

Forum: Riddles ï¼ è¬Žèªži¾‰

Topic: MATRIX ARITHMETIC III

Subject: Re: MATRIX ARITHMETIC III

Posted by: Anonymous

Posted on: 2007/8/26 17:41:59

Hi Rony

Lady Futari's first solution like I said is 'd' universal solution. However, she has the positions of the numbers reversed. Of course it is still correct and my only guess why she has done it that way is ... she is left-handed.

Don't depair! Here's another method.

The numbers used are

03, 05, 11, 13 14, 16, 22, 24

25, 27, 33, 35

36, 38, 44, 46

The end result is

03 44 38 13

24 27 33 14

35 16 22 25

36 11 05 46

Note that if you arrange the numbers in sequence (from smallest to the largest as illustrated in the first set of numbers), you find that the two diagonal lines each adds up to 98. In other words, the numbers at the four corners are there to stay.

What is left to be done is

- 1. to exchange positions of the four centre numbers, i.e. 16 with 27 and 22 with 33.
- 2. to cross-exchange positions of the remaining eight numbers. 05 takes the place of 44; 11 with 38; 14 with 35; and 24 with 25.

In this way all rows, columns and lines, each adds up to a constant of 98.

I am designing a 64-square Matrix Arithmetic IV to be released at a later date.

Cheers.