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On the positive solutions of the system of rational difference equations $x_{n+1} = 1/y_{n-k}, y_{n+1} = y_n/x_{n-m}y_{n-m-k}$. (English) Zbl 1115.39012

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The periodicity of solutions of the system of rational difference equations of the form $x_{n+1} = 1/y_{n-k}, y_{n+1} = y_n/x_{n-m}y_{n-m-k}, n = 0, 1, \ldots$, is investigated.

Reviewer: Ioannis P. Stavroulakis (Ioannina)

MSC:

39A11 Stability of difference equations (MSC2000)
39A20 Multiplicative and other generalized difference equations, e.g., of Lyness type

Keywords:

system of rational difference equations; positive solutions; periodicity

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References:

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