

Exact Solutions for a Class of Nonlinear Singular Two-Point Boundary Value Problems: The Decomposition Method

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Many problems in applied mathematics and engineering are usually formulated as singular two-point boundary value problems. A well-known fact is that the exact solutions in closed form of such problems were not obtained in many cases. In this paper, the exact solutions for a class of nonlinear singular two-point boundary value problems are obtained to the first time by using Adomian decomposition method.

Key words: Adomian Decomposition Method; Nonlinear Singular Two-Point Boundary Value Problems; Exact Solutions.