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Section:

15. Numerical Analysis and Scientific Computing

1991 MS Classification: 39,41,65
Dosiyev, Adigezal, Eastern Mediterranean University, Northern Cyprus
A Block-Grid Method for Solving Laplace's boundary value problem with singularities
In this paper the Block-Grid Method, which was proposed in [1] in solving the Dirichlet problem is developed to the mixed boundary value problem for Laplace's equation on polygons. The numerical experiments in solving the problem in L-shaped domain, and the Motz problem show the effectiveness of this method. Reference: [1] A. A. Dosiyev, A Block Grid method of increased accuracy for solving Dirichlet's problem for Laplace's equation on polygons. Comp. Maths Math. Phys., Vol.34, No.5 (1994),591-604.