Transformation of a Hyperbolic Functions.

Since, $\cosh^2 x - \sinh^2 x = 1$

$\Rightarrow \quad \sinh x = \sqrt{\cosh^2 x - 1}$

$\Rightarrow \sinh x = \dfrac{\sqrt{1 - \text{sech}^2 x}}{\text{sec h } x}$

$\Rightarrow \sinh x = \dfrac{\tanh x}{\sqrt{1 - \tanh^2 x}}$

$\Rightarrow \sinh x = \dfrac{1}{\sqrt{\coth^2 x - 1}}$

Also, $\sinh x = \dfrac{1}{\text{cosech } x}$

In a similar manner we can express $\cosh x$, $\tanh x, \coth x$,............... in terms of other hyperbolic functions.