

**A NOVEL PROPERTY OF THE DICE:
NEW PALINDROMIC SEQUENCES OF NUMBERS**

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Abstract: The standard cubic dice has the pairs of numbers (1,6), (2,5) and (3,4) on its opposite faces. In this article, we extend the Avant Garde idea of one of us (KSR) to assign a place value to a permutation, to enable their ordering. As a consequence the first and subsequent differences between the place-value-ordered-permutations give rise to hierarchies of palindromic sequences. We examine the consequences of this idea to the case of standard and non-standard dice. This idea provides a reason why other pairs of numbers on the faces of the dice are not preferred, in the case of a non-standard dice. A few examples of non-standard dice are provided to establish that the new symmetry of palindromic sequences does not exist in those cases.

Keywords and Phrases: Sequences, sets, palindromic numbers.