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\textbf{On the solution of fourth-order rational recursive sequence}


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\textbf{Abstract}

In this paper we study the behavior of the solutions of the difference equation \(x_{n+1}=ax_n+bx_nx_{n-3}/c+dx_{n-3},=0,1,\ldots\), where the initial conditions \(cx_{-2}+dx_{-3} x_{-1}, X_0\) are arbitrary positive real numbers and \(a, b, c, d\) are positive constants. Also, we give the solution of some special cases of this equation.

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