

**PROOF OF FORMULA 4.229.1**

$$\int_0^1 \ln(\ln 1/x) dx = -\gamma$$

Entry 4.229.4 states that

$$\int_0^1 \ln(\ln 1/x) (\ln 1/x)^{\mu-1} dx = \psi(\mu)\Gamma(\mu)$$

The result now follows from the values  $\psi(1) = -\gamma$ .