

**FORMULA 2.314**

$$\int \frac{dx}{ae^{mx} + be^{-mx}} = \begin{cases} \frac{1}{m\sqrt{ab}} \tan^{-1}(e^{mx} \sqrt{a/b}) & \text{if } ab > 0 \\ \frac{1}{2m\sqrt{-ab}} \ln \left( \frac{b+e^{mx}\sqrt{-ab}}{b-e^{mx}\sqrt{-ab}} \right) & \text{if } ab < 0 \end{cases}$$