

ON THE CONVERGENCE OF NEWTON-LIKE METHOD FOR  
SOLVING NONLINEAR EQUATIONS IN BANACH SPACES

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## Abstract

In this paper, we introduce a Newton-like method for solving nonlinear equations in a Banach space. We present a local and semi-local convergence analysis of our method. Also, we show that our method is better than the Newton method and the S-iteration processes of Newton-like [5] and we give numerical examples to support of our results.

**Keywords:** Newton's method, fixed point, nonlinear operator equations, Newton-like method.

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