EverGreens

LMI July Puzzle Test – 03rd & 04th Jul 2010

Instruction Booklet

Points Table	
Puzzle	**Points**
Arrows	50 + 65
As Easy As ABCD	20 + 40
Battleships	30 + 50
Dominos	20 + 35
Fence	20 + 40
Hitori	30 + 50
Kakuro	20 + 25
Loop Finder	30 + 65
Magnet	20 + 70
Minesweeper	45 + 70
Paint By Number	85
Tents And Trees	25 + 30
ZigZag	30 + 35
Total	**1000**
+ Time Bonus	
Total Time	**100 minutes**

Rules and Regulations

- Before the test starts, a password protected pdf file will be available to download. This will contain the test puzzles.
- After you start the test, the password will be shown to you. You can open the pdf using the password, solve on paper and enter the answer keys using the website.
- After you start the test, submission is allowed upto 100 minutes.
- Time bonus (5 points per minute saved) will be awarded only if all puzzles are solved correctly.

Notes about Submission

- There won't be any provision to solve online. After solving on paper, you have to copy the answer keys and submit.
- A Timer will be available for you on the test page. Don't refresh / reload the test page before submitting.
- The submission page will warn you when you are trying to enter the answer keys in wrong format. This is just a warning, and your submission will be accepted even if there are warnings.
- Every Puzzle has 1 or 2 answer keys. Copy the answer keys carefully. There is nothing worse than solving the puzzle correctly and entering a wrong answer key.
- You may submit as many times as you want. Only your last submission will be considered for scoring.
- There is only one submit button for the whole test. When you click on this, all non-blank answer keys will be (re-)submitted.

Notes about Puzzles

- Points are generally indicative of the difficulty of the Puzzles and time required to solve it. However, your personal experience and preference might differ.
- All the puzzles are designed to have exactly one solution. In fact, in a number of puzzles this assumption can be used while solving.

Submission Link: http://logicmastersindia.com/M201007P

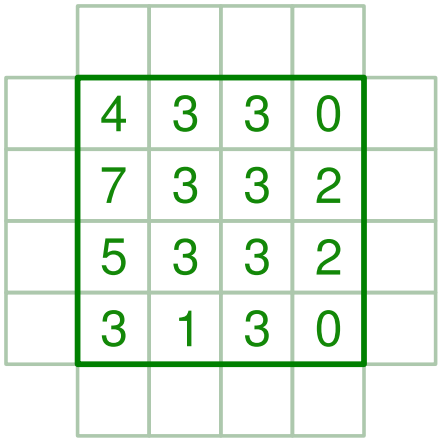
Forum Discussion Link: http://logicmastersindia.com/forum/forums/thread-view.asp?tid=67

Amit Sowani

Deb Mohanty

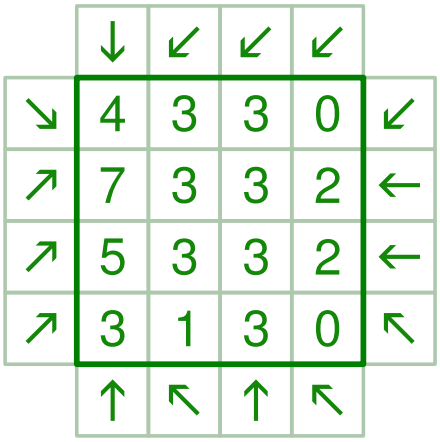
Arrows (50 + 65 points)

Rule: Draw arrows in the squares around the large square. Each square has one arrow. Each arrow points to at least one number. The numbers show the total number of arrows pointing towards them.



Answer Key : Enter the number of horizontal arrows. Enter the number of vertical arrows

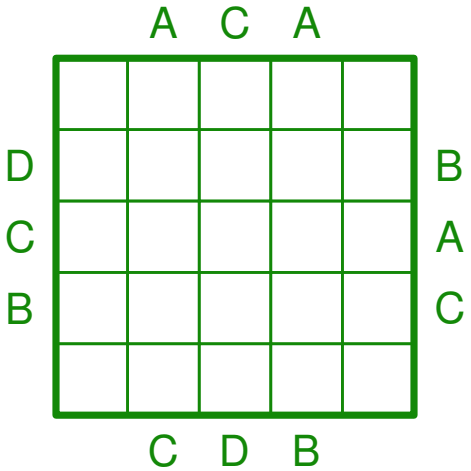
EXAMPLE



Solution (2,3)

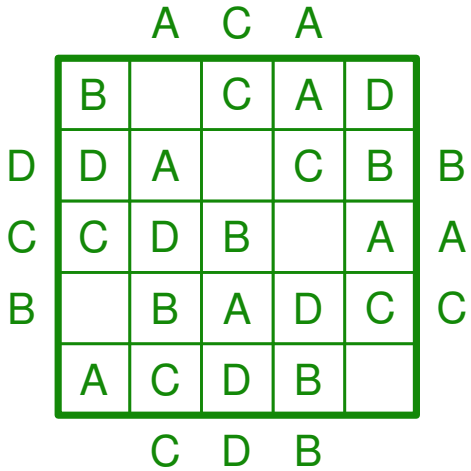
As Easy As ABCD (20 + 40 points)

Rule: Enter the letters A~D, each letter exactly once, in all rows and columns. One cell will remain empty in each row and column. The letters outside the grid show the letter that is seen first from that direction. [In the bigger grid, 2 cells will remain empty.]



Answer Key: Enter the letters in the top-left to bottom-right diagonal. Enter the letters in the top-right to bottom-left diagonal. Replace blanks by X

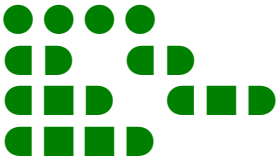
EXAMPLE



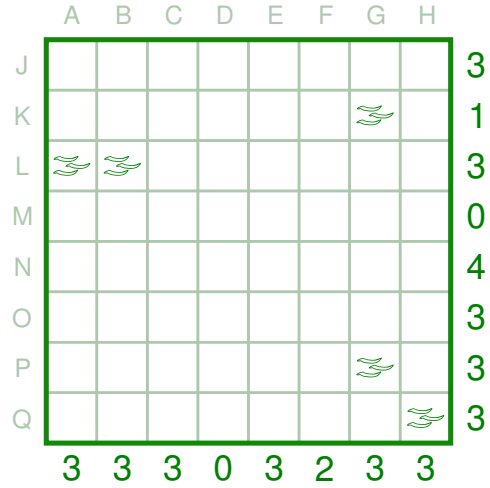
Solution (BABDX, DCBBA)

Battleships (30 + 50 points)

Rule: Locate the position of the 10-ship fleet in the grid. The shapes of the ships are shown. There is one 4x1 battleship, two 3x1 cruisers, three 2x1 destroyers and four 1x1 submarines. The numbers beside the grid indicate the number of cells occupied by ships in each row, while the numbers below the grid indicate the number of occupied cells in each column. Ships cannot touch each other, not even diagonally. Some cells are known to be water and are indicated by waves.

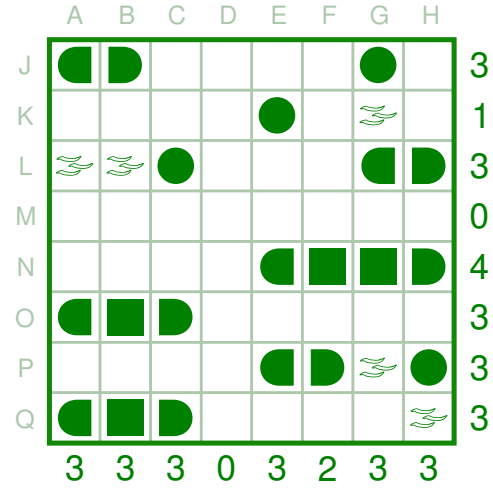


Note: The number of destroyers in actual puzzles is different.



Answer Key: Enter the locations of the submarines starting from the top row, left-to-right.

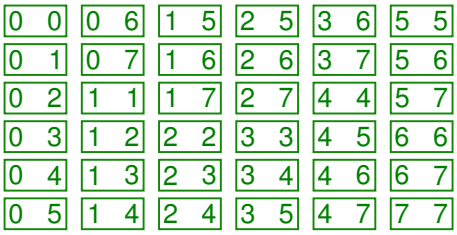
EXAMPLE

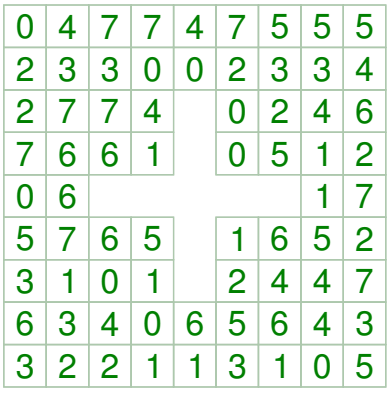


Solution (GJ,EK,CL,HP)

Dominos (20 + 35 points)

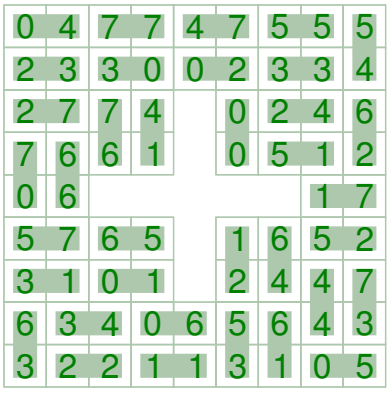
Rule: The grid contains a set of dominoes, using all combinations of zero through seven. The layout is shown with domino edges removed. Reconstruct the missing edges.





Answer Key : Enter the number of horizontal dominos

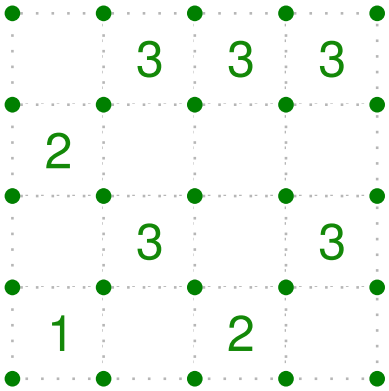
EXAMPLE



Solution (22)

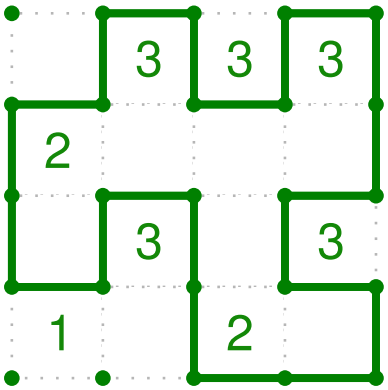
Fence (20 + 40 points)

Rule: Draw a single continuous loop along the dotted vertical or horizontal line segments. Crossovers or branches are not allowed. Numbers given inside the cell indicate the count of line segments surrounding that cell.



Answer Key: Enter the number of cells outside the loop.

EXAMPLE



Solution (6)

Hitori (30 + 50 points)

Rule: Black out some of the digits in the grid so that each row and each column contains distinct digits. Black cells must not touch each other horizontally or vertically. It must be possible to visit any white cell from another white cell using horizontal or vertical paths.

4	5	9	3	2
1	9	9	2	2
7	2	9	1	4
7	3	2	5	3
2	1	5	4	5

Answer Key: Enter the number of the shaded cells in each row starting from top row. Enter the number of shaded cells in each column starting from the left-most column.

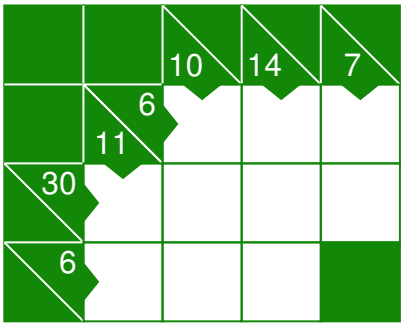
EXAMPLE

4	5	9	3	2
1	9	9	2	2
7	2	9	1	4
7	3	2	5	3
2	1	5	4	5

Solution (12121,11302)

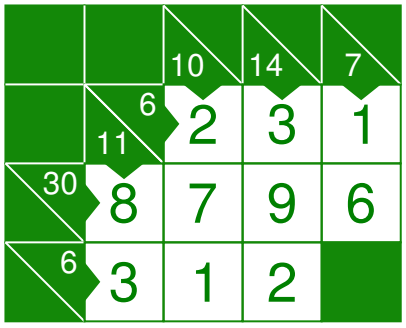
Kakuro (20 + 25 points)

Rule: Place one digit from 1 to 9 in each empty box so that the sum of the digits in each set of consecutive white boxes(horizontal or vertical) is the number appearing to the left of a set or above the set. No number may appear more than once in any set of consecutive white boxes.



Answer Key: Enter the digits in the first Row. Enter the digits in the last Row.

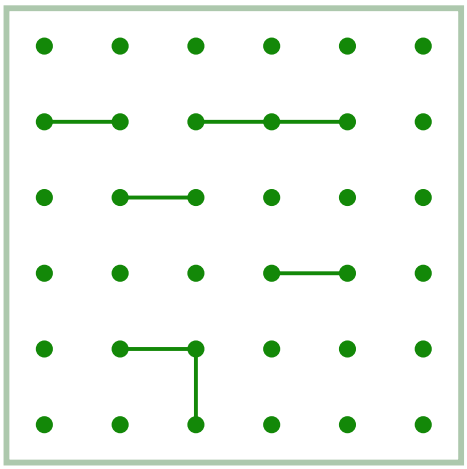
EXAMPLE



Solution (231,312)

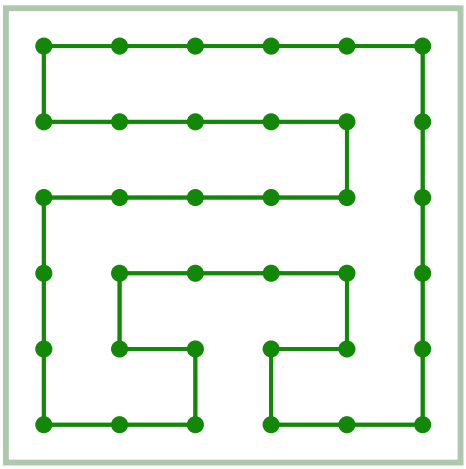
Loop Finder (30 + 65 points)

Rule: Draw a single continuous loop that visits all dots. The loop has only horizontal and vertical line segments. Some line segments are already drawn.



Answer Key: Enter the number of turns by the loop

EXAMPLE



Solution (16)

Magnets (20 + 70 points)

Rule: The grid is made up of magnetic and non-magnetic plates. Each magnetic plate has 2 halves: one positive (+) and one negative (-). Halves with the same polarity cannot touch each other vertically or horizontally. The numbers outside the grid indicate the number of magnetic halves with a particular polarity in each row/column.

				1	1
				1	1
				1	2
				2	1
1	1	1	2	+	
2	0	2	1		-

Answer Key: Enter the number + signs along the top-left to bottom-right diagonal. Enter the number of + signs along the top-right to bottom-left diagonal.

EXAMPLE

-	+			1	1
		-	+	1	1
-		+	-	1	2
+		-	+	2	1
1	1	1	2	+	
2	0	2	1		-

Solution (2,1)

Minesweeper (45 + 70 points)

Rule: Place the mines into empty cells in the grid such that the numbers in the grid represent the number of mines in the neighboring cells, including diagonal ones.

	3			1
1			3	1
1			4	2
1	2			
1				2

Answer Key – Enter the number of mines in each row, starting from the top row. Enter the number of mines in each column, starting from left-most column.

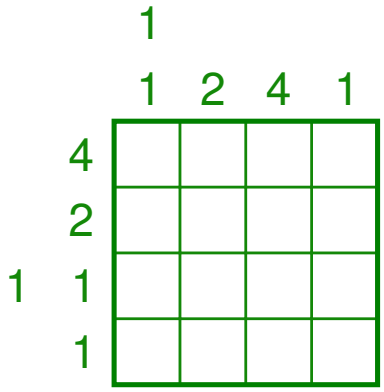
EXAMPLE

	3			1
1			3	1
1			4	2
1	2			
1				2

Solution (22031,02321)

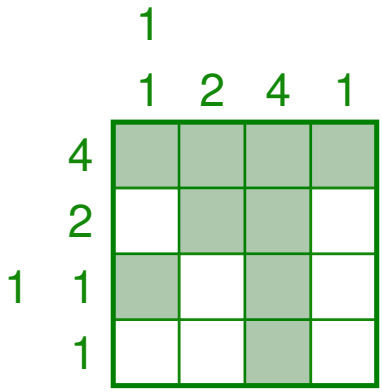
Paint By Number (85 points)

Rule: Shade some of the cells to find out the hidden figure. The numbers on the sides of the grid give the number of shaded cells in each shaded stretch in a certain row or column. The shaded regions are separated by one or more empty cells.



Answer Key: Describe the cells in the top-left to bottom-right diagonal. Describe the cells in the top-right to bottom-left diagonal. Enter 1 for shaded and 0 for white cells.

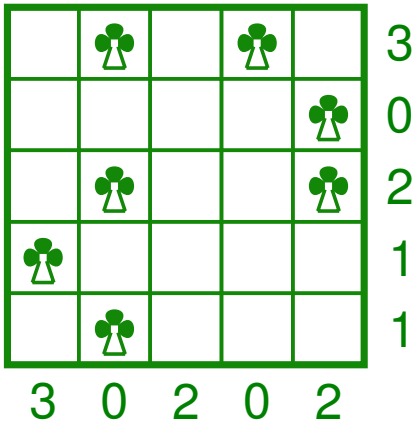
EXAMPLE



Solution (1110,1100)

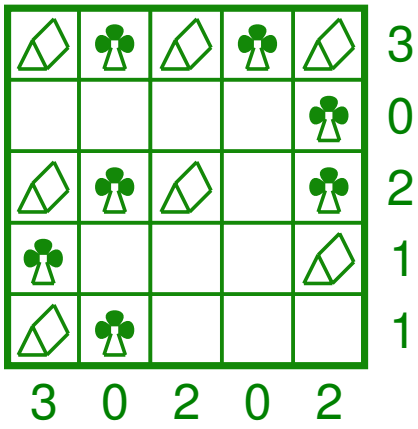
Tents And Trees (25 + 30 points)

Rule: Place one tent horizontally or vertically next to each tree. Tents do not touch, not even diagonally. The numbers outside the grid indicate the number of tents in that row or column.



Answer Key: Enter the number of trees whose tents are attached to them horizontally.

EXAMPLE



Solution (4)

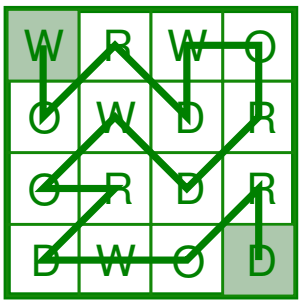
Zig-Zag (30 + 35 points)

Rule: Draw a line between the two highlighted cells passing through all cells. Connect the alphabets in either horizontally, vertically or diagonally while repeating the given pattern. The line can't cross or overlap itself. The line does not pass through cells without letters.

W	R	W	O
O	W	D	R
O	R	D	R
D	W	O	D

WORD

EXAMPLE



WORD

Answer Key: Enter the number of horizontal continous line segments and vertical continuous line segments.

Solution (3, 4)

```
ERROR: invalidrestore
OFFENDING COMMAND: restore

STACK:

-savelevel-
-savelevel-
{90 }
50
90
75
60
45
30
15
0
0
0
0
0
0
0
0
0
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-30
-45
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-75
-90
-90
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-90
-90
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