

NAME:

POINTS:



8TH 24 HOURS PUZZLE CHAMPIONSHIP

17-18 NOVEMBER, 2007

HOTEL BENTA

BUDAPEST

PUZZLES BY

CIHAN ALTAY

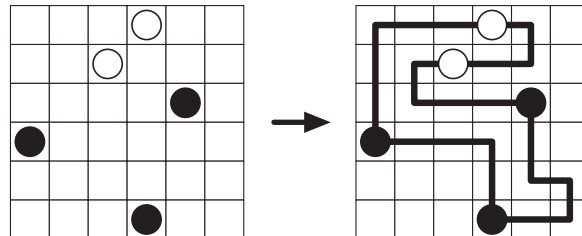
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|----------------------------------|-------------------------|
| 1. Mini Pearls | 60 points (15+15+15+15) |
| 2. Lateral Thinking | 55 points |
| 3. Wrenches | 45 points (20+25) |
| 4. Odd Event | 100 points |
| 5. Rectangle Corners | 80 points (30+50) |
| 6. Cardboard | 80 points |
| 7. Raindrops | 40 points |
| 8. Fences <i>Rotator</i> | 25 points (10+15) |
| 9. Digital Sudoku <i>Rotator</i> | 90 points (40+50) |
| 10. Rectangles <i>Rotator</i> | 20 points (10+10) |
| 11. Numberless Kakuro | 55 points |
| 12. Ordering | 65 points (30+35) |
| 13. Battleships Pool | 70 points |
| 14. Fuzuli | 155 points (60+95) |
| 15. Islanders | 60 points |

Total 1000 points

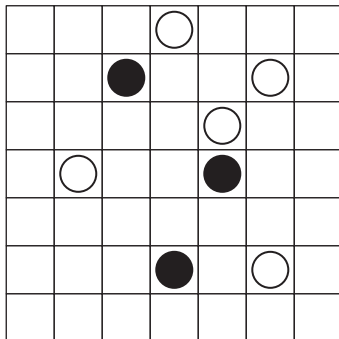


1. Mini Pearls

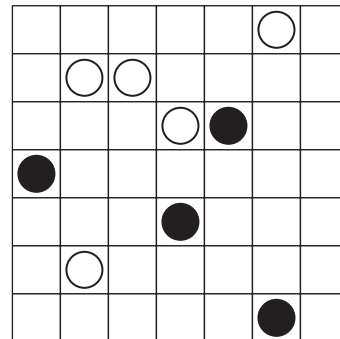
Moving between edge-to-edge neighbouring cells, draw a closed path that passes through every circle and doesn't cross itself. The path must turn at every black circle, but can not turn immediately before or after. And the path can not turn at any white circle but must turn immediately before and/or after.



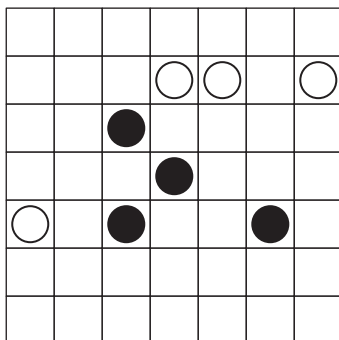
15
POINTS



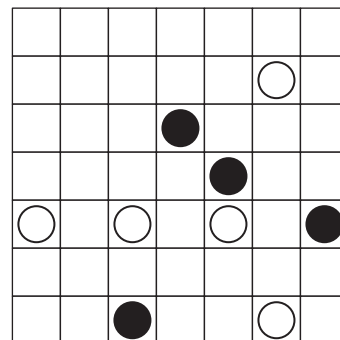
15
POINTS



15
POINTS



15
POINTS

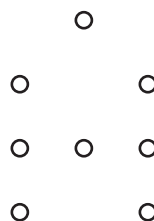


2. Lateral Thinking

How many quadrilaterals (simple, not self-intersecting) can be drawn, taking four points on the diagram as corners?



36



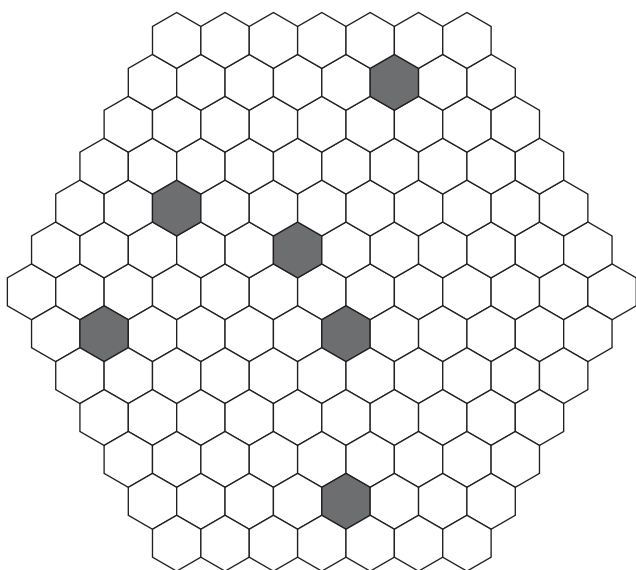
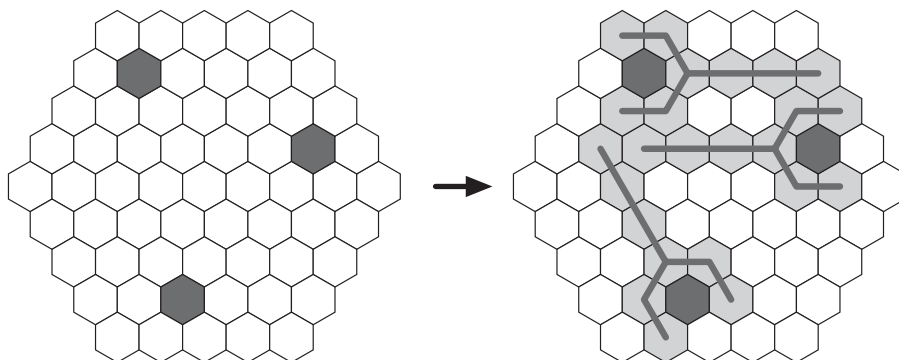
55
POINTS





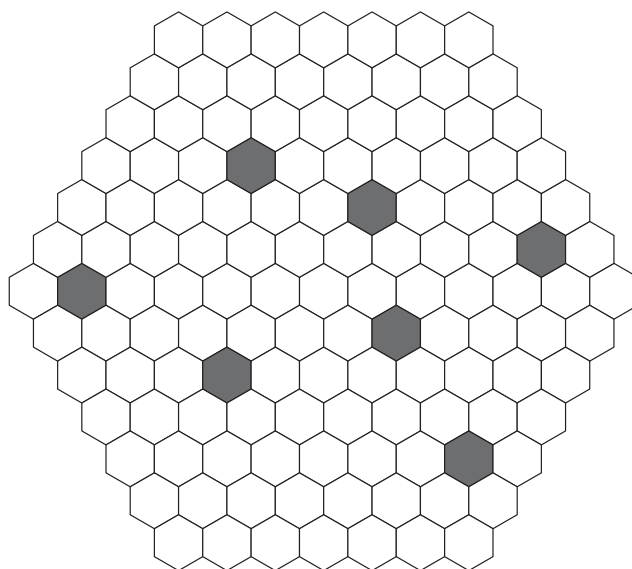
3. Wrenches

Find all wrenches in the grid where each bolt is gripped by a wrench with the proportions as shown in the example. Wrenches do not overlap each other or other bolts.



20
POINTS

25
POINTS

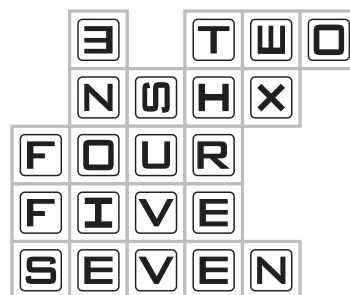
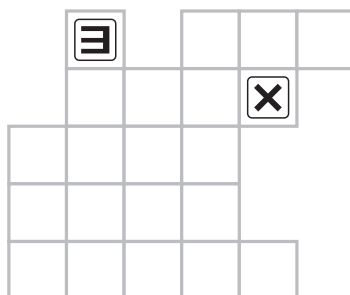




6. Cardboard

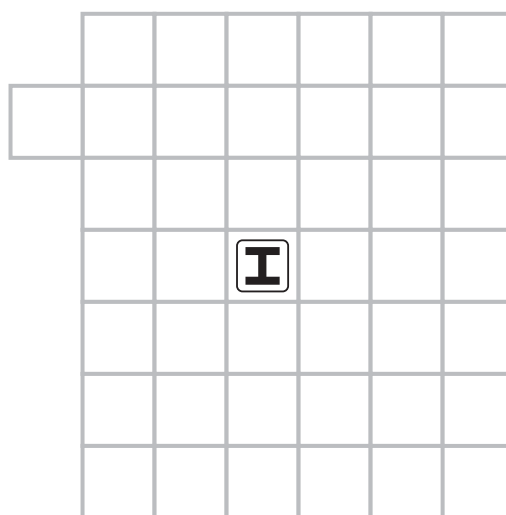
Locate a letter card into every cell of the grid, so that all words in the given word list can be read either across or down from any one of the four directions. Each letter card in the finished grid must be used at least once.

ONE
TWO
THREE
FOUR
FIVE
SIX
SEVEN



80
POINTS

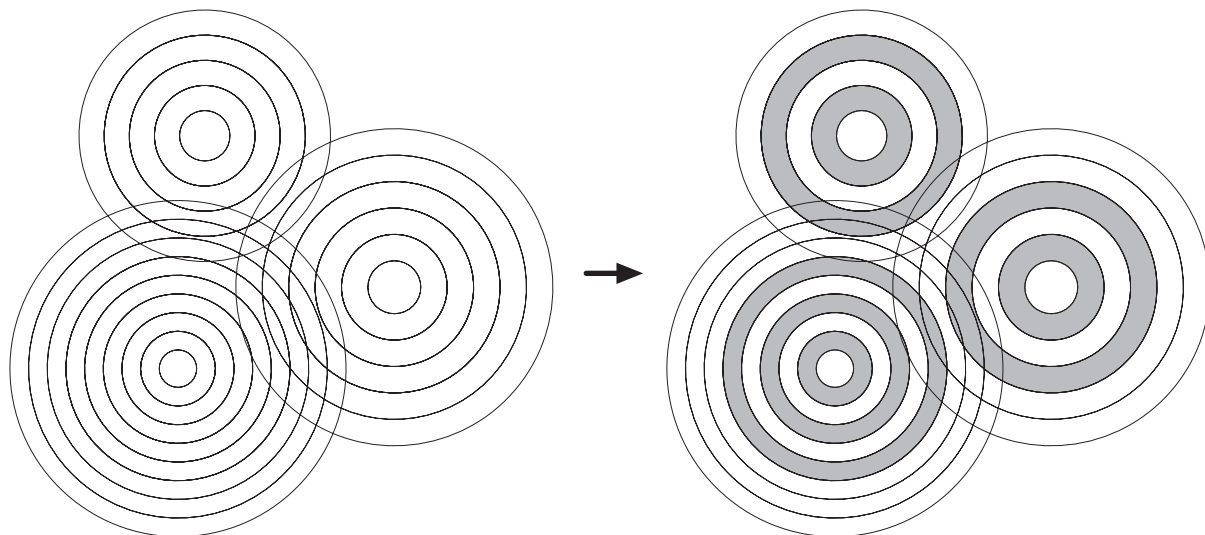
SUN
MERCURY
VENUS
EARTH
MARS
JUPITER
SATURN
URANUS
NEPTUNE



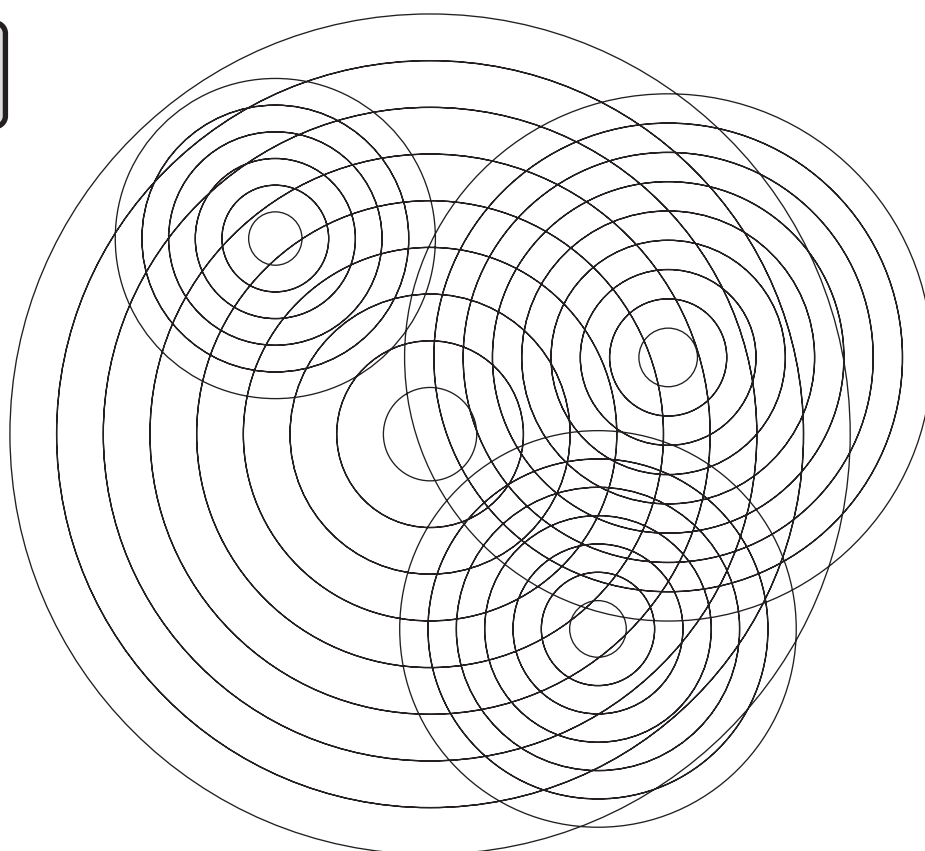


7. Raindrops

Paint the maximum possible number of nontouching rings in the diagram.



40
POINTS

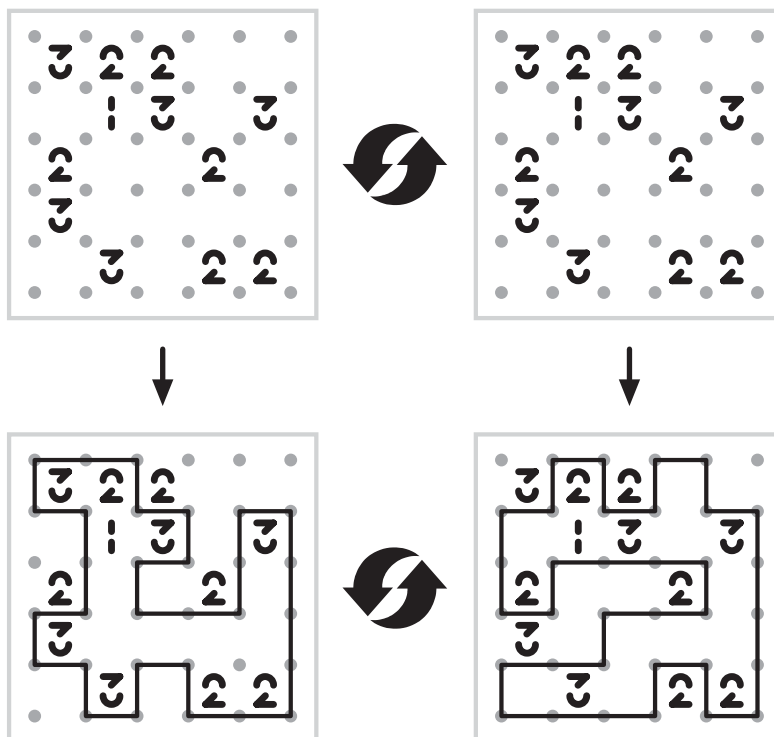




8. Fences Rotator

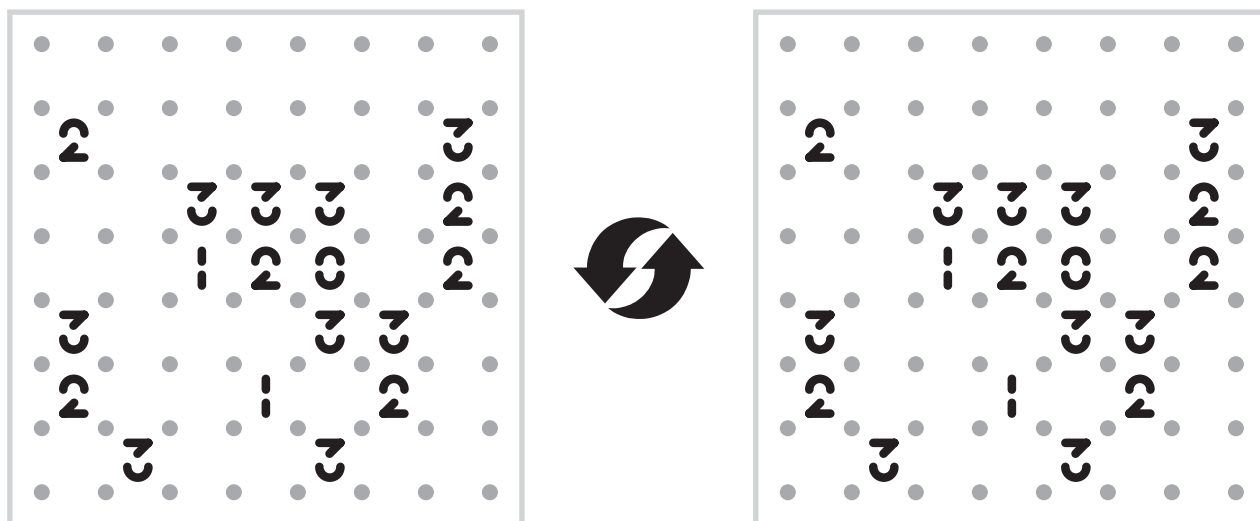
Connecting the dots horizontally and vertically, draw a closed path that doesn't touch or cross itself. Each number gives its number of edges used by the path.

Given two grids are the same. Solve the first one; then turn the page upside down and solve the other.



10
POINTS

15
POINTS





9. Digital Sudoku *Rotator*

Fill in the grid with digits from 1 to 6 so that in every row, in every column and in every 2x3 block each digit appears exactly once. Digits are in digital form as shown, and some segments have already been filled in.

Given two grids are the same. Solve the first one; then turn the page upside down and solve the other.

1 2 3 4

1			

↓

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

↻

8 8 2 1

8			

↓

1	1	8	2
8	2	1	1
1	8	2	1
2	1	1	8

40
POINTS

50
POINTS

1 2 3 4 5 6

↻

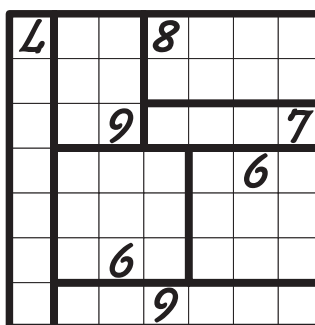
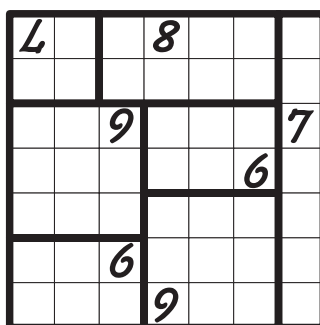
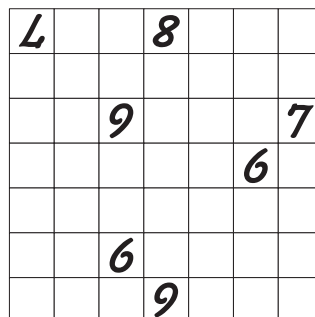
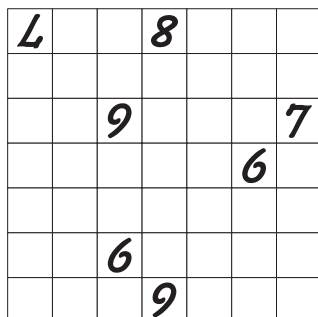
8 5 6 8 2 1



10. Rectangles *Rotator*

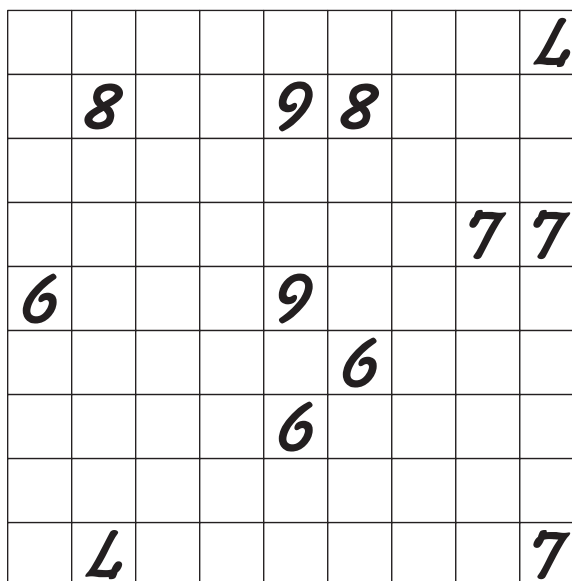
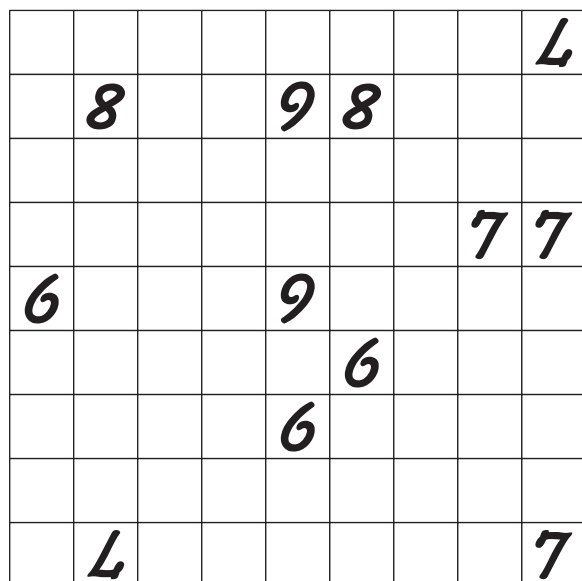
Divide the whole grid into some nonoverlapping rectangles, so that each rectangle contains exactly one number which also indicates the area of that rectangle in square units.

Given two grids are the same. Solve the first one; then turn the page upside down and solve the other.



10
POINTS

10
POINTS





11. Numberless Kakuro

Replace each letter with a unique digit and then solve the formed Kakuro puzzle: Enter a single digit from 1 to 9 into each empty cell, so that the sum of the digits in each across and down answer equals the value given to the left or above, respectively. No digit is repeated within an answer.

	FA	FH		BE	FC	B	FG
B			HG				
FE			HD				
			FF				
JE					B	HD	FG
JJ							
	FD	C	FE				
FG			FJ			C	
HI					FF		



	19	12		40	17	4	15
4	3	1	25	7	8	1	9
10	7	3	26	8	9	3	6
		11					
30	8	6	7	9	4	26	15
33	1	2	4	6	3	9	8
			10				
	16	7	13	3	1	4	2
15	7	1	5	2	7	6	1
28	9	6	8	5	11	7	4

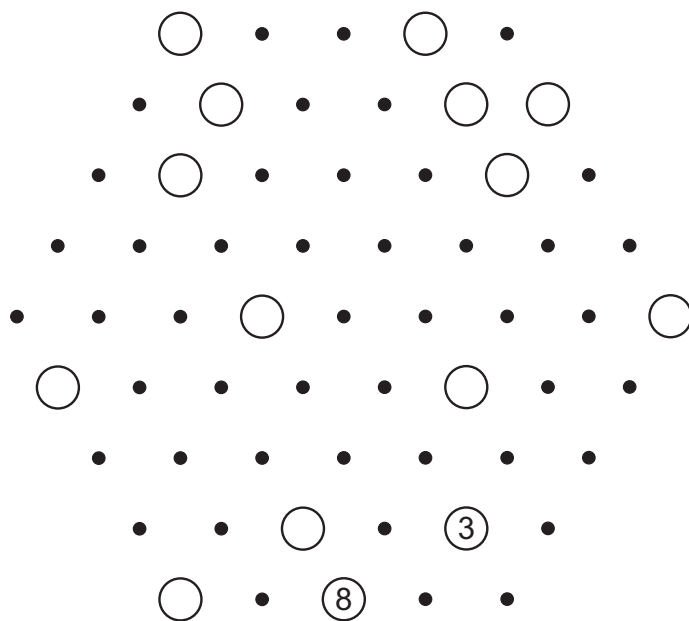
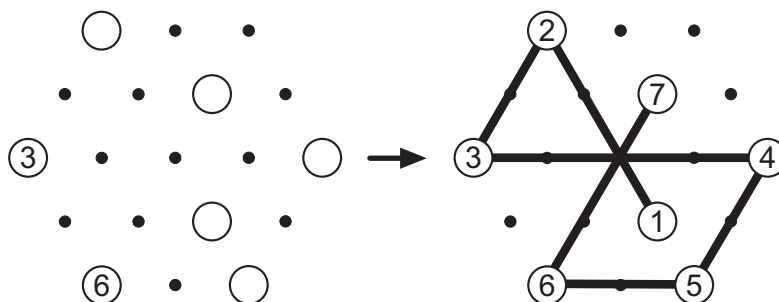
	CA	CH		IF	CJ	B
B			CE			
H			DH			
			CE			
DE					G	DF
	CC	I	CD			
E				CD		
CG				CI		

55
POINTS



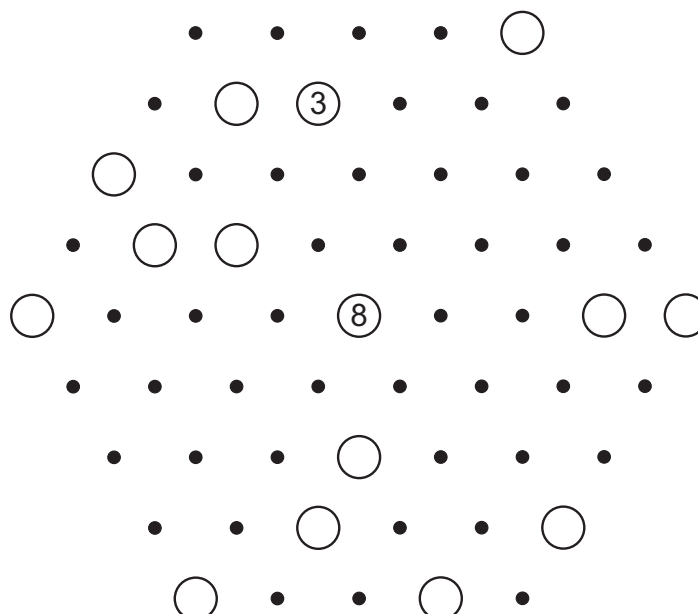
12. Ordering

Draw a path starting with a circle, visiting each circle once and finishing on another circle by connecting each two consecutive circle pair with a straight line which makes a multiple of 60 degrees with the horizontal. Connection lines can not pass through other circles. Start with "1" and give a consecutive number into each next circle on the path. Some numbers are already given.



30
POINTS

35
POINTS



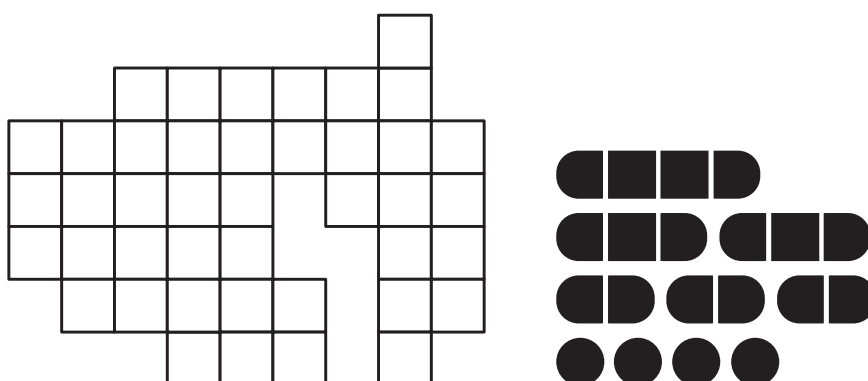


13. Battleships Pool

Locate the position of the 10-ship fleet in the grid. Ships are oriented either horizontally or vertically; and they don't touch each other, not even diagonally.



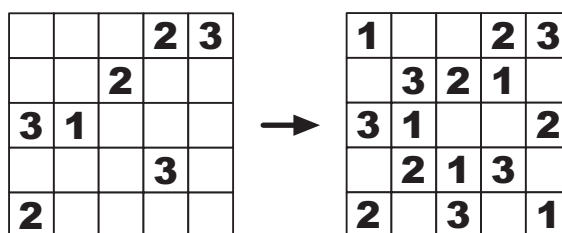
70
POINTS



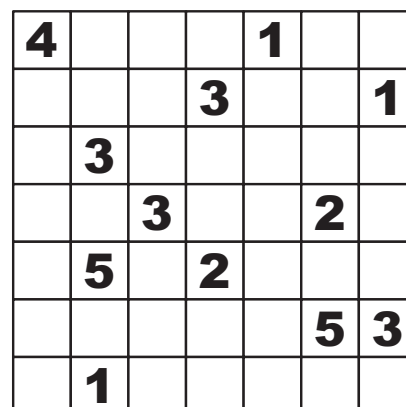
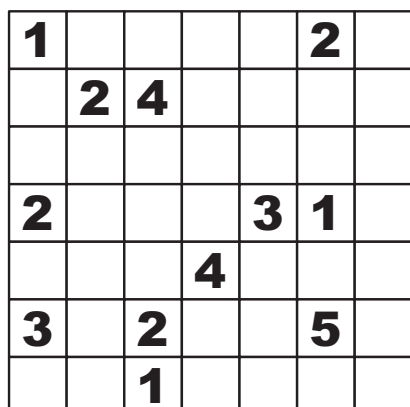
14. Fuzuli

Fill in some cells of the grid with digits from 1 to 5 (1 to 3 in the example) so that in every row and in every column each digit appears exactly once. There can not be any 2x2 square of filled-in cells anywhere on the grid.

60
POINTS



95
POINTS

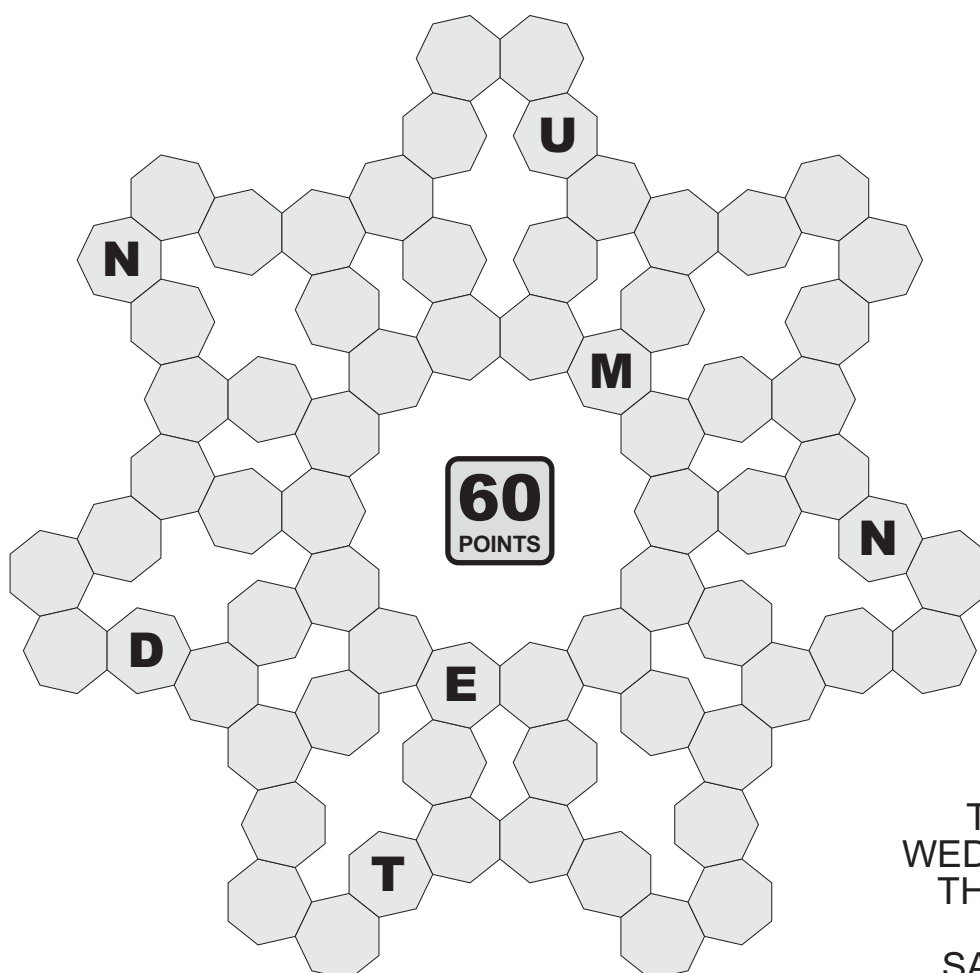
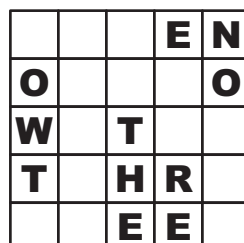
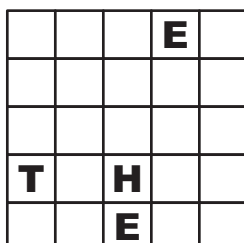




15. Islanders

Fill in some cells of the grid to read each word in the given word list moving between edge-to-edge neighbouring cells from letter to consecutive letter. Letters from different words can not touch each other, not even at a point.

ONE
TWO
THREE



MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY