Interval forms of a sixth-order class of modified Ostrowski methods

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Abstract

In this paper, interval extension of a sixth-order class of the classic modified Ostrowski methods which improves the order of convergence of Ostrowski method from four to six for solving nonlinear equations is introduce. Also, error analysis and convergence will be discussed. Some implemented examples with INTLAB are also included to illustrate the validity and applicability of the scheme. The results of proposed method are compared with the results of the interval Ostrowski method and the interval Newton method.

References

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