

# Puzzle - Instruction Booklet

Duration: 1 hour (30 minutes + 30 minutes)

## Instructions

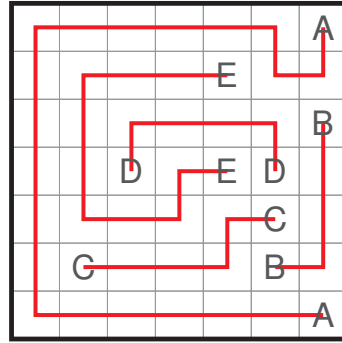
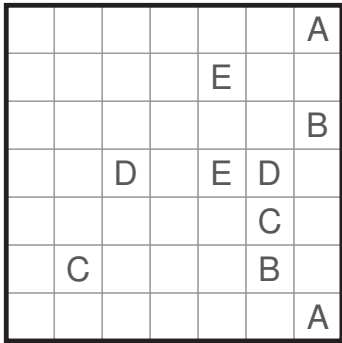
1. ALL participants must participate in both rounds. Duration of each round is 30 minutes.
2. Each puzzle is assigned certain amount of points, based on the difficulty. Grid sizes vary from 5x5 to 10x10 and are different in different puzzles. Points will be awarded only if it is completely correct. There is no partial marking.
3. You may use pen or/and pencil for solving.
4. External help of any kind is NOT permitted.
5. Read the puzzle instructions carefully before solving the puzzle. Below are the puzzle types of the two rounds. This Instruction Booklet contains examples to help understand the rules.

Round 1	Points
ABC Connection	10
Easy As ABC	6
Hitori	14
Skyscrapers	10
Minesweeper	15
Fence	9
Water Fun	6
Kakuro	15
Rebus Puzzles (8)	24 (3 each)
<b>Total</b>	<b>109</b>

Round 2	Points
Light Bulbs	5
Double Back	20
Tents	5
Streams and Islands	8
Star Battle	6
Magnets	6
Thermometers	12
Loop Finder	5
Rebus Puzzles (8)	24 (3 each)
<b>Total</b>	<b>91</b>

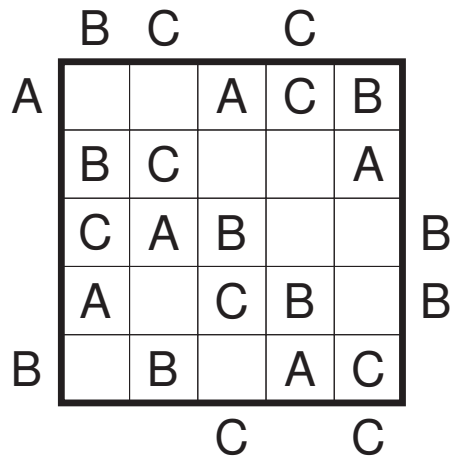
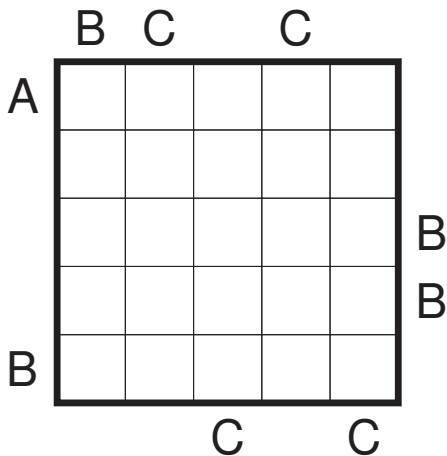
## ABC Connection

Connect each pair of same letters by paths of connected lines. Every cell of the grid must be visited by exactly one path, and paths cannot cross or overlap each other.



## Easy As ABC

Place the letters A, B and C once in every row and column. Letters on the outside indicate that this letter is seen first in that row or column when looking from that side.



## Hitori

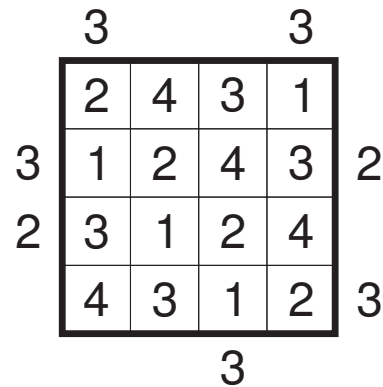
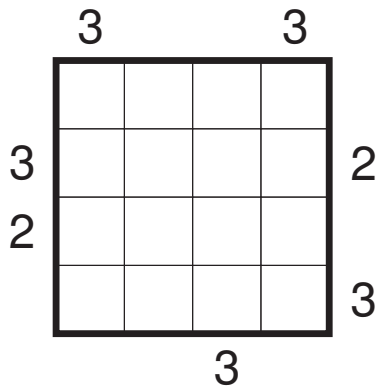
Black out some of the digits in the grid so that each row and each column contains distinct digits. Black cells must not touch each other horizontally or vertically. It must be possible to visit any white cell from another white cell using horizontal or vertical paths.

4	2	6	3	8	3	5
8	4	2	5	7	5	1
5	8	1	4	7	8	4
7	5	1	3	2	1	4
2	2	8	3	5	6	2
1	2	4	7	3	5	6
7	6	7	1	1	1	2

4	2	6	3	8	3	5
8	4	2	5	7	5	1
5	8	1	4	7	8	4
7	5	1	3	2	1	4
2	2	8	3	5	6	2
1	2	4	7	3	5	6
7	6	7	1	1	1	2

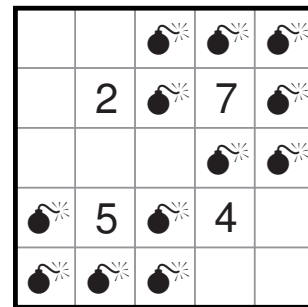
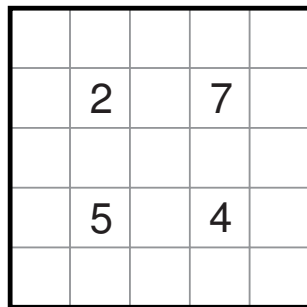
## Skyscrapers

Place the digits from 1 to n in the grid, where n is the size of a row/column of the grid. These digits represent skyscrapers of that height. The clues on the outside indicate the number of skyscrapers that are visible from that side. Larger skyscrapers block the view of smaller ones.



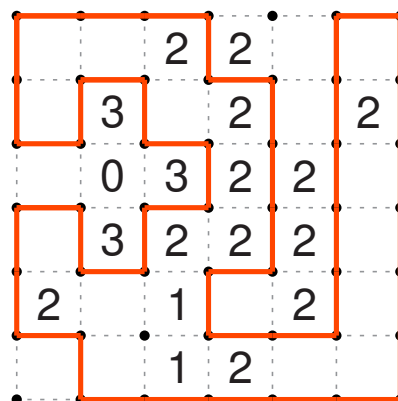
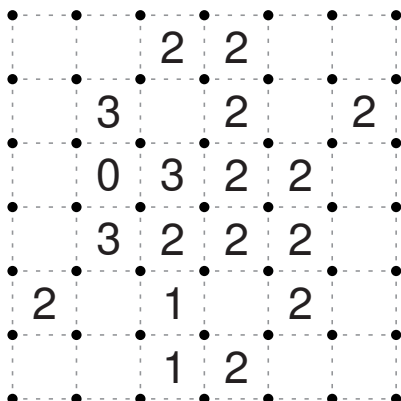
## Minesweeper

Place the given number of 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.



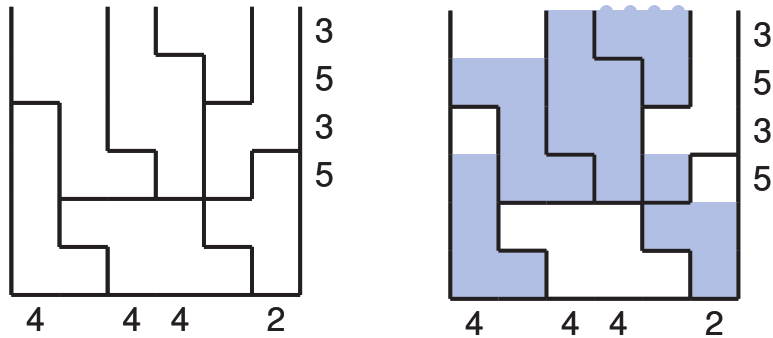
## Fence

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



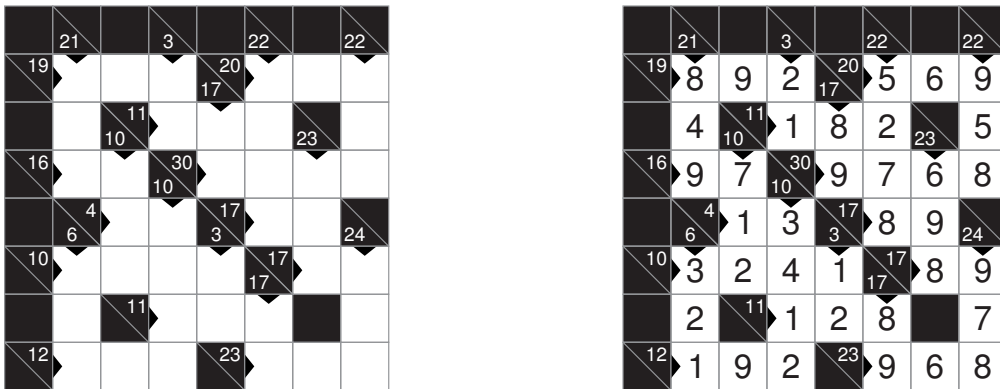
## Water Fun

Fill water in some parts of the grid. The numbers below or next to the grid indicate how many squares of each row or column must be filled with water. Connected areas of filled cells must have same surface height everywhere – even if the surface is not connected, like in a U-shaped tube.



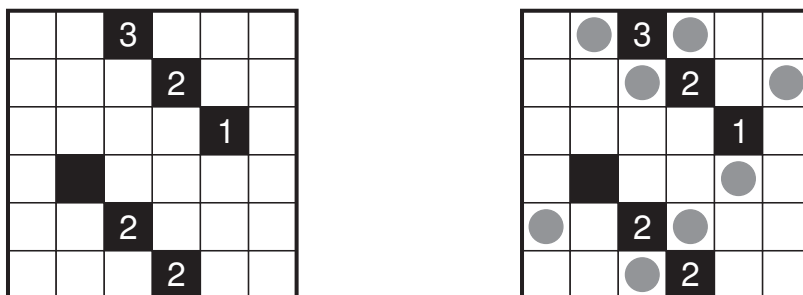
## Kakuro

Place one digit from 1 to 9 in each empty square so that the sum of the digits in each set of consecutive white squares (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 squares.



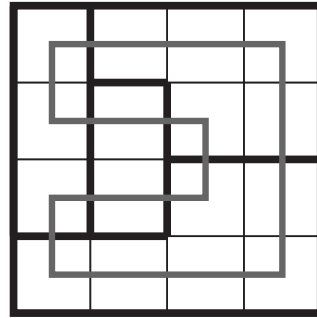
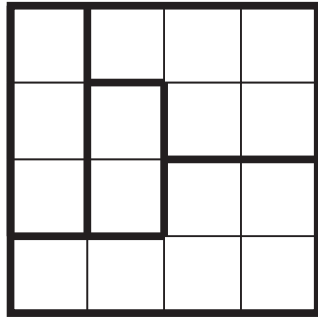
## Light Bulbs

Place a number of light bulbs in the grid, so that every cell is lit by at least one light bulb. Light bulbs illuminate all cells it can see horizontally and vertically. Black cells block its view. No two light bulbs are allowed to see each other. The numbers in the grid indicate the amount of light bulbs that touch that cell horizontally and vertically.



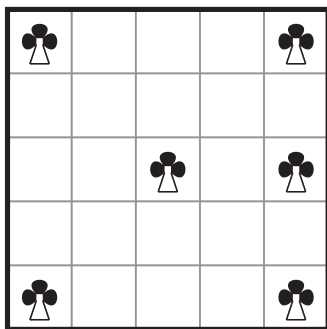
## Double Back

Draw a single closed loop passing through every cell in the grid. The loop must enter and exit each outlined region exactly twice.

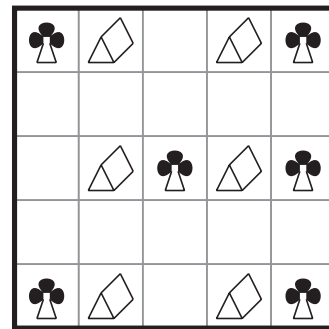


## Tents

Place a tent horizontally or vertically next to each tree. Tents do not touch each other, not even diagonally. Numbers outside give the number of tents in that row or column.



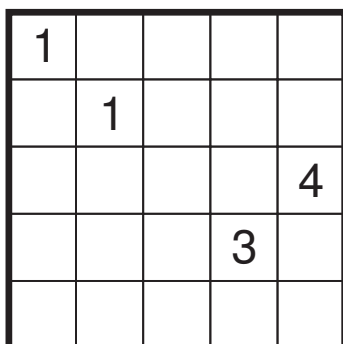
3



3

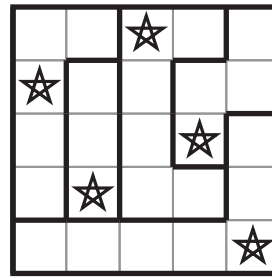
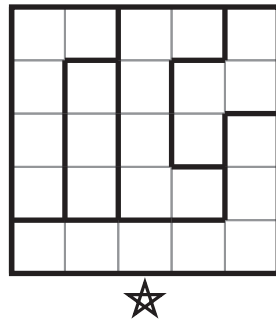
## Streams and Islands

Determine for each cell if it's part of the stream or an island. Each number is part of a single island of horizontally and vertically connected cells, and the number gives the size of the island. Islands can't touch each other horizontally or vertically. The cells not part of an island form the stream. The stream is a single connected area, which cannot fully cover any 2x2 groups of cells.



## Star Battle

Place the given number of stars in each row, each column and each region. Stars do not touch each other, even diagonally.



## Magnets

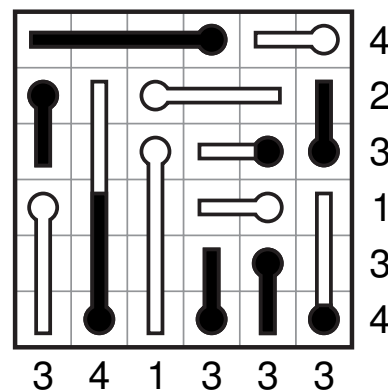
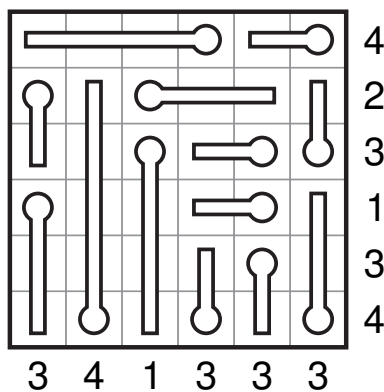
The grid is made up of magnetic and non-magnetic plates. Each magnetic plate has 2 halves: one positive (+) and one negative (-). Halves with the same polarity cannot touch each other vertically or horizontally. The digits outside the grid indicate the number of magnetic halves with a particular polarity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

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

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

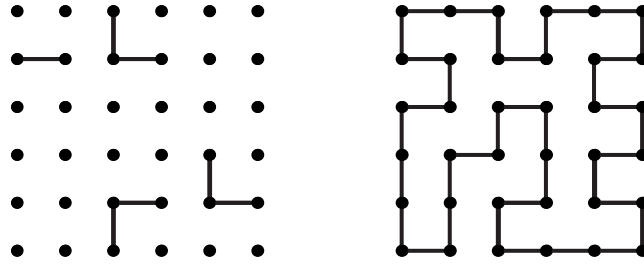
## Thermometers

The thermometers in the grid all have their own level of mercury, which always flows from rounded end towards the other end. Thermometers may be empty, partially or completely full. Numbers around the grid indicate the numbers of cells in the corresponding row / column that contain mercury.



# Loop Finder

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



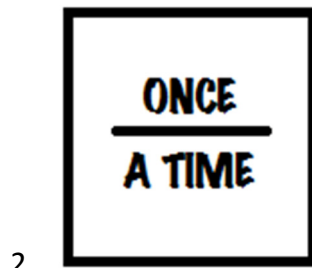
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## Rebus Puzzle (3 points per Puzzle)

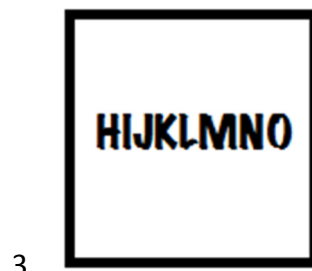
Here are some samples of what to expect in this type.



Answer: Circular Arrangement.



Answer: Once Upon A Time.



Answer: Water.