

F. T. Howard and Curtis Cooper
Some Identities for r -Fibonacci Numbers,
Fibonacci Quart. **49** (2011), no. 3, 231–243.

Abstract

Let $r \geq 1$ be an integer. The r -generalized Fibonacci sequence $\{G_n\}$ is defined as

$$G_n = \begin{cases} 0, & \text{if } 0 \leq n < r - 1; \\ 1, & \text{if } n = r - 1; \\ G_{n-1} + G_{n-2} + \cdots + G_{n-r}, & \text{if } n \geq r. \end{cases}$$

We will present several identities and congruences involving r -generalized Fibonacci numbers.