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On the zeros of shifted Bernoulli and Euler polynomials

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Dedicated to the memory of Professor Béla Brindza (1958–2003)

Abstract. In this short survey paper, some recent results on the zero-structure of shifted Bernoulli polynomials $B_k(X)+b$ and Euler polynomials $E_k(X)+b$ are presented. Further, using some previous results, we show that there are only finitely many pairs (k, b) with $k \geq 3$, $b \in \mathbb{C}$ for which $B_k(X)+b$, resp., $E_k(X)+b$ has no three simple zeros, and we give explicitly all these pairs (k, b).

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