Bilkent University
Department of Mathematics

PROBLEM OF THE MONTH

Term: February 2023

We say that two monic quadratic polynomials $P(x) = x^2 + ax + b$ and $Q(x) = x^2 + cx + d$ with integer coefficients are disjoint if $P(i) \neq Q(j)$ for any two integers i and j. Find the maximal number of pairwise disjoint monic quadratic polynomials with integer coefficients.