

# Smarandache Concatenated Magic Squares

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## Abstract:

In this article, I present the results of investigation of Smarandache Concatenate Magic Squares formed from the magic squares, and report some conjectures.

## Key words:

Magic Square, Smarandache Concatenate Magic Squares, Smarandache Prime - Concatenate Magic Squares.

## 1) Introduction:

A magic square consists of the distinct positive integers , 1 ,2 ,..., n , such that the sum of the n numbers in any horizontal , vertical , or main diagonal line is always the same constant, for more details see [1],[2],and [3].

## 2) Smarandache Concatenated Magic Squares (SCMS):

SCMS is formed from concatenation of numbers in magic squares such that the sum of the n numbers in any horizontal, vertical, line is always the same constant, but not necessary main diagonal the same constant.

## 3) Examples:

Consider the following magic square (4x4), figure .1

14	24	25	11
19	17	16	22
15	21	20	18
26	12	13	23

Figure .1