Douglas E. Iannucci and Florian Luca Catalan numbers, factorials, and sums of aliquot parts, Fibonacci Quart. **45** (2007), no. 4, 327–336.

Abstract

Let \mathcal{A} be the set of all Catalan numbers and factorials. In this note, we look at positive integers $n \in \mathcal{A}$ whose sum of aliquot parts also belongs to \mathcal{A} .