Linus Lindroos, Andrew Sills, and Hua Wang Odd Fibbinary Numbers and the Golden Ratio, Fibonacci Quart. **52** (2014), no. 1, 61–65.

Abstract

The fibbinary numbers are positive integers whose binary representation contains no consecutive ones. We prove the following result: If the *j*th odd fibbinary is the *n*th *odd* fibbinary number, then $j = \lfloor n\phi^2 \rfloor - 1$.