962-37-211 **Candace M Kent*** (cmkent@saturn.vcu.edu), Department of Mathematical Sciences, Virginia Commonwealth University, 1015 West Main Street, P.O. Box 842014, Richmond, VA 23284-2014.
Convergence of Solutions in a Nonhyperbolic Case When the Equilibrium is Positive. Preliminary report.

We study a family of second-order difference equations of the form x[n+1]=f(x[n],x[n-1]), n=0,1,... for which there exists a unique positive equilibrium and all positive solutions converge to period-two solutions. We find sufficient conditions for the existence of positive solutions which converge to the positive equilibrium and for the existence of positive solutions which converge to prime period-two solutions. (Received August 28, 2000)