Symbolic implementation of the general cubic decomposition of polynomial sequences. Results for several orthogonal cases.

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ABSTRACT. We deal with a symbolic approach to the cubic decomposition (CD) of polynomial sequences - presented in a previous article referenced herein - developed in *Mathematica* software, which allows us to compute explicitly the first elements of the nine component sequences of a CD. Properties are investigated and several experimental results are discussed, related to the CD of some widely known orthogonal sequences. Results concerning the symmetric character of the component sequences are established.

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