

ON THE GENERALIZED K-PELL (P,I)-NUMBERS

Kâmil ARI¹

¹*Karamanoğlu Mehmetbey University, Karaman, Turkey*

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Abstract

This study focus on the generalized k -Pell (p, i) -numbers for $k = 1, 2, \dots$ and $0 \leq i \leq p$. It introduces the generalized k -Pell (p, i) -numbers and their generating matrices and generating functions. Some interesting identities are established.

The basic properties of Fibonacci and Fibonacci-like numbers are well known and are outlined, for example in [1] and generalizations of Pell numbers can be found in the literature. In [2] P. Catarino consider a generalization of Pell numbers, which the author calls the k -Pell numbers.

Keywords: Fibonacci numbers; Pell numbers; Binet's formula

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¹kamilari@kmu.edu.tr