A PROBLEM CONCERNING THE FIBONACCI RECURRENCE (6)
by T. Yau, student, Pima Community College

Let \( S(n) \) be defined as the smallest integer such that \( (S(n))! \) is divisible by \( n \) (Smarandache Function). For what triplets this function verifies the Fibonacci relationship, i.e. find \( n \) such that
\[
S(n) + S(n+1) = S(n+2)
\]

Solution:
Checking the first 1200 numbers, I found just two triplets for which this function verifies the Fibonacci relationship:
\[
S(9) + S(10) = S(11) \Rightarrow 6 + 5 = 11,
\]
and
\[
S(119) + S(120) = S(121) \Rightarrow 17 + 5 = 22.
\]
How many other triplets with the same property do exist? (I can't find a theoretical proof ...)

Reference: