

On the interval zero symmetric single step procedure IZSS1-5D for the simultaneous bounding of real polynomial zeros

Abstract

A new modified method IZSS1-5D for the simultaneously bounding all the zeros of a polynomial is formulated in this paper. The efficiency of this method is measured on the CPU times and the number of iterations after satisfying the convergence criteria where the results are obtained using five test polynomials. The R-order of convergence of this method is at least five.

Keyword: CPU times; Initial disjoint intervals; Interval; Number of iteration