}{2} + \frac{i}{2}}\right) \log(1 - (1 + \sqrt{2}) e^x) +$ $\pi \log(\sinh(x) + 1) - \pi \log(1 - \sinh(x)) -$ $8 i \sin^{-1}\left(\sqrt{\frac{1}{2} + \frac{i}{2}}\right) \tan^{-1}\left(\frac{(1+i)\cot\left(\frac{1}{4}(\pi+2ix)\right)}{\sqrt{2}}\right) +$ $8 \sin^{-1}\left(\sqrt{\frac{1}{2} - \frac{i}{2}}\right) \tanh^{-1}\left(\frac{(1+i)\cot\left(\frac{1}{4}(\pi+2ix)\right)}{\sqrt{2}}\right) \Bigg)$
$\coth^{-1}(\operatorname{sech}(x))$	$-\frac{\tanh(x)\operatorname{sech}(x)}{1-\operatorname{sech}^2(x)}$	$\operatorname{Li}_2(-e^{-x}) - \operatorname{Li}_2(e^{-x}) +$ $x(\log(1 - e^{-x}) - \log(e^{-x} + 1)) + x \coth^{-1}(\operatorname{sech}(x))$
$\coth^{-1}(\coth(x))$	$-\frac{\operatorname{csch}^2(x)}{1-\coth^2(x)}$	$x \coth^{-1}(\coth(x)) - \frac{x^2}{2}$
$\coth^{-1}(\sinh^{-1}(x))$	$\frac{1}{\sqrt{x^2+1} (1-\sinh^{-1}(x)^2)}$	$\int \coth^{-1}(\sinh^{-1}(x)) dx$
$\coth^{-1}(\cosh^{-1}(x))$	$\frac{1}{\sqrt{x-1} \sqrt{x+1} (1-\cosh^{-1}(x)^2)}$	$\int \coth^{-1}(\cosh^{-1}(x)) dx$
$\coth^{-1}(\tanh^{-1}(x))$	$\frac{1}{(1-x^2)(1-\tanh^{-1}(x)^2)}$	$\int \coth^{-1}(\tanh^{-1}(x)) dx$
$\coth^{-1}(\operatorname{csch}^{-1}(x))$	$-\frac{1}{\sqrt{\frac{1}{x^2}+1} x^2 (1-\operatorname{csch}^{-1}(x)^2)}$	$\int \coth^{-1}(\operatorname{csch}^{-1}(x)) dx$
$\coth^{-1}(\operatorname{sech}^{-1}(x))$	$-\frac{1}{x \sqrt{\frac{1-x}{x+1}} (x+1) (1-\operatorname{sech}^{-1}(x)^2)}$	$\int \coth^{-1}(\operatorname{sech}^{-1}(x)) dx$

$\coth^{-1}(\log(x))$	$\frac{1}{x(1-\log^2(x))}$	$\int \coth^{-1}(\log(x)) dx$
$\coth^{-1}\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{\log(n)}{x \log^2(x) \left(1 - \frac{\log^2(n)}{\log^2(x)}\right)}$	$\int \coth^{-1}\left(\frac{\log(n)}{\log(x)}\right) dx$
$\log(\sqrt{x})$	$\frac{1}{2x}$	$\frac{1}{2}(x \log(x) - x)$
$\log(e^x)$	1	$-\frac{1}{2}x(x - 2 \log(e^x))$
$\log(x^2)$	$\frac{2}{x}$	$x \log(x^2) - 2x$
$\log(x^3)$	$\frac{3}{x}$	$x \log(x^3) - 3x$
$\log(x^4)$	$\frac{4}{x}$	$x \log(x^4) - 4x$
$\log(x^n)$	$\frac{n}{x}$	$x(\log(x^n) - n)$
$\log(n^x)$	$\log(n)$	$x \log(n^x) - \frac{1}{2}x^2 \log(n)$
$\log(n^{1/x})$	$-\frac{\log(n)}{x^2}$	$x \log(n^{1/x}) + \log(n)(\log(x) - 1)$
$\log(\sin(x))$	$\cot(x)$	$\frac{1}{2}i(x^2 + \text{Li}_2(e^{2ix})) - x \log(1 - e^{2ix}) + x \log(\sin(x))$
$\log(\cos(x))$	$-\tan(x)$	$\frac{1}{2}i \text{Li}_2(-e^{2ix}) + \frac{ix^2}{2} - x \log(1 + e^{2ix}) + x \log(\cos(x))$
$\log(\tan(x))$	$\csc(x) \sec(x)$	$-\frac{1}{2}i \text{Li}_2(-e^{2ix}) + \frac{1}{2}i \text{Li}_2(e^{2ix}) + x(-\log(1 - e^{2ix}) + \log(1 + e^{2ix}) + \log(\tan(x)))$
$\log(\csc(x))$	$-\cot(x)$	$-\frac{1}{2}i(x^2 + \text{Li}_2(e^{2ix})) + x \log(1 - e^{2ix}) + x \log(\csc(x))$
$\log(\sec(x))$	$\tan(x)$	$-\frac{1}{2}i \text{Li}_2(-e^{2ix}) - \frac{ix^2}{2} + x \log(1 + e^{2ix}) + x \log(\sec(x))$
$\log(\cot(x))$	$-\csc(x) \sec(x)$	$\frac{1}{2}i \text{Li}_2(-e^{2ix}) - \frac{1}{2}i \text{Li}_2(e^{2ix}) + x(\log(1 - e^{2ix}) - \log(1 + e^{2ix}) + \log(\cot(x)))$
$\log(\sin^{-1}(x))$	$\frac{1}{\sqrt{1-x^2} \sin^{-1}(x)}$	$\int \log(\sin^{-1}(x)) dx$
$\log(\cos^{-1}(x))$	$-\frac{1}{\sqrt{1-x^2} \cos^{-1}(x)}$	$\int \log(\cos^{-1}(x)) dx$
$\log(\tan^{-1}(x))$	$\frac{1}{(x^2+1) \tan^{-1}(x)}$	$\int \log(\tan^{-1}(x)) dx$
$\log(\csc^{-1}(x))$	$-\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 \csc^{-1}(x)}$	$\int \log(\csc^{-1}(x)) dx$
$\log(\sec^{-1}(x))$	$\frac{1}{\sqrt{1-\frac{1}{x^2}} x^2 \sec^{-1}(x)}$	$\int \log(\sec^{-1}(x)) dx$
$\log(\cot^{-1}(x))$	$-\frac{1}{(x^2+1) \cot^{-1}(x)}$	$\int \log(\cot^{-1}(x)) dx$
$\log(\sinh(x))$	$\coth(x)$	$\frac{1}{2}(\text{Li}_2(e^{-2x}) - x(x + 2 \log(1 - e^{-2x}) - 2 \log(\sinh(x))))$
$\log(\cosh(x))$	$\tanh(x)$	$\frac{1}{2}(\text{Li}_2(-e^{-2x}) - x(x + 2 \log(e^{-2x} + 1) - 2 \log(\cosh(x))))$
$\log(\tanh(x))$	$\text{csch}(x) \text{sech}(x)$	$\frac{1}{2}(-\text{Li}_2(-e^{-2x}) + \text{Li}_2(e^{-2x}) + 2x(\log(e^{-2x} + 1) - \log(1 - e^{-2x}) + \log(\tanh(x))))$
$\log(\text{csch}(x))$	$-\coth(x)$	$\frac{1}{2}(x(x + 2 \log(1 - e^{-2x}) + 2 \log(\text{csch}(x))) - \text{Li}_2(e^{-2x}))$
$\log(\text{sech}(x))$	$-\tanh(x)$	$\frac{1}{2}(x(x + 2 \log(e^{-2x} + 1) + 2 \log(\text{sech}(x))) - \text{Li}_2(-e^{-2x}))$
$\log(\coth(x))$	$-\text{csch}(x) \text{sech}(x)$	$\frac{1}{2}(\text{Li}_2(-e^{-2x}) - \text{Li}_2(e^{-2x}) + 2x(-\log(e^{-2x} + 1) + \log(1 - e^{-2x}) + \log(\coth(x))))$

$\log(\sinh^{-1}(x))$	$\frac{1}{\sqrt{x^2+1} \sinh^{-1}(x)}$	$\int \log(\sinh^{-1}(x)) dx$
$\log(\cosh^{-1}(x))$	$\frac{1}{\sqrt{x-1} \sqrt{x+1} \cosh^{-1}(x)}$	$\int \log(\cosh^{-1}(x)) dx$
$\log(\tanh^{-1}(x))$	$\frac{1}{(1-x^2) \tanh^{-1}(x)}$	$\int \log(\tanh^{-1}(x)) dx$
$\log(\operatorname{csch}^{-1}(x))$	$-\frac{1}{\sqrt{\frac{1}{x^2}+1} x^2 \operatorname{csch}^{-1}(x)}$	$\int \log(\operatorname{csch}^{-1}(x)) dx$
$\log(\operatorname{sech}^{-1}(x))$	$-\frac{1}{x \sqrt{\frac{1-x}{x+1}} (x+1) \operatorname{sech}^{-1}(x)}$	$\int \log(\operatorname{sech}^{-1}(x)) dx$
$\log(\operatorname{coth}^{-1}(x))$	$\frac{1}{(1-x^2) \operatorname{coth}^{-1}(x)}$	$\int \log(\operatorname{coth}^{-1}(x)) dx$
$\log\left(\frac{\log(n)}{\log(x)}\right)$	$-\frac{1}{x \log(x)}$	$\operatorname{li}(x) + x \log\left(\frac{\log(n)}{\log(x)}\right)$
$\frac{\log(n)}{\log(\sqrt{x})}$	$-\frac{\log(n)}{2x \log^2(\sqrt{x})}$	$2 \operatorname{li}(x) \log(n)$
$\frac{\log(n)}{\log(e^x)}$	$-\frac{\log(n)}{\log^2(e^x)}$	$\log(n) \log(\log(e^x))$
$\frac{\log(n)}{\log(x^2)}$	$-\frac{2 \log(n)}{x \log^2(x^2)}$	$\log(n) \int \frac{1}{\log(x^2)} dx$
$\frac{\log(n)}{\log(x^3)}$	$-\frac{3 \log(n)}{x \log^2(x^3)}$	$\log(n) \int \frac{1}{\log(x^3)} dx$
$\frac{\log(n)}{\log(x^4)}$	$-\frac{4 \log(n)}{x \log^2(x^4)}$	$\log(n) \int \frac{1}{\log(x^4)} dx$
$\frac{\log(n)}{\log(x^n)}$	$-\frac{n \log(n)}{x \log^2(x^n)}$	$\log(n) \int \frac{1}{\log(x^n)} dx$
$\frac{\log(n)}{\log(n^x)}$	$-\frac{\log^2(n)}{\log^2(n^x)}$	$\log(\log(n^x))$
$\frac{\log(n)}{\log(n^{1/x})}$	$\frac{\log^2(n)}{x^2 \log^2(n^{1/x})}$	$(x^2 \log(n) (x \log(n^{1/x}) - \log(n) (\log(x \log(n^{1/x}) + 1))) / (\log(n) - x \log(n^{1/x}))^2)$
$\frac{\log(n)}{\log(\sin(x))}$	$-\frac{\log(n) \cot(x)}{\log^2(\sin(x))}$	$\log(n) \int \frac{1}{\log(\sin(x))} dx$
$\frac{\log(n)}{\log(\cos(x))}$	$\frac{\log(n) \tan(x)}{\log^2(\cos(x))}$	$\log(n) \int \frac{1}{\log(\cos(x))} dx$
$\frac{\log(n)}{\log(\tan(x))}$	$-\frac{\log(n) \csc(x) \sec(x)}{\log^2(\tan(x))}$	$\log(n) \int \frac{1}{\log(\tan(x))} dx$
$\frac{\log(n)}{\log(\csc(x))}$	$\frac{\log(n) \cot(x)}{\log^2(\csc(x))}$	$\log(n) \int \frac{1}{\log(\csc(x))} dx$
$\frac{\log(n)}{\log(\sec(x))}$	$-\frac{\log(n) \tan(x)}{\log^2(\sec(x))}$	$\log(n) \int \frac{1}{\log(\sec(x))} dx$
$\frac{\log(n)}{\log(\cot(x))}$	$\frac{\log(n) \csc(x) \sec(x)}{\log^2(\cot(x))}$	$\log(n) \int \frac{1}{\log(\cot(x))} dx$
$\frac{\log(n)}{\log(\sin^{-1}(x))}$	$-\frac{\log(n)}{\sqrt{1-x^2} \sin^{-1}(x) \log^2(\sin^{-1}(x))}$	$\log(n) \int \frac{1}{\log(\sin^{-1}(x))} dx$
$\frac{\log(n)}{\log(\cos^{-1}(x))}$	$\frac{\log(n)}{\sqrt{1-x^2} \cos^{-1}(x) \log^2(\cos^{-1}(x))}$	$\log(n) \int \frac{1}{\log(\cos^{-1}(x))} dx$
$\frac{\log(n)}{\log(\tan^{-1}(x))}$	$-\frac{\log(n)}{(x^2+1) \tan^{-1}(x) \log^2(\tan^{-1}(x))}$	$\log(n) \int \frac{1}{\log(\tan^{-1}(x))} dx$
$\frac{\log(n)}{\log(\operatorname{csc}^{-1}(x))}$	$\frac{\log(n)}{\sqrt{1-\frac{1}{x^2}} x^2 \operatorname{csc}^{-1}(x) \log^2(\operatorname{csc}^{-1}(x))}$	$\log(n) \int \frac{1}{\log(\operatorname{csc}^{-1}(x))} dx$
$\frac{\log(n)}{\log(\operatorname{sec}^{-1}(x))}$	$-\log(n) / \left(\sqrt{1-\frac{1}{x^2}} x^2 \operatorname{sec}^{-1}(x) \log^2(\operatorname{sec}^{-1}(x)) \right)$	$\log(n) \int \frac{1}{\log(\operatorname{sec}^{-1}(x))} dx$

$\frac{\log(n)}{\log(\cot^{-1}(x))}$	$\frac{\log(n)}{(x^2+1) \cot^{-1}(x) \log^2(\cot^{-1}(x))}$	$\log(n) \int \frac{1}{\log(\cot^{-1}(x))} dx$
$\frac{\log(n)}{\log(\sinh(x))}$	$-\frac{\log(n) \coth(x)}{\log^2(\sinh(x))}$	$\log(n) \int \frac{1}{\log(\sinh(x))} dx$
$\frac{\log(n)}{\log(\cosh(x))}$	$-\frac{\log(n) \tanh(x)}{\log^2(\cosh(x))}$	$\log(n) \int \frac{1}{\log(\cosh(x))} dx$
$\frac{\log(n)}{\log(\tanh(x))}$	$-\frac{\log(n) \operatorname{csch}(x) \operatorname{sech}(x)}{\log^2(\tanh(x))}$	$\log(n) \int \frac{1}{\log(\tanh(x))} dx$
$\frac{\log(n)}{\log(\operatorname{csch}(x))}$	$\frac{\log(n) \coth(x)}{\log^2(\operatorname{csch}(x))}$	$\log(n) \int \frac{1}{\log(\operatorname{csch}(x))} dx$
$\frac{\log(n)}{\log(\operatorname{sech}(x))}$	$\frac{\log(n) \tanh(x)}{\log^2(\operatorname{sech}(x))}$	$\log(n) \int \frac{1}{\log(\operatorname{sech}(x))} dx$
$\frac{\log(n)}{\log(\operatorname{coth}(x))}$	$\frac{\log(n) \operatorname{csch}(x) \operatorname{sech}(x)}{\log^2(\operatorname{coth}(x))}$	$\log(n) \int \frac{1}{\log(\operatorname{coth}(x))} dx$
$\frac{\log(n)}{\log(\sinh^{-1}(x))}$	$-\frac{\log(n)}{\sqrt{x^2+1} \sinh^{-1}(x) \log^2(\sinh^{-1}(x))}$	$\log(n) \int \frac{1}{\log(\sinh^{-1}(x))} dx$
$\frac{\log(n)}{\log(\cosh^{-1}(x))}$	$-\log(n) / \left(\sqrt{x-1} \sqrt{x+1} \cosh^{-1}(x) \log^2(\cosh^{-1}(x)) \right)$	$\log(n) \int \frac{1}{\log(\cosh^{-1}(x))} dx$
$\frac{\log(n)}{\log(\tanh^{-1}(x))}$	$-\frac{\log(n)}{(1-x^2) \tanh^{-1}(x) \log^2(\tanh^{-1}(x))}$	$\log(n) \int \frac{1}{\log(\tanh^{-1}(x))} dx$
$\frac{\log(n)}{\log(\operatorname{csch}^{-1}(x))}$	$\log(n) / \left(\sqrt{\frac{1}{x^2} + 1} x^2 \operatorname{csch}^{-1}(x) \log^2(\operatorname{csch}^{-1}(x)) \right)$	$\log(n) \int \frac{1}{\log(\operatorname{csch}^{-1}(x))} dx$
$\frac{\log(n)}{\log(\operatorname{sech}^{-1}(x))}$	$\log(n) / \left(x \sqrt{\frac{1-x}{x+1}} (x+1) \operatorname{sech}^{-1}(x) \log^2(\operatorname{sech}^{-1}(x)) \right)$	$\log(n) \int \frac{1}{\log(\operatorname{sech}^{-1}(x))} dx$
$\frac{\log(n)}{\log(\operatorname{coth}^{-1}(x))}$	$-\frac{\log(n)}{(1-x^2) \operatorname{coth}^{-1}(x) \log^2(\operatorname{coth}^{-1}(x))}$	$\log(n) \int \frac{1}{\log(\operatorname{coth}^{-1}(x))} dx$
$\frac{\log(n)}{\log(\log(x))}$	$-\frac{\log(n)}{x \log(x) \log^2(\log(x))}$	$\log(n) \int \frac{1}{\log(\log(x))} dx$