1067-39-1375

Candace M. Kent* (cmkent@vcu.edu), Dept. of Mathematics and Applied Mathematics, Grace E.Harris Hall, 1015 Floyd Avenue, P.O. Box 842014, Richmond, VA 23284-2014, and Witold Kosmala and Stevo Stevic. Long-Term Behavior of Solutions of the Difference Equation $x_{n+1} = x_{n-1}x_{n-2} - 1$.

We investigate the long-term behavior of solutions of the following difference equation:

$$x_{n+1} = x_{n-1}x_{n-2} - 1, \quad n \in \mathbf{N_0},$$

where the initial conditions x_{-2} , x_{-1} , x_0 are real numbers. Numerous fascinating properties of the solutions of the equation are presented. (Received September 20, 2010)