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ASYMPTOTICS OF SOLUTION OF A BOUNDARY
VALUE PROBLEM FOR A SINGULARLY
PERTURBED QUASILINEAR
ONE-CHARACTERISTIC EQUATION

Abstract

On a rectangular domain, a boundary value problem is considered for a non-classic type third order quasilinear equation containing a small parameter at higher derivatives. The complete asymptotic expansion in small parameter of the solution of the problem under consideration with boundary layer functions near two sides of the rectangle is constructed, and the residual term is estimated.