

FORMULA 4.245.2

$$\int_0^1 \frac{x^{4n+3} \ln x \, dx}{\sqrt{1-x^4}} = \frac{(2n)!!}{4(2n+1)!!} \left(\ln 2 - \sum_{k=1}^{2n+1} \frac{(-1)^{k-1}}{k} \right)$$