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## OSCILLATORY BEHAVIOR OF FORCED NEUTRAL DIFFERENCE EQUATIONS WITH MIXED NONLINEARITIES

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### Abstract

In this paper, we investigate the oscillatory behavior of a class of forced neutral difference equations. We obtain sufficient conditions for the oscillations of first and second order forced neutral difference equations with mixed nonlinearities. Our results extend and improve known results in the literature. Suitable examples are provided to illustrate the main results obtained in this paper. MATLAB is used to generate the graph of the solutions in the examples.

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