On modification of the interval zoro symmetric single-step procedure IZSS1-5D for the simultaneously bounding of real polynomial zeros

ABSTRACT

A new modified IZSS1-5D method for 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 tested polynomials. The R-order convergence of this method is at least 5.

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