

MATHEMATICAL MONTHLY PROBLEM PROPOSAL

CHRISTOPHER J. HILLAR AND LIONEL LEVINE

ABSTRACT. Christopher Hillar, Texas A& M University, College Station, TX and Lionel Levine, MIT. For monic polynomials p of degree n with complex coefficients, let A_p be $(n+1) \times (n+1)$ matrix with entries $a(i, j) = p(x - i + j)$ for $1 \leq i, j \leq n+1$, and let D_p be the determinant of A_p . Show that D_p depends only on n , and find its value in terms of n .

DEPARTMENT OF MATHEMATICS, TEXAS A&M UNIVERSITY, COLLEGE STATION, TX 77843
E-mail address: `chillar@math.tamu.edu`

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF CALIFORNIA, BERKELEY, BERKELEY, CA.
E-mail address: `levine@math.berkeley.edu`