

Existence of Minimal and Maximal Solutions for a Quasilinear Elliptic Equation With Integral Boundary Conditions

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Abstract: This work is concerned with the construction of the minimal and maximal solutions for a quasilinear elliptic equation with integral boundary conditions, where the nonlinearity is a continuous function depending on the first derivative of the unknown function. We also give an example to illustrate our results.

Keywords: Integral boundary conditions; upper and lower solutions; monotone iterative technique; p -Laplacian; Nagumo–Wintner condition

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