Abstract

This article partially answers an open problem of Kimberling. Consider a sequence of polynomials satisfying an mth order recursive relation with polynomial coefficients. Under what circumstances can we say anything exact about the coefficients of x^i? The paper's main theorem asserts that under modest assumptions, there exists a computable constant, c, such that, for each i, the coefficients of x^i eventually satisfy a polynomial of degree i with the ith difference operator applied to this polynomial equaling c^i.