

Open problems.

1. Let $P(x) = \sum_{i=0}^n a_i x^{n-i} = a_0 \prod_{i=1}^n (x - \alpha_i)$, $L(P) = \sum_{i=0}^n |a_i|$, $M(P) = |a_0| \prod_{i=1}^n \{1, |\alpha_i|\}$. Is it true that if $|\alpha_i| = 1$ for a certain i , then $L(P) \geq 2M(P)$?
2. (T. Ordowski) Let an increasing sequence of integers a_i have the property that every positive integer is representable and only once as a difference $a_j - a_i$. Is it true that the series $\sum_{i=1}^{\infty} \frac{1}{a_{i+1} - a_i}$ is divergent?