

Minesweeper

1 + 1 + 6 + 3 points

- Place mines into some empty cells in the grid such that the numbers in the grid represent the number of mines in the 8 neighboring cells, including diagonal ones.
- In some of the puzzles, number of mines to be used will be given.

Answer key: Enter the number of mines for each row, from top to bottom.

		2	2	1		1
4			4			
		3				3
3		4	4			2
					3	
3	5		4			
		2	2	2		2



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

27 mines

		2		3		4		
2				4				3
3		3		2		3	3	
			1				2	
2		4		3		3		2
	2				3			
	2	3		3		5		3
3				4				3
		3		3		2		



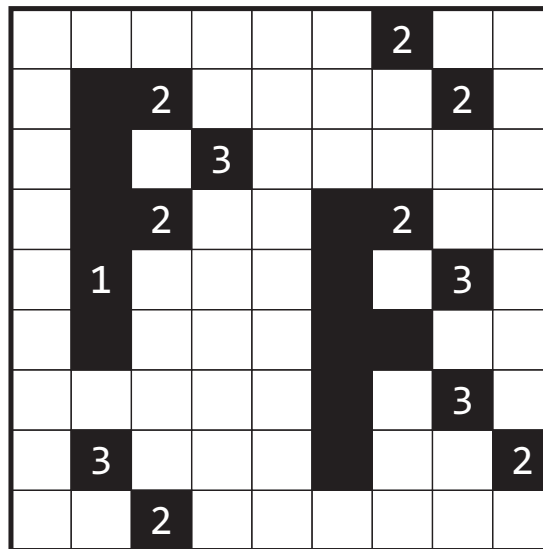
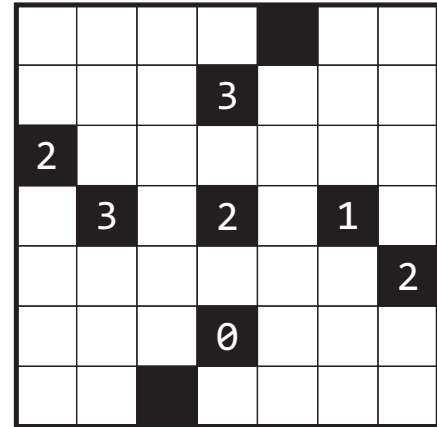
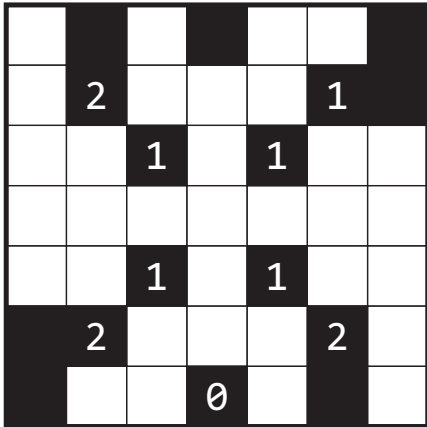
		3					2		
	3			4	2			4	
3		4	3			3			1
		3					3		
	4			1	0			3	
	2			4	2			4	
		5					2		
1			5			3	4		2
	4			3	4			2	
		2					2		

Akari

1 + 1 + 3 points

- Place lightbulbs in some of the white cells so that all white cells are illuminated.
- Lightbulbs illuminate all cells they can see horizontally and vertically, including the cell in which it is placed.
- Lightbulbs are blocked by black cells or the edge of the grid.
- No two lightbulbs may illuminate each other.
- Numbers in black cells indicate how many orthogonally adjacent cells contain a lightbulb.

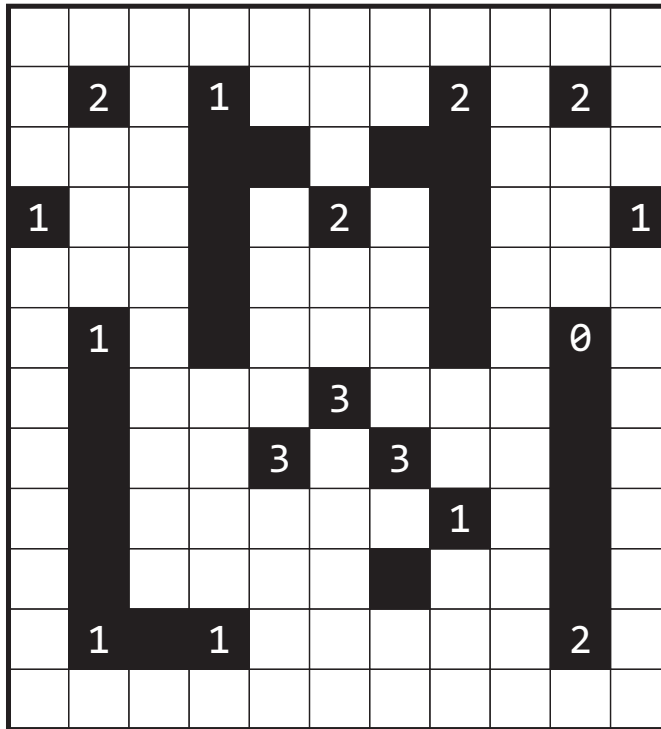
Answer key: Enter the number of light bulbs for each row, from top to bottom.



Akari

5 points

Refer to previous page for rules and answer keys.

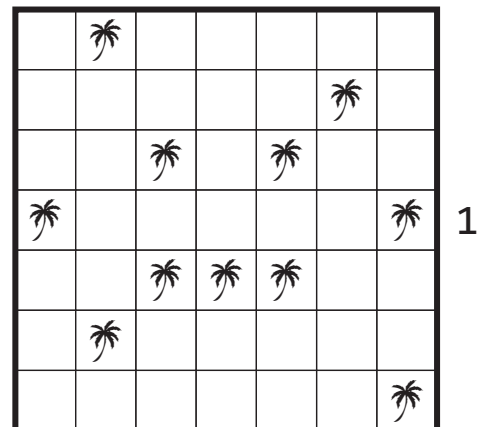
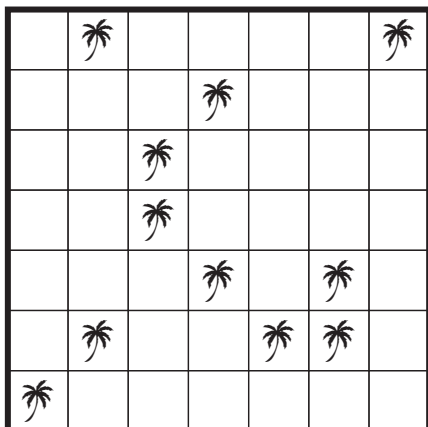


Tents

1 + 3 points

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

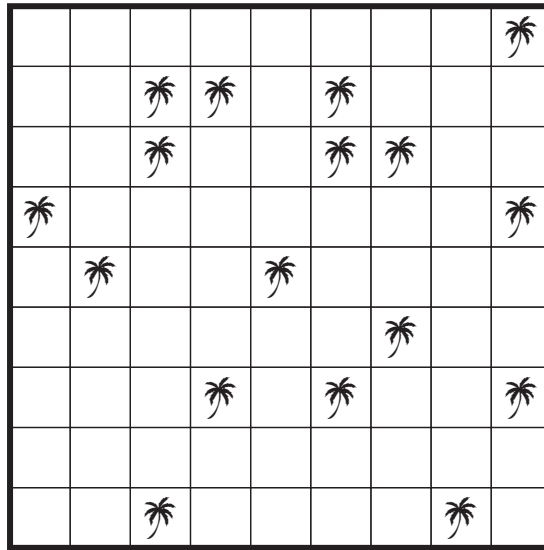
Answer key: Enter the maximum continuous non-tent area for each row, from top to bottom. In case of double digit numbers, enter the right (unit) digit only.



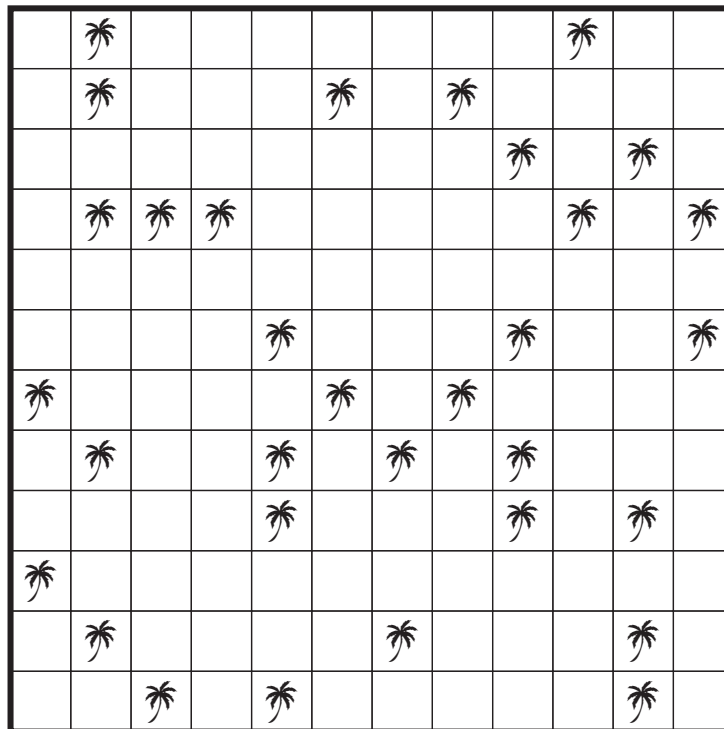
Tents

4 + 7 points

Refer to previous page for rules and answer keys.



3



4

Battleships

2 + 2 points

- Place the given fleet of ships with the shapes of the ships as shown.
- The numbers outside the grid indicate the number of cells occupied by ships in that row or column.
- Ships cannot touch each other, not even diagonally.
- Some cells are known to be water and are indicated by waves.

Answer key: For each row from top to bottom, enter the column position of first ship segment. Enter “-“ if there are no ships in the row.

3 1 2 3 1

1 2 1 2 2

1

3 1 2 2 2 4 6

4 2 1 3 2 2 4

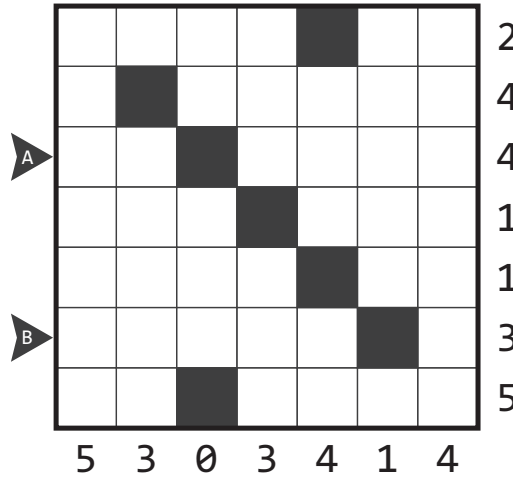
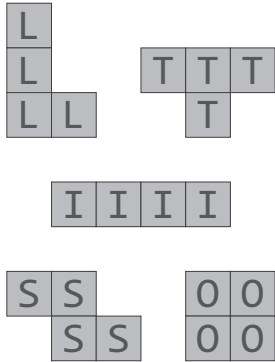
2

Tetromino

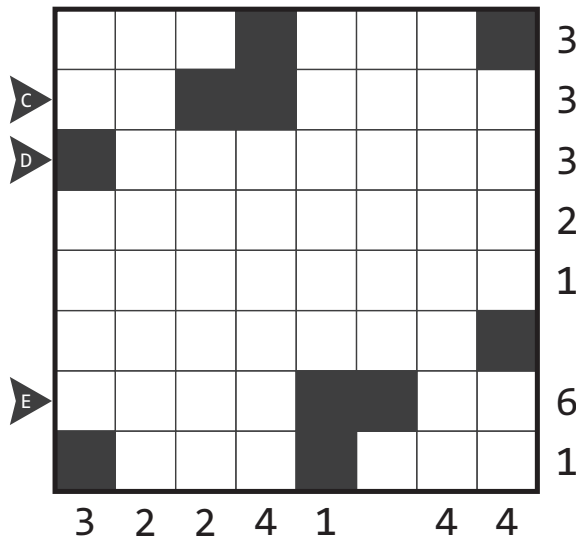
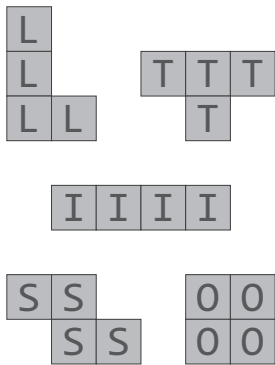
5 + 3 points

- Place the given set of polyominoes in grid.
- Polyominoes do not touch each other, even diagonally.
- Rotations and reflections are allowed.
- Polyominoes cannot be placed in shaded cells.
- The numbers outside the grid indicate the number of cells occupied by polyominoes in that row or column.

Answer key: Enter the letters corresponding to first two polyominoes seen from the marked directions. (– if not enough polyominoes)



1

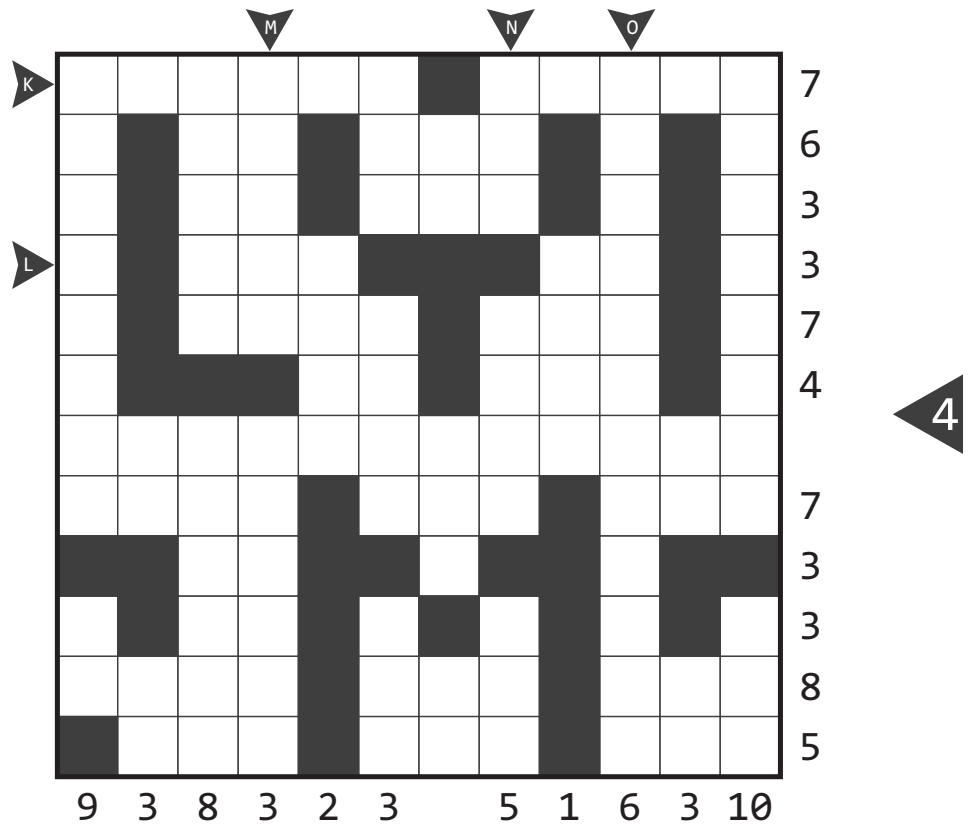
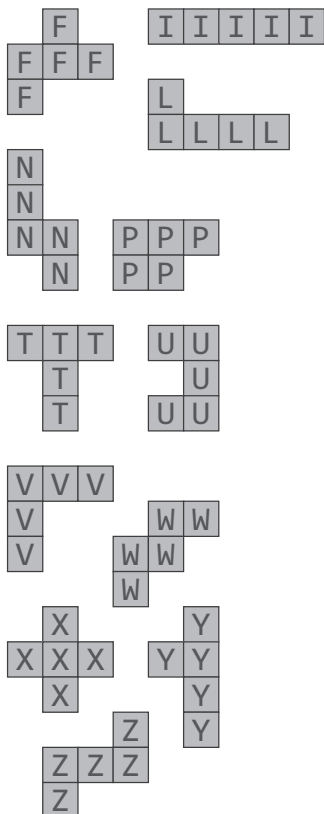
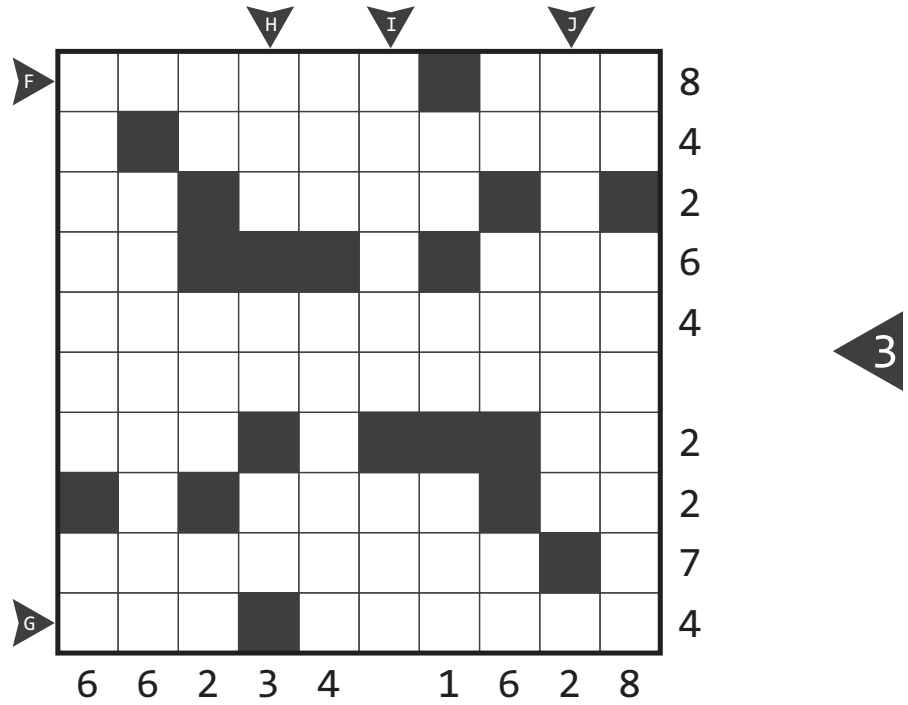
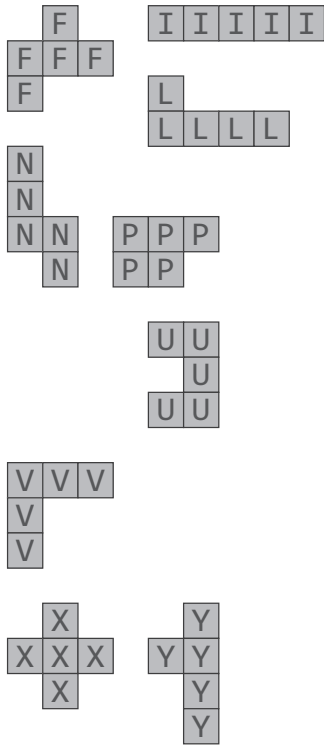


2

Pentomino

7 + 15 points

Refer to previous page for rules and answer keys.



Minesweeper Instructionsless

8 points

2		2				
					2	
		1	2			
					4	
				4		
3		3				

EXAMPLE

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

Answer key: Enter the number of mines for each row, from top to bottom.

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

Minesweeper

? + ? + ? + ? points

- Place mines into some empty cells in the grid such that the numbers in the grid represent the number of mines in the 8 neighboring cells, including diagonal ones.
- In some of the puzzles, number of mines to be used will be given.

Answer key: Enter the number of mines for each row, from top to bottom.

●	●	2	2	1		1
4		●	4	●		●
●	●	3	●	●	●	3
3		4	4		●	2
●		●	●		3	
3	5	●	4	●		●
●	●	2	2	2	●	2



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

27 mines

		2	●	3	●	4	●	
2	●			4	●		●	3
3	●	3		2	●	3	3	●
	●		1				2	●
2	●	4	●	3	●	3		2
	2		●		3	●	●	
●	2	3		3	●	5	●	3
3	●		●	4			●	3
●		3	●	3	●	2		●



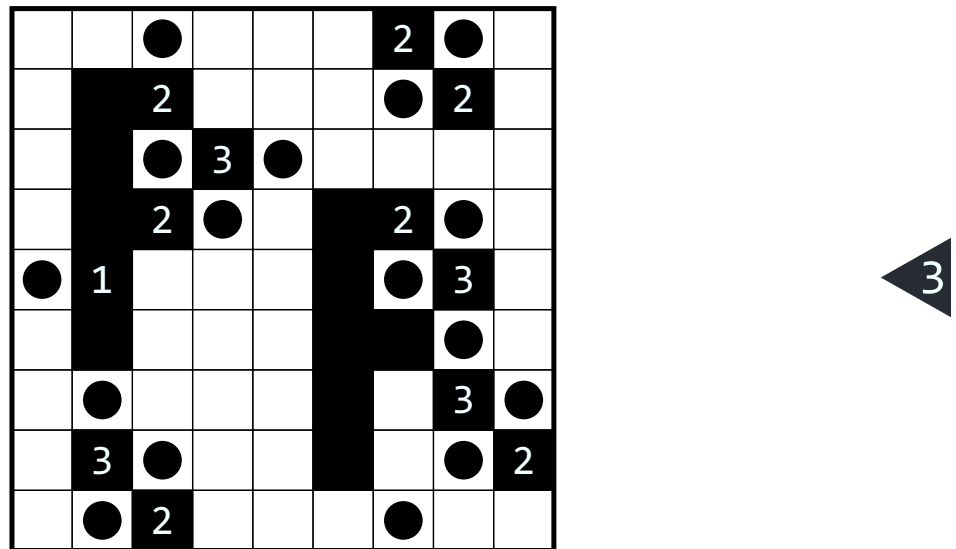
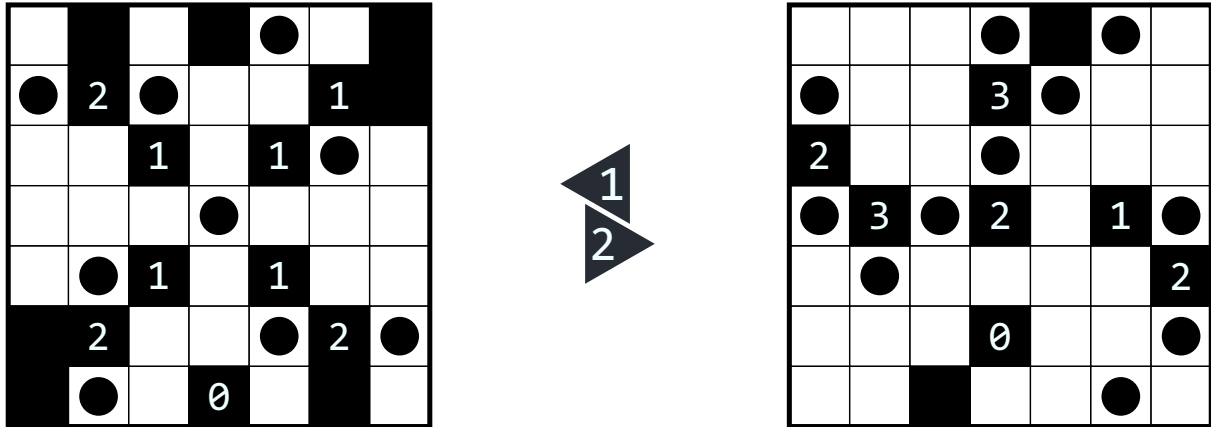
●		3	●				2	●	
	3	●	●	4	2		●	4	
3	●	4	3	●	●	3	●	●	1
●	●	3					3		
	4	●		1	0		●	3	●
	2	●	●	4	2			4	●
		5	●	●	●		2	●	
1	●	●	5	●		3	4	●	2
	4	●		3	4	●	●	2	
	●	2		●	●		2		

Akari

? + ? + ? points

- Place lightbulbs in some of the white cells so that all white cells are illuminated.
- Lightbulbs illuminate all cells they can see horizontally and vertically, including the cell in which it is placed.
- Lightbulbs are blocked by black cells or the edge of the grid.
- No two lightbulbs may illuminate each other.
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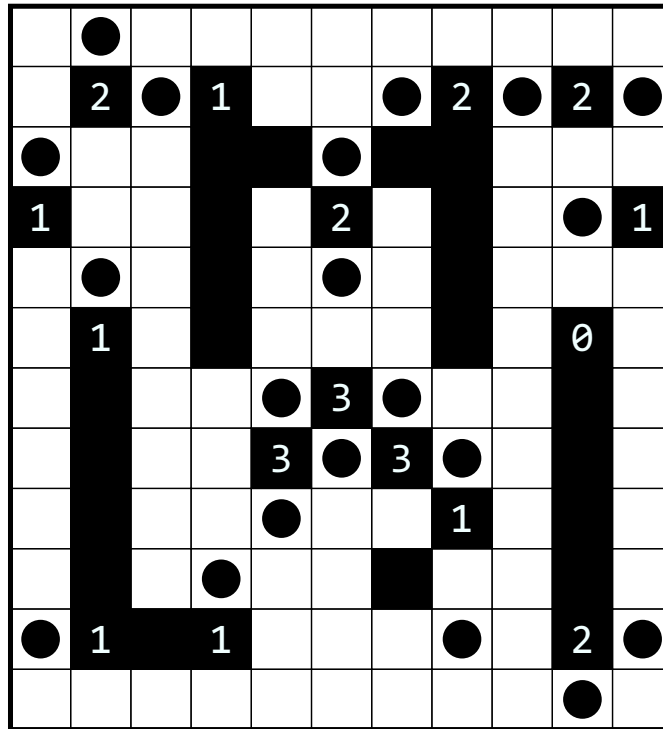
Answer key: Enter the number of light bulbs for each row, from top to bottom.



Akari

? points

Refer to previous page for rules and answer keys.

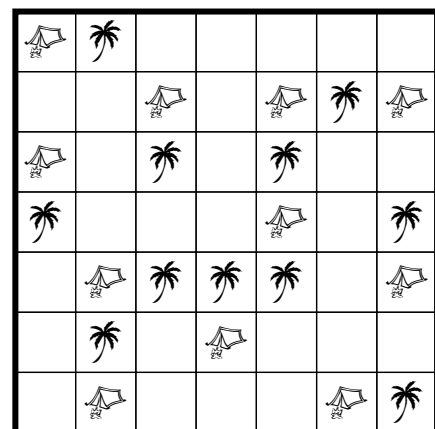
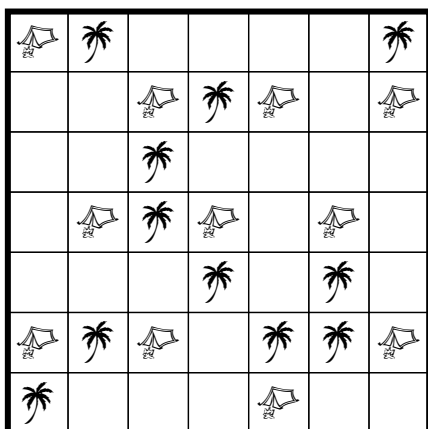


Tents

? + ? points

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

Answer key: Enter the maximum continuous non-tent area for each row, from top to bottom. In case of double digit numbers, enter the right (unit) digit only.

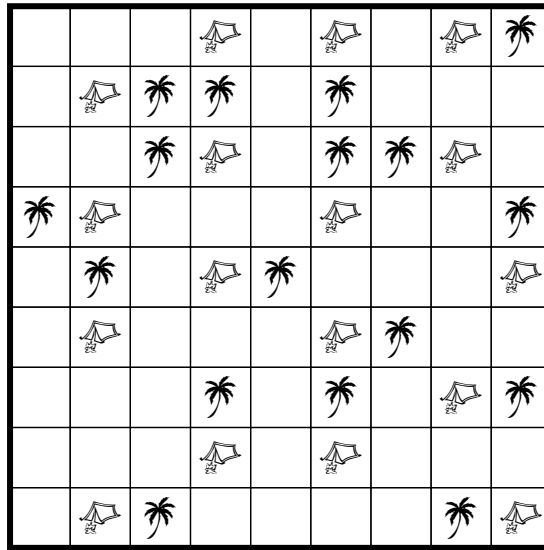


1

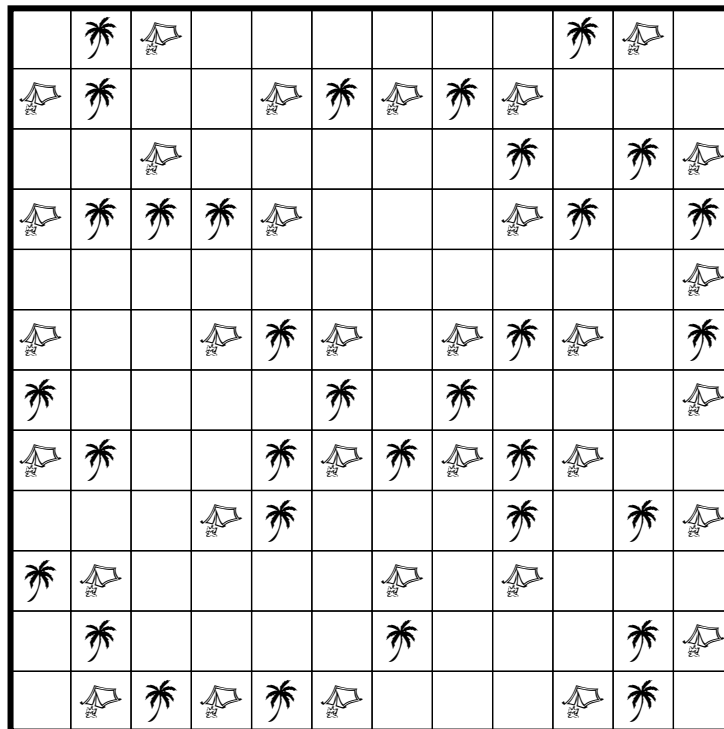
Tents

3 + 4 points

Refer to previous page for rules and answer keys.



3



1

3

3

3

4

Battleships

? + ? points

- Place the given fleet of ships with the shapes of the ships as shown.
- The numbers outside the grid indicate the number of cells occupied by ships in that row or column.
- Ships cannot touch each other, not even diagonally.
- Some cells are known to be water and are indicated by waves.

Answer key: For each row from top to bottom, enter the column position of first ship segment. Enter “-“ if there are no ships in the row.

	A	B	C	D	E	F	
1		Waves				Ship	1
2		Ship	Ship				2
3					Ship	Waves	1
4	Ship		Ship				2
5	Ship				Ship		2
6	3	1	2		3	1	



	A	B	C	D	E	F	G	H	
1		Ship	Ship	Ship	Waves	Waves		Ship	4
2						Ship	Waves	Ship	2
3			Waves	Ship		Ship		Waves	1
4	Ship		Ship		Waves			Ship	3
5	Waves				Ship	Waves		Ship	2
6	Ship	Waves						Ship	2
7	Ship		Waves	Waves	Ship	Ship		Ship	4
8	3	1	2	2	2	4		6	

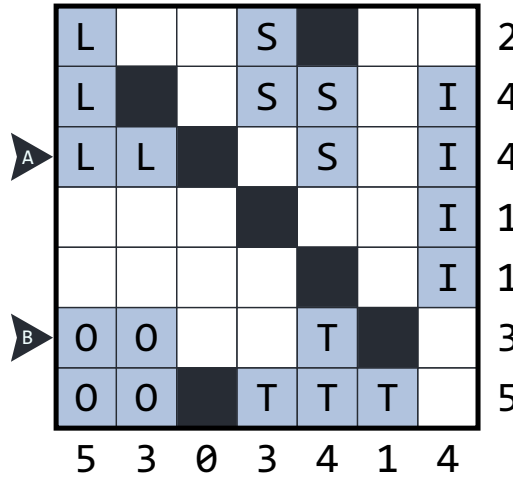
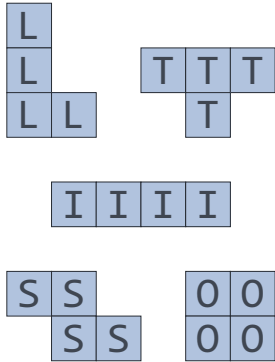


Tetromino

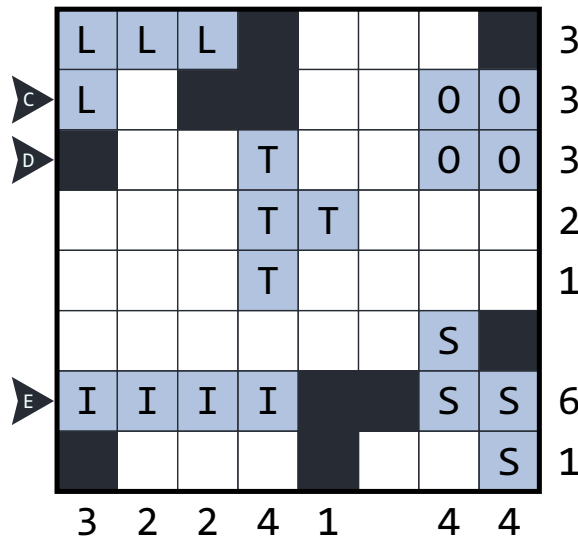
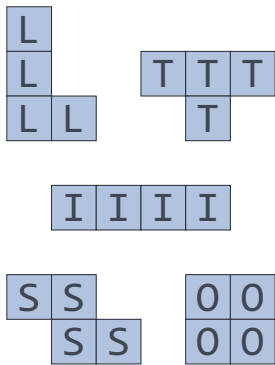
? + ? points

- Place the given set of polyominoes in grid.
- Polyominoes do not touch each other, even diagonally.
- Rotations and reflections are allowed.
- Polyominoes cannot be placed in shaded cells.
- The numbers outside the grid indicate the number of cells occupied by polyominoes in that row or column.

Answer key: Enter the letters corresponding to first two polyominoes seen from the marked directions. (– if not enough polyominoes)



1



2

Minesweeper Instructionsless

? points

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

EXAMPLE

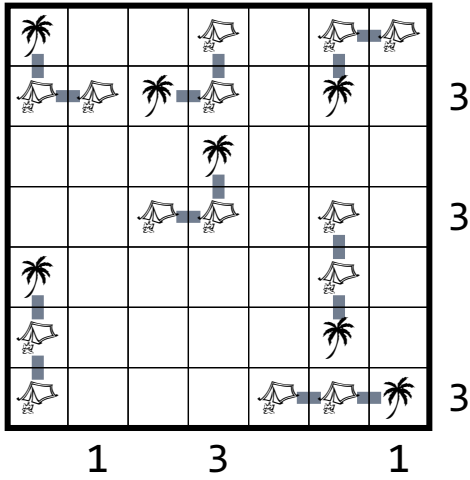
2	●	2	●							
●								2		
		1	2	●	●					
	●			●	4					
				4	●					
3	●	3		●	●					
●	●	●								

Answer key: Enter the number of mines for each row, from top to bottom.

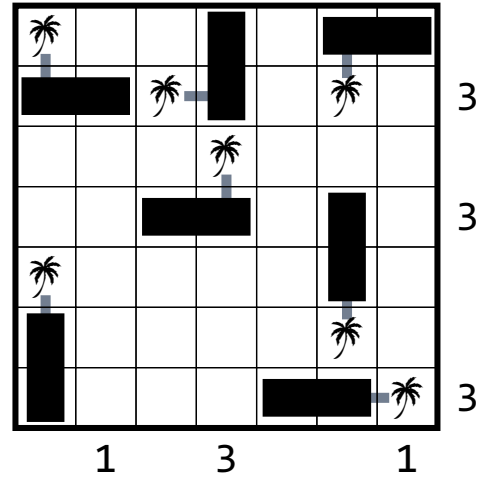
1				1	●	2	●	2			
●		2						●		1	
		●	●	4	●	●				●	
				●	●	●	2			2	
●	4	●		2						●	
●	●					1		1	●	2	
●	3		1		2	●					
			●			●	3			2	●
	3	●	●	2			●				●
	●	●					2		●		
	2			●			●		2	●	
			2	●	3	●	2				

Tents Instructionsless

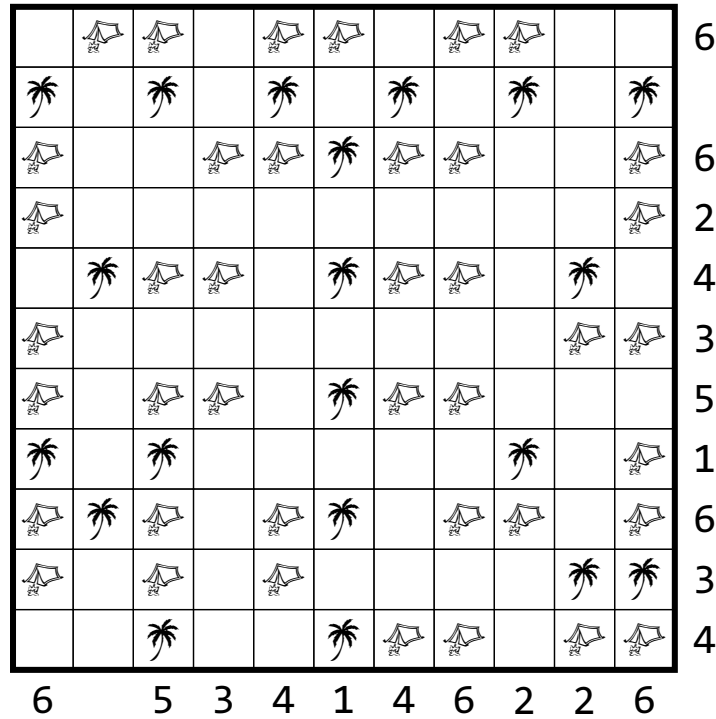
? points



EXAMPLE



Answer key: Enter the maximum continuous non-tent area for each row, from top to bottom. In case of double digit numbers, enter the right (unit) digit only.



End of Test