

Estimates for Roots and Divisors of Polynomials
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The computation of accurate bounds for univariate complex polynomials has many applications in various problems involving polynomials. We review some methods for computing polynomial bounds, emphasizing on the case of real zeros. For this case we propose a general method that extends the theorems of Kioustelidis, Stefanescu a. o. These bounds are expressed in function of the degree, the size of the coefficients and families of parameters that can be properly chosen. We use these bounds for the evaluation of the sizes of polynomial divisors. The computation of such sizes as the measure, the Bombieri norm, the height or the length are useful in algorithms of factorization of polynomials over the integers.