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1 Introduction

11786. *Proposed by George Stoica, University of New Brunswick, Saint John, Canada.* Let $x_1, x_2, ...$ be a sequence of positive numbers such that $\lim_{n\to\infty} x_n = 0$ and $lim_{n\to\infty} \frac{\log x_n}{x_1+...+x_n}$ is a negative number. Prove that $lim_{n\to\infty} \frac{\log x_n}{\log n} = -1$.