

A QUICKIE

OVIDIU FURDUI

Prove that

$$\sum_{n=1}^{\infty} \frac{1}{n} \left(\sum_{k=1}^n \frac{x^k}{k} - \ln \frac{1}{1-x} \right) = -\frac{\ln^2(1-x)}{2}, \quad -1 \leq x < 1.$$

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