A Difference Equation with Neimark-Sacker Bifurcation.

We compute the direction of the Naimark-Sacker bifurcation for the difference equation

\[ x_{n+1} = \frac{x_n}{C x_{n-1}^2 + D x_n + F} \]

where \( C, D \) and \( F \) are positive numbers and the initial conditions \( x_{-1} \) and \( x_0 \) are positive numbers. Moreover, we give the asymptotic approximation of the invariant curve. (Received September 26, 2017)