Thomas Koshy and Zhenguang Gao Polynomial Extensions of a Diminnie Delight, Fibonacci Quart. 55 (2017), no. 1, 13–20.

Abstract

As a neat application of Chebyshev polynomials of the first kind, we extend to Fibonacci polynomials a complex recurrence studied by C. R. Diminnie. We then explore the corresponding versions to Lucas, Pell, and Pell-Lucas polynomials, and extract the respective numbertheoretic versions. In addition, we pursue two interesting recurrences with Fibonacci, Lucas, Pell, and Pell-Lucas implications.