

**FORMULA 4.267.9**

$$\int_0^1 \frac{x^{p-1} - x^{q-1}}{\ln x} \frac{dx}{1+x} = \ln \left( \frac{\Gamma(\frac{q}{2})\Gamma(\frac{p+1}{2})}{\Gamma(\frac{p}{2})\Gamma(\frac{q+1}{2})} \right)$$