

Alsaedi, A., Afandi, H.

**Existence and approximation of solutions for nonlocal boundary value problems with mixed nonlinearities**

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Department of Mathematics, Faculty of Science, King Abdulaziz University, P.O. Box 80203, Jeddah 21589, Saudi Arabia

**Abstract**

In this paper, we study a second-order boundary value problem involving mixed nonlinearities in the differential equation and nonlinear nonlocal general three-point boundary conditions. We develop a generalized quasilinearization technique to obtain monotone sequences of lower and upper solutions converging quadratically to a unique solution of the problem at hand.

**Author Keywords**

Nonlocal conditions; Quadratic convergence; Quasilinearization; Three-point boundary value problem

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