

Forum: Riddles i'¼ ꬎ語i¼‰
Topic: MATRIX ARITHMETIC
Subject: Re: MATRIX ARITHMETIC

Posted by: Anonymous Posted on: 2007/1/2 4:57:21

TO: All Those Who Are Interested

There are 4 methods of positioning the numbers 1~81 to land them such that 369 is the all-round total. Again middle number 41 multiply by 9.

I think Pretty Futari employs the upward-diagonal sequence beginning with 1 and upwards until 9; and continues in that format until number 81 is reached. See illustration (may be distorted) below.

Next, highlight the 9 by 9 squares with the centre number 41 in the middle. Then, move the numbers outside the 9 x 9 box towards the opposite direction into the box, each time counting 9 squares. Do this both vertically and horizontally.

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09
   08 18
   07 17 27
  06 16 26 36
  05 46 15 56 25 66 35 76 45
 04 54 14 55 24 65 34 75 44 4 54
 03 13 63 23 64 33 74 43 03 53 63
02 12 62 22 72 32 73 42 02 52 12 62 72
01 11 21 71 31 81 41 01 51 11 61 71 81
10 20 70 30 80 40 9 50 10 60 20 70 80
 19 29 79 39 8 49 18 59 19 69 79
 28 78 38 7 48 17 58 27 68 28 78
  37 6 47 16 57 26 67 36 77
  46 56 66 76
   55 65 75
   64 74
    73
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ps: As expected the figure is distorted. It should look like the diagram of a rhombus instead of like a loud speaker.

My method is quite similar. I use the downward sequence. See illustration below.

37 30 23 16 09 74 67 60 53 54 38 31 24 17 01 75 68 61 62 46 39 32 25 18 02 76 69 70 63 47 40 33 26 10 03 77

78 71 55 48 41 34 27 11 04 05 79 72 56 49 42 35 19 12 13 06 80 64 57 50 43 36 20 21 14 07 81 65 58 51 44 28 29 22 15 08 73 66 59 52 45