September SSC print Contest @ LMI

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2021

INSTRUCTION BOOKLET

1-2. CROSSROADS	21 + 26 pt
3. BATTLESHIPS	20 pt
4-5. BUBBLES	18 + 36 pt
6. AT THE LEVERS	10 pt
7. EASY AS ABCD	18 pt
8. EASY WITH MIRRORS	10 pt
9. HEXAPALINDROMES	40 pt
10. PYRAMID WITH AREAS	23 pt
TOTAL	222 pt

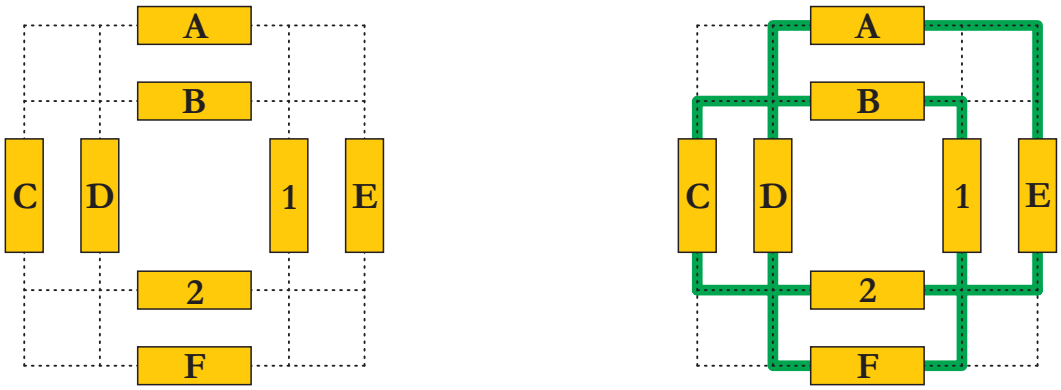
TIME
36.6 minutes

BONUS
6 points per minute saved if all puzzles are solved correctly

Thanks to Andrey Bogdanov and Prasanna Seshadri

1-2. CROSSROADS 21 + 26 pt

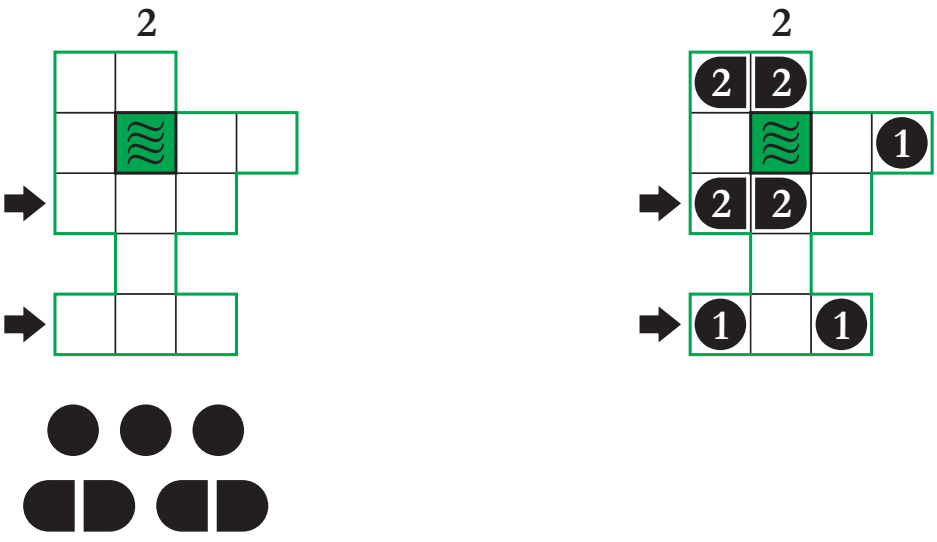
Draw a loop along the dotted lines, passing through all the yellow stripes once. Horizontal and vertical stripes along the path should alternate. The number on the strip shows the number of all points of intersection of the loop on the same horizontal or vertical line with this strip.
Ignore the letters while solving.



Answer: Enter a sequence of letters along the loop, moving from A to the right. For the example: AECBFD.

3. BATTLESHIPS 20 pt

Place the given set of ships into the white cells. Ships cannot touch each other, not even diagonally.
Clues outside the grid show the number of cells occupied by ships in the corresponding row or column.
The numbers given in the solution are for answer key purposes only.

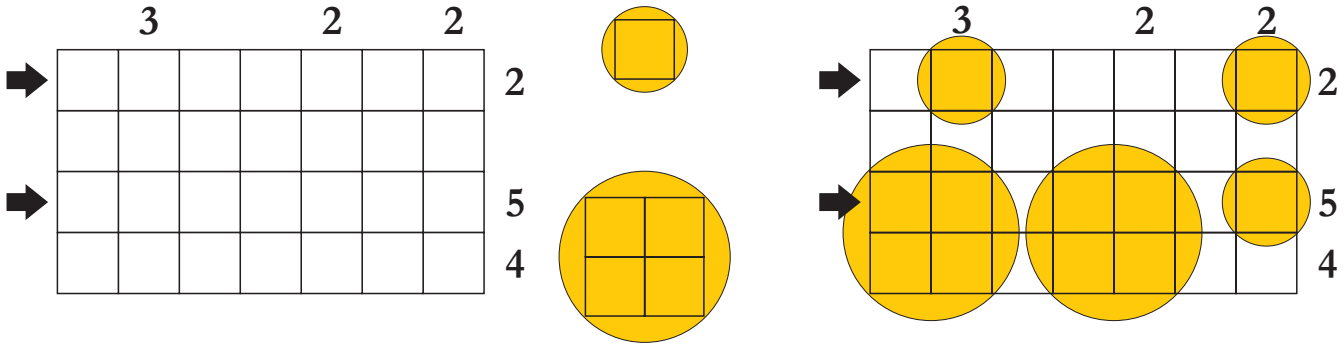


Answer: Enter the contents of the marked rows from left to right, using "-" for seas and N for any ship segment where N is the size of that ship. For the example: 22-, 1-1.

4-5. BUBBLES

18 + 36 pt

Draw some yellow circles of the given sizes (they are different for each puzzle with the cells in them indicating the pattern of completely filled cells they represented) so that they do not touch or intersect one another. The numbers outside the grid indicate the number of completely yellow cells in the corresponding rows and columns.

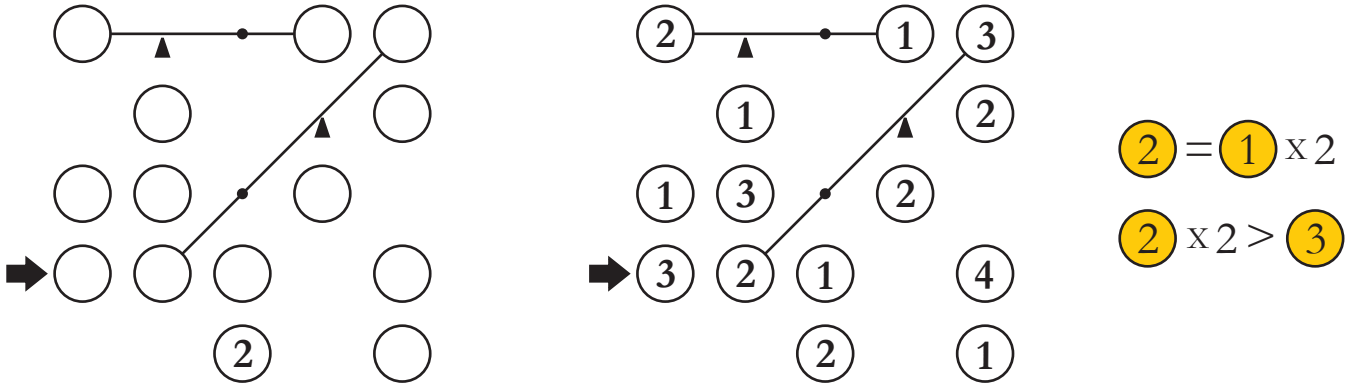


Answer: Enter the content of marked rows from left to right, using Y for completely yellow cells and W for other cells. For the example: WYWWWWY, YYWYYWY.

6. AT THE LEVERS

10 pt

Fill the circles with digits. Each row and column must contain all digits from 1 to N (where N = number of circles in the row/column). Some of the digits lie on a balance. For comparing different weights, multiply each digit by the length of the corresponding lever. Weight of the spokes is ignored.

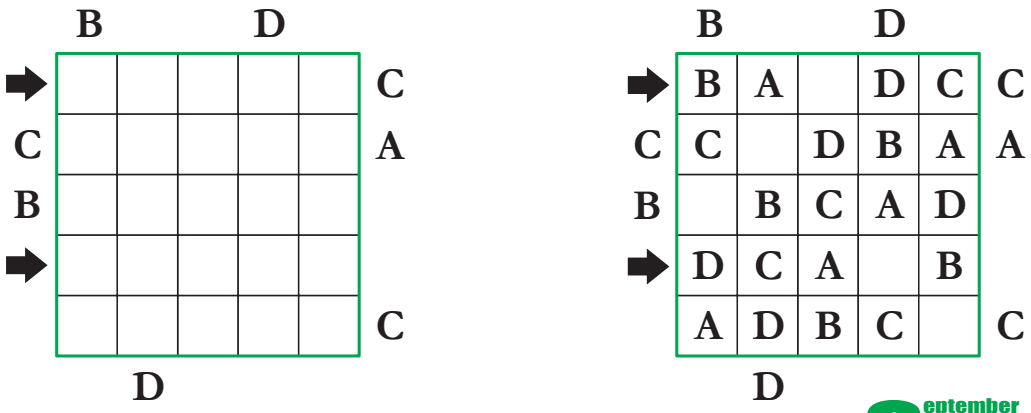


Answer: Enter the content of marked row from left to right. For the example: 3214.

7. EASY AS ABCD

18 pt

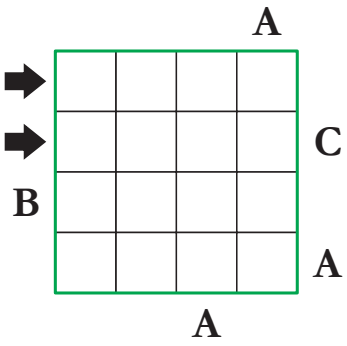
Enter the letters A, B, C, D into the grid so that each row and column contains each letter exactly once. Some cells may remain empty. Letters outside the grid denote the first letter found in the corresponding row or column from that direction.

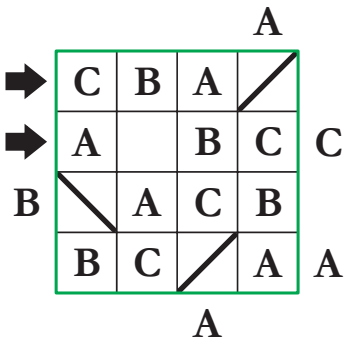


Answer: Enter the contents of the marked rows from left to right, using "-" for an empty cell. For the example: BA-DC, DCA-B.

8. EASY AS ABCD WITH MIRRORS — 10 pt

Enter the letters A, B, C, D (A, B, C in the example) into the grid so that each row and column contains each letter exactly once. Place a mirror in each empty cell around the grid perimeter. Letters outside the grid denote the first letter found in the corresponding row or column from that direction. The letter outside the grid, reflected from the mirror, necessarily indicates the first letter in a new direction.

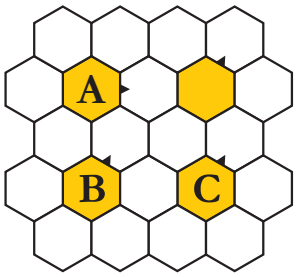




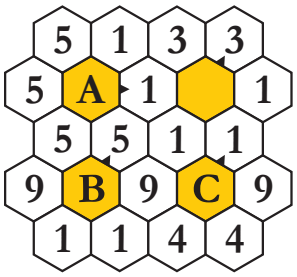
Answer: Enter the contents of the marked rows from left to right, using "-" for an empty cell and cell with mirror. For the example: CBA-, A-BC.

9. HEXAPALINDROMES — 40 pt

Enter all the given numbers-palindromes around the colored cells clockwise from the pointers. Ignore letters while solving.



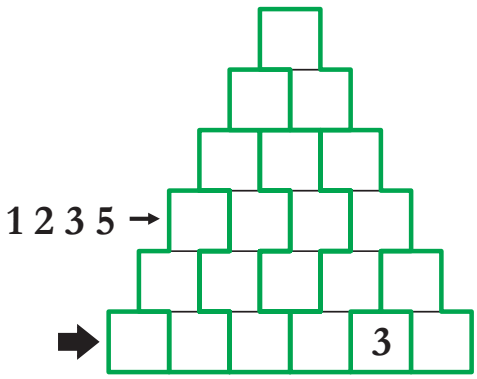
155551
194491
311113
591195

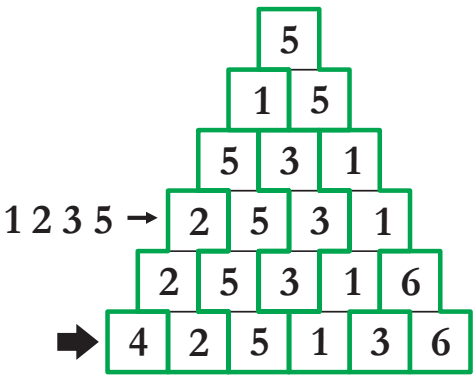


Answer: Enter the numbers around A, B, C. For the example: 155551, 591195, 194491.

10. PYRAMID WITH AREAS — 23 pt

Enter all the digits from 1 to 9 into the base of the pyramid. Each time you rise to the level, remove one digit from the lower set. In the highlighted green areas, the digits are the same. Only digits that differ by 2 or more can be placed in cells with a common bold border. In the direction of the arrow, all the specified digits will occur.





Answer: Enter the content of the marked row from left to right. For the example: 425136.