

**FORMULA 4.353.3**

$$\int_0^1 (\mu x + n + 1)x^n e^{\mu x} \ln x dx = e^\mu \sum_{k=0}^n \frac{(-1)^{k-1} n!}{(n-k)! \mu^{k+1}} + (-1)^n \frac{n!}{\mu^{n+1}}$$