

Ovidiu D. Bagdasar and Peter J. Larcombe
On the Characterization of Periodic Complex Horadam Sequences,
Fibonacci Quart. **51** (2013), no. 1, 28–37

Abstract

Horadam sequences are second-order linear recurrence sequences which depend on a family of four parameters (two in the defining recursion itself, and two initial values). In this article we find necessary and sufficient conditions for the periodicity of complex Horadam sequences, under general initial values, characterizing sequence behavior for degenerate and non-degenerate characteristic solution types. Inner and outer boundaries for regions containing periodic orbits are also determined.