

Sequences of positive integers containing no p terms in arithmetic progression generated by the greedy algorithm

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Communicated by: R. Parimala

Received: November 4, 2008

Abstract. Let S_p be the set of positive integers containing no p terms in arithmetic progression generated by the greedy algorithm. We show that for p an odd prime, the set S_p does not maximize the sum $\sum_{a \in A} \frac{1}{a}$, where the set A runs over all sequences of positive integers containing no p terms in arithmetic progression.