962-39-75 Carol H Gibbons, Department of Mathematics, University of Rhode Island, Kingston, RI 02881, M. R.S. Kulenovic* (kulenm@math.uri.edu), Department of Mathematics, University of Rhode Island, Kingston, RI 02881, and Gerry Ladas (gladas@math.uri.edu), Department of Mathematics, University of Rhode Island, Kingston 02881. On the Rational Difference Equation of Second Order. Preliminary report.
We investigate the boundedness character, the oscillation, the periodic nature, and the global stabilty character of the nonnegative solutions of the difference equation $\mathrm{x}(\mathrm{n}+1)=(\mathrm{a}+\mathrm{bx}(\mathrm{n})+\mathrm{cx}(\mathrm{n}-1)) /(\mathrm{A}+\mathrm{x}(\mathrm{n})), \mathrm{n}=0,1, \ldots$ where the parameters $\mathrm{a}, \mathrm{b}, \mathrm{c}$, and A are nonnegative real numbers such that $\mathrm{a}+\mathrm{b}+\mathrm{c}>0$, and where the initial conditions $\mathrm{x}(-1)$ and $\mathrm{x}(0)$ are nonnegative real numbers. (Received July 23, 2000)

