

MAGIC SQUARES AND CUBES

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Abstract

Part a square in n^2 equal small squares, where n natural number $n \geq 3$. We put the numbers $1, 2, \dots, n^2$ inside the small squares in a such way that, horizontal sums, whole sums and diagonal sums, be the same. The solution of problem is divided into three cases: for n odd, for $n \equiv 2 \pmod{4}$ and for $n \equiv 0 \pmod{4}$. This square is called magic square. Part a cube in n^3 equal small cubes, where n natural number $n \geq 3$. We put the numbers $1, 2, \dots, n^3$ inside the small cubes in a such way that, the sums according to the length, width, height, sums according to diagonals of each page of the big cube and sums according to diagonal of the cube, be the same. The solution of problem is divided into three cases: for n odd, for $n \equiv 2 \pmod{4}$ and for $n \equiv 0 \pmod{4}$. This cube is called magic cube.

Keywords: *square, cub, sum.*