

Integration of Hyperbolic Functions

$$(1) \int \sinh x \, dx = \cosh x + c$$

$$(2) \int \cosh x \, dx = \sinh x + c$$

$$(3) \int \sec^2 x \, dx = \tan x + c$$

$$(4) \int \operatorname{cosec}^2 x \, dx = -\cot x + c$$

$$(5) \int \sec x \tan x \, dx = \sec x + c$$

$$(6) \int \operatorname{cosec} x \cot x \, dx = -\operatorname{cosec} x + c$$