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An extended method of quasilinearization for nonlinear impulsive differential equations with a nonlinear three-point boundary condition

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Abstract

In this paper, we discuss an extended form of generalized quasilinearization technique for first order nonlinear impulsive differential equations with a nonlinear three-point boundary condition. In fact, we obtain monotone sequences of upper and lower solutions converging uniformly and quadratically to the unique solution of the problem.

Author Keywords

Impulsive differential equations; Quadratic convergence; Quasilinearization; Three-point boundary conditions

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