

**University of Colorado**  
**Department of Mathematics**  
**Problem of the Month**  
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Let  $p(x)$  be a real polynomial of degree  $n$  with the leading coefficient 1. Let  $b_i$ ,  $i = 1, 2, \dots, n + 1$  be  $n + 1$  distinct integer numbers. Show that for some  $i$

$$|p(b_i)| \geq \frac{n!}{2^n}.$$