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Algorithm for the complement of orthogonal operations

Abstract: G. B. Belyavskaya and G. L. Mullen showed the existence of a complement for a k-tuple of orthogonal n-ary operations, where $k < n$, to an n-tuple of orthogonal n-ary operations. But they proposed no method for complementing. In this article, we give an algorithm for complementing a k-tuple of orthogonal n-ary operations to an n-tuple of orthogonal n-ary operations and an algorithm for complementing a k-tuple of orthogonal k-ary operations to an n-tuple of orthogonal n-ary operations. Also we find some estimations of the number of complements.

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