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Title: A magic square

Intended Audience: Elementary Type of Presentation Preferred: Short Presentation (less than 20 minutes) Description:

The standard 3-by-3 magic square may seem old hat to most of us, but it is a novelty for elementary school children, especially if they are tasked with constructing it. However, there are some additional properties that they may check out involving the products of the rows and columns. There is in fact a generalization to second order recursions; while pupils at this level should not be given the algebraic formulation, I have found that it is possible to introduce the generalization in a more informal way. Finally, we can use the magic square to illustrate the mathematical concept of isomorphism and give pupils an additional sidelight on the nature of mathematics.