

Calcoliamo

$$\int \frac{\log x}{x^{1-\log x}} dx.$$

Poniamo $\log x = t$ da cui $dx = e^t dt$. Si ha allora

$$\begin{aligned} \int \frac{\log x}{x^{1-\log x}} dx &= \int \frac{t}{e^t (e^t)^{-t}} e^t dt \\ &= \int t e^{t^2} dt \\ &= \frac{1}{2} \int 2t e^{t^2} dt \\ &= \frac{1}{2} e^{t^2} + C \end{aligned}$$