

FORMULA 3.513.2

$$\int_0^{\infty} \frac{dx}{a + b \cosh x} = \begin{cases} \frac{2}{\sqrt{b^2 - a^2}} \tan^{-1} \sqrt{\frac{b-a}{b+a}} & \text{if } b^2 > a^2 \\ \frac{1}{\sqrt{a^2 - b^2}} \ln \left[\frac{a+b+\sqrt{a^2-b^2}}{a+b-\sqrt{a^2-b^2}} \right] & \text{if } b^2 < a^2 \end{cases}$$