

If one weakens the requirements still further and only asks that a square be magic in the rows and columns, then a pair of antipodal elements can add up to 17 without the square being diabolic. This is illustrated by

1	15	4	14
12	2	9	11
8	7	16	3
13	10	5	6

which is magic in rows and columns, but not in diagonals, and which has $a+k=e+o=17$.

An analogous treatment of the problem of finding all diabolic magic squares is given by Kraitchik on page 167 of his book, *La Mathématique des Jeux*, where he shows that all diabolic magic squares can be derived by successive applications of A , B , C , and D from three particular ones which he gives.

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A NOTE ON REGULAR BANACH SPACES*

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Introduction. For an element x of a Banach space B_0 † it is well known that the functional

$$X_x(f) = f(x)$$

defined over $B_1 = \overline{B_0}$, the Banach space composed of all linear functionals (real-valued additive and continuous functions) defined over B_0 , is linear; moreover‡

$$\|X_x\|_{\overline{B_1}} = \|x\|_{B_0};$$

hence the additive operation $X_x = T(x)$ from B_0 to $B_2 = \overline{B_1}$ is continuous and norm-preserving. In B_2 let $B_2^{(0)}$ denote the set of image ele-

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† S. Banach, *Théorie des Opérations Linéaires*, Warsaw, 1932, p. 53. We shall use Banach's terminology.

‡ Banach, loc. cit., pp. 188–189.