

FORMULA 4.352.2

$$\int_0^{\infty} x^n e^{-\mu x} \ln x \, dx = \frac{n!}{\mu^{n+1}} \left[1 + \frac{1}{2} + \frac{1}{3} + \cdots + \frac{1}{n} - \gamma - \ln \mu \right]$$