Makhmud A. AKHMEDOV, Ozan OZKAN[1]

ON APPLICATION OF DIFFERENTIAL TRANSFORMATIONS TO N-DIMENSIONAL PROBLEMS FOR DIFFERENTIAL EQUATIONS ON A GRID

Abstract

The differential transformation is one of numeric methods for solving of differential equations. Advantage of this method is transformation of the differential equation into algebraic. Application of differential transformation method to various problems gives more effective errors. In this investigation we use this method for numerical solution on n-dimensional grid of boundary value problems for evolution differential equation. Researches have shown the efficiency of application of a method to a considered class of problems.