

Chris Burns and Benjamin Purcell

Counting the number of winning binary strings in the 1-dimensional same game,

Fibonacci Quart. **45** (2007), no. 3, 233–238.

Abstract

A simple matching game played with binary strings is related to the Fibonacci numbers. Using a counting argument, we show that the number of strings of length n that cannot result in a win is an integer multiple of the $(n-2)$ 'nd Fibonacci number, not counting certain trivial strings.