# The identity of log n

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#### Abstract

In this paper, I describe the identity of  $\log n.$  The paper ends with "The End"

# The identity of $\log n$

The identity of  $\log n$  states for  $n \in \mathbb{Z}$  and n > 1

$$\log n = \log (n-1) + \frac{1}{n} \left( 1 - \sum_{i=1}^{\infty} \frac{(-1)^i}{(n-1)^i i(i+1)} \right)$$

## The End