Numerical Iteration Method to Find New Formulas for Nonlinear Equations

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Abstract : A new algorithm is presented to find some new iterative methods for solving nonlinear equations F(x)=0 by using the variational iteration method. The efficiency of the considered method is illustrated by example. The results show that the proposed iteration technique, without linearization or small perturbation, is very effective and convenient.

Keywords : variational iteration method, nonlinear equations, Lagrange multiplier, algorithms
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