

Problem 3 (due Monday, March 11)

Let $p(x) = cx^n + c_{n-1}x^{n-1} + \dots$ be a polynomial of degree n with real coefficients and the leading coefficient $c \neq 0$. Prove that at least one of the numbers $|p(0)|, |p(1)|, \dots, |p(n)|$ is greater or equal than $\frac{|c|n!}{2^n}$. Prove furthermore that this bound is best possible.

We received a solution from Mithun Padinhare Veettil. For a complete solution see the following link [Solution](#).

From:

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