University of Colorado

Department of Mathematics

Problem of the Month

October 2013

Let $P(x) = x^n + a_1 x^{n-1} + \cdots + a_{n-1} x + a_n$ be a real, monic polynomial of degree n. Let t be a real number. Let A be the $(n+1) \times (n+1)$ matrix whose ij-th entry is $P(x + t(i + j))$. Compute $\det A$.