عنوان مقاله:

Numerical solution of two-dimensional integral equations of the first kind by multi-step methods

محل انتشار:

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نویسندگان:

Seyed Musa Torabi - *Department of Mathematics, Shahed University, Tehran, Iran*

Abolfazl Tari Marzabad - *Department of Mathematics, Shahed University, Tehran, Iran*

خلاصه مقاله:

In this paper, we develop multi-step methods to solve a class of two-dimensional nonlinear Volterra integral equations (۲D-NVIEs) of the first kind. Here, we convert a ۲D-NVIE of the first kind to a one-dimensional linear VIE of the first kind and then we solve the resulted equation numerically by multi-step methods. We also verify convergence and error analysis of the method. At the end, we give some illustrative examples to show the efficiency and accuracy of the presented method.

کلمات کلیدی:

Two-dimensional nonlinear Volterra integral equations, Integral equations of the first kind, Multi-step methods