

NAME:

POINTS:



11TH 24 HOURS PUZZLE CHAMPIONSHIP

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HOTEL AMADEUS

BUDAPEST

PUZZLES BY

RAJESH KUMAR

WWW.WPCSTYLEPUZZLES.COM

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Akkara Loop (20)

Paint some cells black to form a single closed loop that does not touch itself even at a point. Numbers in painted cells indicate the number of unpainted cells in neighboring squares. Numbers in unpainted cells indicate the number of painted cells in neighboring squares.

Akkara Loop

	2	3				
1			5		6	
3		5		4		
			4			5
3		5				
1		3	3			1

Akkara Loop

	2	3				
1			5		6	
3		5		4		
			4			5
3		5				
1		3	3			1

Akkara Snake (20 + 15)

Paint some cells to form a single snake that does not touch itself even diagonally. Painted numbers indicate the amount of unpainted neighboring cells (including diagonals). Unpainted numbers indicate the amount of painted neighboring cells (including diagonals).

Akkara Snake

1				2	
					2
			3		
	7				
	4		4		
1				3	3

Akkara Snake

1				2	
					2
			3		
	7				
	4		4		
1				3	3

Coral (10 + 20)

Paint some of the squares black to create continuous wall called Corral. Any part of the Corral does not touch itself, not even at diagonal. The numbers given outside measure how many unbroken lines of painted squares are there in any given row or column. For example, a clue of "4 8 3" would mean there are sets of four, eight, and three filled squares, not necessarily in order, with at least one blank square between successive groups. No part of Coral can form 2x2 square.

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

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

Easy As Jigsaw ABC (30 + 40)

Place letters A-C (in puzzles A-D and A-E) so that in each row, in each column, in each outlined area and in the remaining grey cells inside the grid there will exist exactly one of each letter. The letters outside the grid indicate the letter seen first in the corresponding direction.

Easy As Jigsaw ABC

	A	B	C	A	C	
B						A
A						C
B						A
C						B
A						B
	C	A	A	C	B	

Easy As Jigsaw ABC

	A	B	C	A	C	
B		B	C	A		A
A	A		B			C
B		C				A
C	C		A	B		B
A				C	B	B
	C	A	A	C	B	

Four Squares (170 + 150)

The four puzzle types in this part: Skyscrapers, Battleships, Tents and Snake all rely on clue numbers on the outside of the four puzzle grids. Find the missing clues that are shared between the grids so that all puzzles can be solved, and solve them.

Skyscrapers: Place digits 1-6 into the grid so that each digit appears exactly once in each row and in each column, and the clue numbers are the number of buildings that can be seen from the corresponding direction.

Battleships: Place the given fleet into the grid so that ships do not touch each other, not even diagonally. The clue numbers are the number of ship segments in the corresponding direction. Squares marked with 'X' can not contain any part of ship.

Tents: Locate the tents in the grid. Trees and tents appear in distinct pairs, in horizontally or vertically adjacent squares. Tents do not touch each other, not even diagonally. The clue numbers are the total number of tents in the corresponding direction.

Snake: Find a path of sequentially numbered and edge-connected squares starting from 1, passing through given numbers in order, and ending at maximum given number (1-12 for the example). The path cannot loop back or touch itself, not even diagonally. The clue numbers are the number of times the snake makes a 90-degree turn in the corresponding direction.

The image shows four puzzle grids with their respective clue numbers and elements:

- Skyscrapers:** A 5x5 grid with clue numbers 1, 3, 2 on the top and 1, 3, 2 on the left. A 2x2 block of grey cells is in the top-right, and a 2x2 block of black cells is in the bottom-right.
- Battleships:** A 5x5 grid with clue numbers 1, 3, 2 on the top and 2, 1, 2 on the left. A 2x2 block of grey cells is in the top-right, and a 2x2 block of black cells is in the bottom-right.
- Tents:** A 5x5 grid with clue numbers 1, 3, 2 on the top and 1, 12 on the right. It contains several trees and tents.
- Snake:** A 5x5 grid with clue numbers 1, 3, 2 on the top and 2, 1, 2 on the left. It contains a path of numbered squares (1-12) and several 90-degree turns.

Japanese Sums (30)

Place digits given in the range in the grid, so that no row or column contains the same digit more than once. The numbers outside the grid indicate the sums of the digit groups in that row or column and in the given order. Sums should be separated by at least one black cell.

Japanese Sums

		1				
	8	5	3	9	5	4
	7	5	12	1	5	7

	15					
5	3	3				
2	3	1				
12	1					
2	13					
10	2					

(1-5)

Japanese Sums

		1				
	8	5	3	9	5	4
	7	5	12	1	5	7

	15	3	1	2	4	5		
5	3	3	5		1	2		3
2	3	1		2		3		1
12	1		4	3	5		1	
2	13		2		3	1	4	5
10	2		1	5	4			2

Polygraph (45)

Draw a single continuous loop by connecting neighboring dots horizontally or vertically. The clues inside the loop indicate the number of its edges used by the loop. The clues outside the loop indicate the number of its edges NOT used by loop.

Polygraph

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

Polygraph

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

Prime Snake (10 + 35)

Fill in every circle inside and outside the grid with one of the given prime numbers. Prime numbers larger than those given are not needed. Locations of all prime numbers inside and outside the grid are given as circles.

Draw a snake of numbers in the diagram that starts with 1, grows in value with every visited adjacent square and ends at a prime number. The snake goes through all circles inside the grid and does not touch itself, not even diagonally. The numbers outside the grid indicate the number of squares that are occupied by the snake in the corresponding direction.

Prime Snake

	○	○	○	○	○
			○		
○				○	
○					
○	○	○			
		○			○

2,3,5,7,11,13

Prime Snake

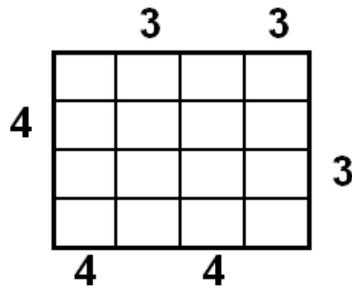
	○(2)	○(2)	○(3)	○(3)	○(3)
			○(13)		
				○(11)	
○(2)					
○(3)					
○(3)	○(2)	○(3)			
		○(5)			○(7)

2,3,5,7,11,13

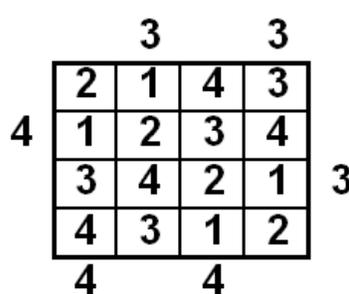
Skyscrapers Either Or (15)

Fill in each cell of the grid with digits 1-4, so that each digit appears exactly once in each row and in each column. Each digit inside the grid represents a building with the height of the digit itself. Numbers outside the grid indicate EITHER a) the number of buildings that can be seen by an observer looking into the grid in the corresponding direction, taking into account that higher buildings block the view of lower buildings from the observer, OR b) the height of the first visible building in that direction.

Skyscrapers Either Or



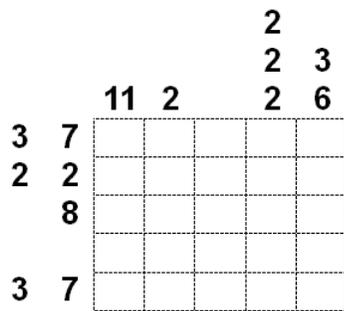
Skyscrapers Either Or



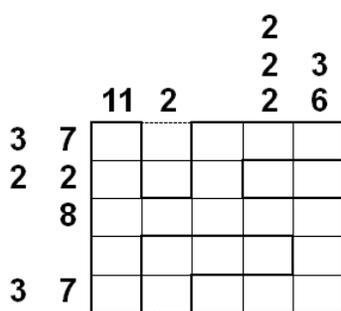
Summenbild Rundweg (15 + 25 + 15)

Draw a loop into the diagram along the dotted lines. Not all dots must be passed and the loop must not touch or cross itself. Each number outside the diagram represents one group of connected fields within the loop in this row/column. Each number is equal to the edges of the fields of its group which are used by the loop. Different groups must have at least one field outside the loop between them. The order of the numbers is the same as the order of the groups.

Summenbild Rundweg



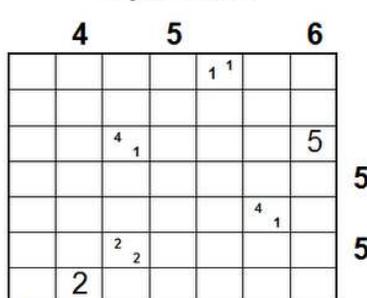
Summenbild Rundweg



Tapa Snake (15)

Fill some of the squares of the grid with the body of the Snake which does not touch itself, not even diagonally. Number outside the grid represents the number of the body parts of the Snake in the corresponding row and column. Numbers inside the grid are the Tapa clues for the Snake body. Tapa rules are as below. Paint some squares black to create a continuous wall. Number/s in a square indicates the length of black cell blocks on its neighboring cells. If there is more than one number in a square, there must be at least one white cell between the black cell blocks. Painted cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.

Tapa snake



Tapa snake



Ungerade Innenzahlen Rundweg (25 + 25 + 35)

Draw a single continuous loop by connecting neighboring dots horizontally or vertically. The numbers inside the grid indicate how many edges of a cell are used for the loop. All odd numbers inside the loop are given. The loop cannot touch or cross itself.

Ungerade Innenzahlen Rundweg

3				1	3
			1		
1					
1					
	1		3		
	3				3

Ungerade Innenzahlen Rundweg

3				1	3
			1		
1					
1					
	1		3		
	3				3

TREN (45)

Locate some blocks in the grid, having the size either 1x2 or 1x3. Each number in the grid should be part of a block, indicating the amount of the possible movements of the block. Blocks can only move in the direction of their short edge.

	1				2	
				1		
		4	2			
	1					2
		3				
					1	

	1				2	
				1		
		4	2			
1						2
		3				
					1	

Alphabets in Fences (20)

Draw a single closed loop by connecting neighboring dots horizontally or vertically (but not diagonally). A numbered square indicates exactly how many of its edge segments are used by the path. Some of the alphabets are given. These alphabets are either inside or outside the loop. Same alphabet should follow the same rule e.g. if "A" is outside the loop, it implies that all the "A" will be outside the loop.

Alphabets In Fences

B	2	B			3
B	1	3		3	
C			B		3
2	A	2	A		
	3			2	C
2		1	C		1

Alphabets In Fences

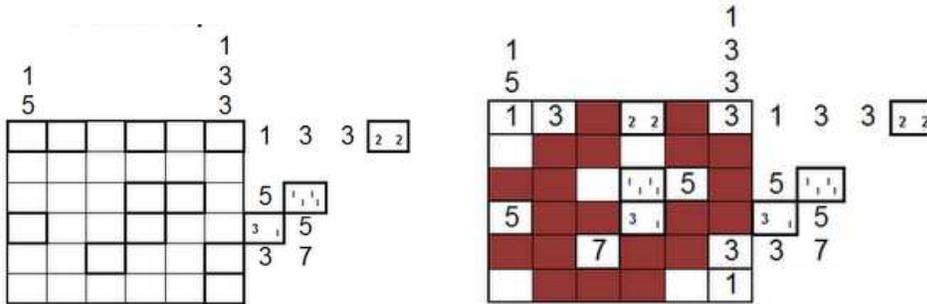
B	2	B			3
B	1	3		3	
C			B		3
2	A	2	A		
	3			2	C
2		1	C		1

Outside Tapa (15)

Tapa clues are given outside the grid (not in order). Distribute all of the given clues to the marked cells in the corresponding row/column, one clue set per cell and solve the Tapa Puzzle.

Paint some squares black to create a continuous wall. Number/s in a square indicates the length of black cell blocks on its neighboring cells. If there is more than one number in a square, there must be at least one white cell between the black cell blocks. Painted cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.

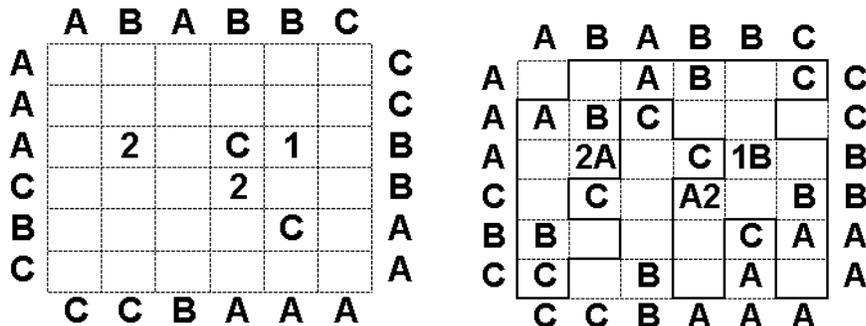
Solution is considered correct if all the cells are painted correctly. It is NOT required to write all the numbers in the squares.



ABC Loop (60)

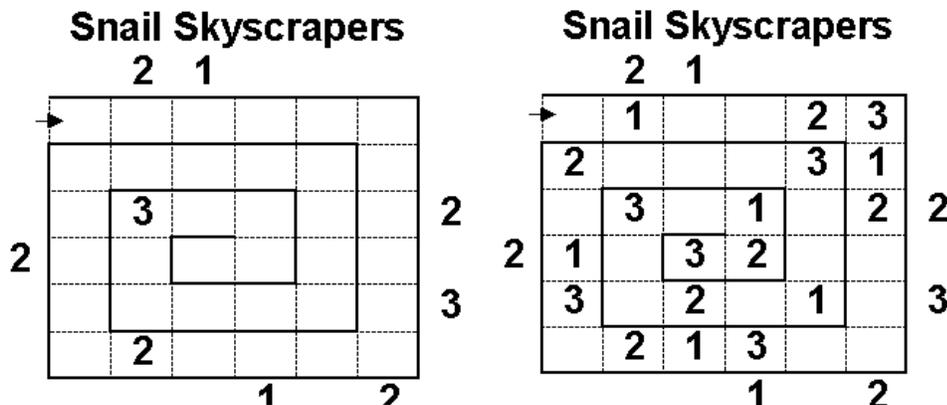
Enter the letters A to C exactly once, in all of the rows and columns. The letters outside the grid show which letter you come across First from that direction. Each letter equals to 1 to 3 uniquely. Find this correspondence and use the numbers to solve the Fences puzzle. Instructions for the Fences are as below

Draw a single closed loop by connecting neighboring dots horizontally or vertically (but not diagonally). A numbered square indicates exactly how many of its edge segments are used by the path.



Snail Skyscrapers (35)

Fill the grid with digits 1~3, so that each digit appears exactly once in every row, column. Digits should be placed orderly in the spirals, from the entrance to the center starting with 1 and ending with 3. The cells in the grid can be thought of as individual buildings, and the number inside the building is the number of floors. A number outside the grid indicates how many buildings can be "seen" from the corresponding direction. A building is seen by an observer if there are not buildings taller (with a greater number), between it and the observer.



Blocked View Skyscrapers (10)

Fill the grid with digits 1 to 5 (1 to 4 in example), so that each digit appears exactly once in every row/column. The cells in the grid can be thought of as individual buildings, and the number inside the building is the number of floors. A number outside the grid indicates how many buildings can be "seen" from the corresponding direction. Additionally each row/column contains exactly one blocker. Observer cannot see beyond the blocker.

A building is seen by an observer if there are not buildings taller (with a greater number), between it and the observer and it is not blocked by a blocker in that direction.

Blocked View Skyscrapers

		1		1	
2					
		1		3	
1					
3	1				
2					
		1	2	1	

Blocked View Skyscrapers

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

Direct Turn Loop (50)

Draw a loop using horizontal and vertical lines. All the cells must be visited once. The loop does not cross itself. The loop takes 90 degrees turn and goes straight at alternate circles.

Direct Turn Loop

			○			○
○		○			○	
	○	○				
	○		○	○		
○		○	○		○	○
		○	○			
		○	○			○

Direct Turn Loop

			○			○
○		○			○	
	○	○				
	○		○	○		
○		○	○		○	○
		○	○			
		○	○			○