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Abstract

For $k \geq 2$, a fixed integer, we work with the k-bonacci sequence, $\{X_n\}$, a kth order generalization of the Fibonacci numbers, and their use in a Zeckendorf representation of positive integers. We extend Zeckendorf representations using $\{X_n \mid n \in \mathbb{Z}\}$ and show that every sequence of positive integers satisfying the k-bonacci recurrence eventually agrees with a row of the k-Zeckendorf array.