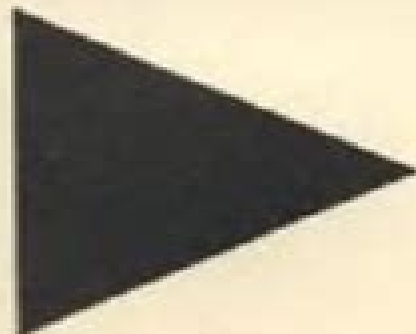


Solutions of Laplace's Equation

D. R. Bland



Library of Mathematics
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Solutions Of Laplaces Equation

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presents a new efficient numerical analytical method for solving the Laplace equation on an arbitrary polygon This method called the approximate block method overcomes indicated difficulties and has qualitatively more rapid convergence than well known difference and variational difference methods The block method also solves the complicated problem of approximate conformal mapping of multiply connected polygons onto canonical domains with no preliminary information required The high precision results of calculations carried out on the computer are presented in an abundance of tables substantiating the exponential convergence of the block method and its strong stability concerning the rounding off of errors

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