

Let x_1, \dots, x_n be real numbers. For any set $I \subset \{1, 2, \dots, n\}$ let $s(I) = \sum_{i \in I} x_i$. Assume that the function $I \mapsto s(I)$ takes on at least 1.8^n values where I runs over all 2^n subsets of $\{1, 2, \dots, n\}$. Prove that the number of sets $I \subset \{1, 2, \dots, n\}$ for which $s(I) = 2019$ does not exceed 1.7^n .