

$(\sec^{-1} x) = \tan x \sec x$
$(\operatorname{cosec}^{-1} x) = -\cot x \operatorname{cosec} x$
$(\sin^{-1} x) = \frac{1}{\sqrt{(1-x^2)}}$
$(\cos^{-1} x) = \frac{-1}{\sqrt{(1-x^2)}}$
$(\tan^{-1} x) = \frac{1}{(1+x^2)}$
$(\cot^{-1} x) = \frac{-1}{(1+x^2)}$
$(\sec^{-1} x) = \frac{1}{(x\sqrt{(x^2-1)})}$
$(\operatorname{cosec}^{-1} x) = \frac{-1}{(x\sqrt{(x^2-1)})}$
$(\bar{sh} x) = \cosh x, (\operatorname{cosech} x) = -\operatorname{cosech} x \coth x$
$(\bar{cosh} x) = sh x, (\operatorname{sech} x) = -\operatorname{sech} x \tanh x$
$(\bar{tanh} x) = \frac{1}{(\cosh^2 x)} = \operatorname{sech}^2 x$
$(\bar{coth} x) = \frac{-1}{(\sinh^2 x)} = -\operatorname{cosech}^2 x$
$[f(x) \pm g(x)] = \bar{f}(x) \pm \bar{g}(x)$
$[f \frac{\bar{g}}{g}(x)] = g(x) \bar{f}(x) - f(x) \bar{g} \frac{(x)}{[g(x)]^2}, g(x) \neq 0$
$y^{(n)} = (uv)^{(n)} = u^{(n)} v + c_1 u^{(n-1)} v^{(1)} + c_2 u^{(n-2)} v^{(2)} + c_3 u^{(n-3)} v^{(3)} + \dots + c_r u^{(n-r)} v^{(r)} + \dots + u v^{(n)}$ نظرية ليبتنز لحاصل ضرب دالتين