

ZEKÂ OYUNLARI ŞAMPİYONASI BELİRİO PRIOR PUZZLE CHAMPIONSHIP



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Bu sorular, 16. Dünya Zekâ Oyunları Şampiyonası resmi internet sitesinde 27 Eylül 2007 akşamı yayınlanan kitapçık temel alınarak hazırlanmış ve 3 Ekim 2007 sabahı tamamlanmıştır. Soru isimleri ve yönergeler, yayınlanan kitapçıktan alıntıdır.

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Serkan Yürekli
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These puzzles are based on the booklet published on the official website of the 16th World Puzzle Championship on the evening of September 27th 2007. They are finished on October 3rd 2007 morning. Puzzle names and instructions are from those in the booklet.

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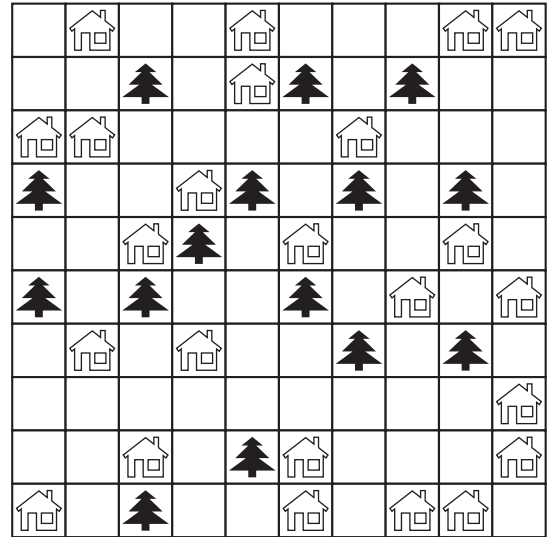
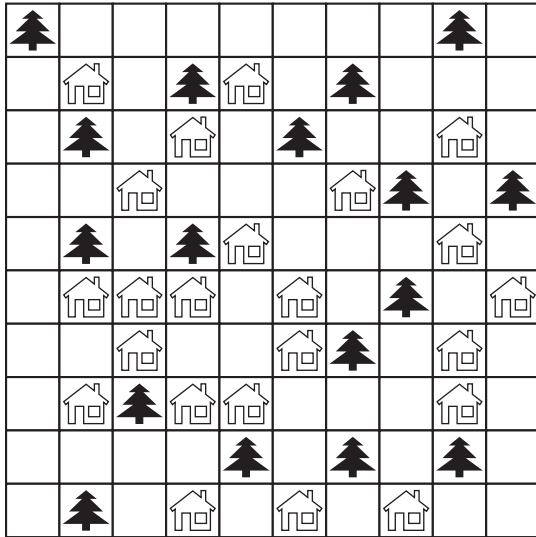
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İlk 10'un yarışacağı Yarı Final'deki soru tipleri. --9 Ekim 2007

Puzzle types in the Semi Final for the top 10. --October 9th, 2007

City Maze

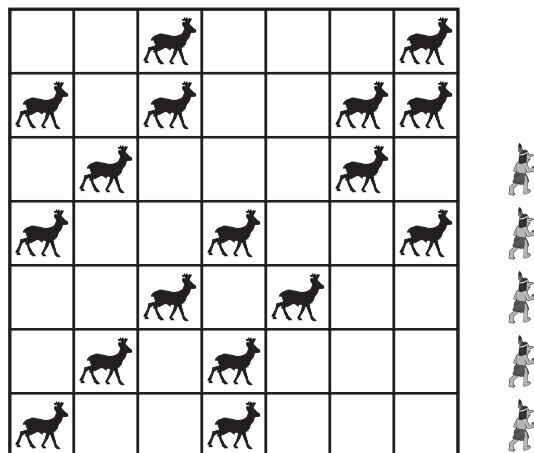
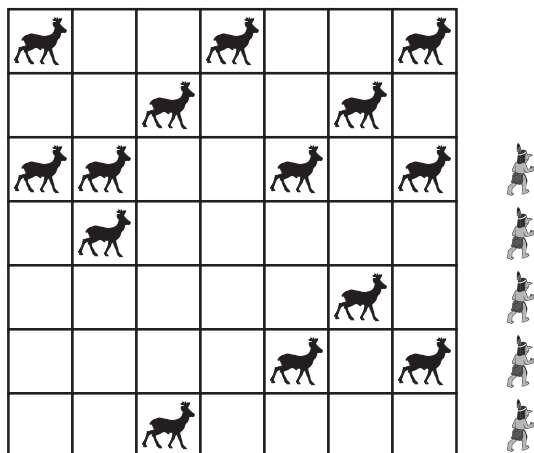
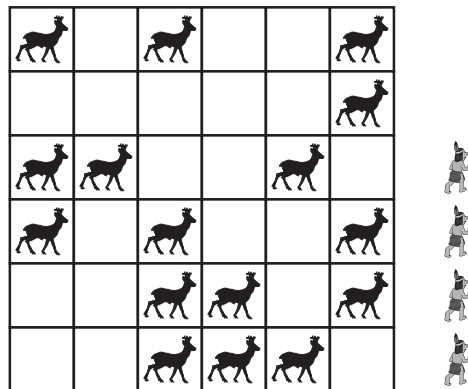
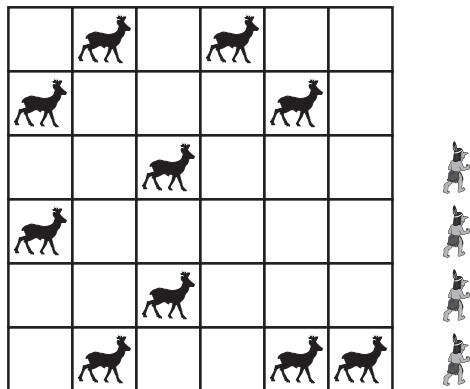
When you travel to these cities, you have to visit every house. Every time you arrive at a house, you must turn 90 degrees and you cannot pass through a tree. Draw a continuous loop (its sections connect the centres of the neighbouring squares by a straight line) showing the path you made. The loop must not touch or cross itself.



Hunted

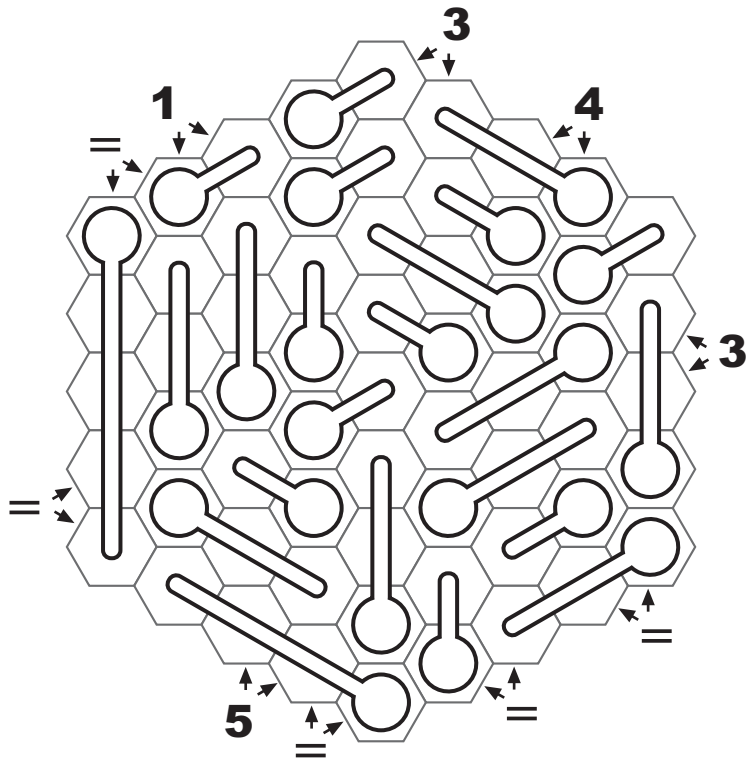
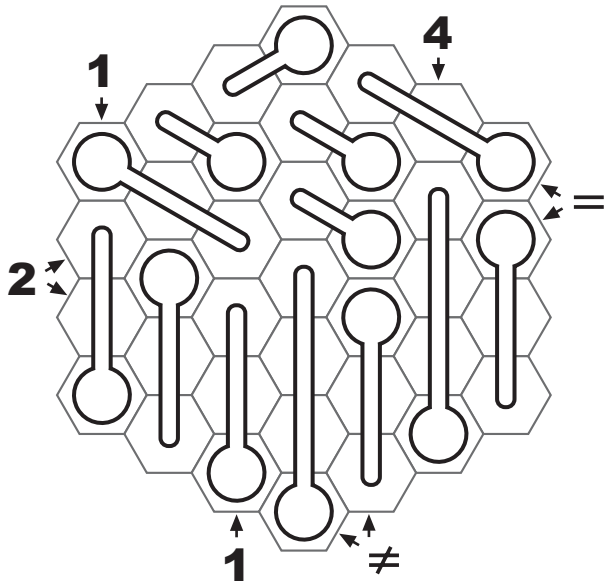
The goal is to distribute the Indians on the grid (in the empty squares) so that they can hunt all the animals. Each Indian can capture, with his bow and arrows, all animals within 3 squares away from him, in any direction (line, column and diagonals).

Each animal can only be captured by one Indian, and no Indian can be within the reach of another Indian's arrow. The number of Indians appears to the side of the diagram.



Matches

The goal is to find out which segments of matches placed on the tablecloth (grid made of hexagons) are burnt (painted) and which aren't (white). The flame always burns the match from the head (round side) to the base (square side) - the flame never skips a segment. The flame from the segment of match burns the part of the tablecloth (hexagon) where it is. The matches have different sizes and may be completely burnt, partially burnt or completely new. The numbers around the tablecloth indicate the quantity of burnt segments in each column or diagonals. The tablecloth will always have only one burnt piece and one unburnt piece (the burnt or unburnt areas have to be full pieces). The numbers around the tablecloth indicate how many match segments are burnt in each line pointed out by the arrows. A [=] sign indicates that the pointed lines have the same number of burnt segments, and a [≠] sign indicates that the lines have a different amount of burnt segments.



Irrigators

The goal is to distribute the irrigators on the squared field. The numbers below the columns represent how many irrigated squares there are in those columns, and the numbers on the right indicate how many irrigators there are on those lines. One square cannot be irrigated by more than one irrigator, nor contain two irrigators. There are two types of irrigators: the x-shaped ones and the +-shaped ones, and both irrigate just the first square to where each of their "arms" points.

									1
									1
									3
3					4	0	4		

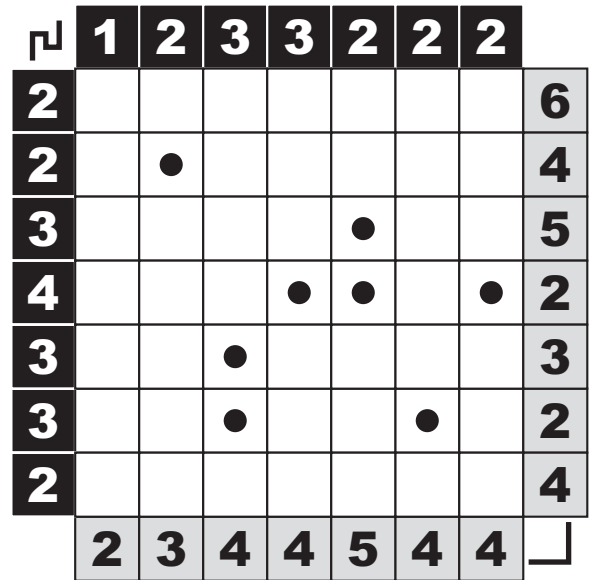
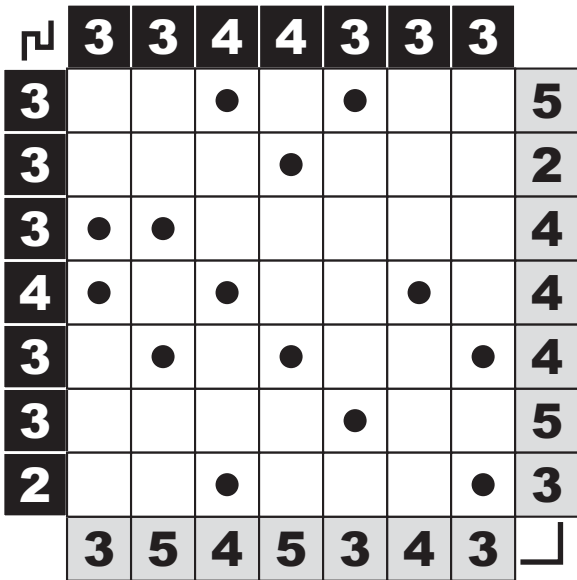
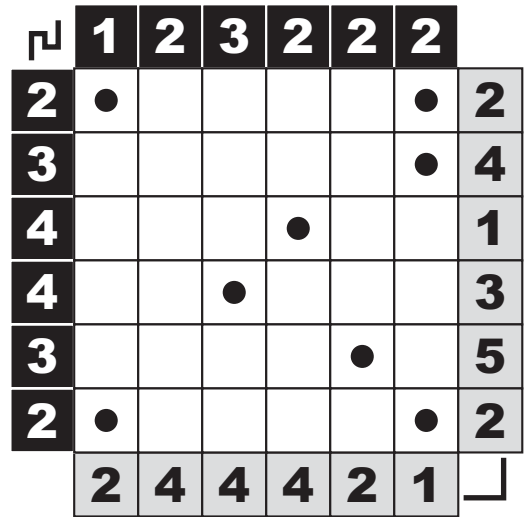
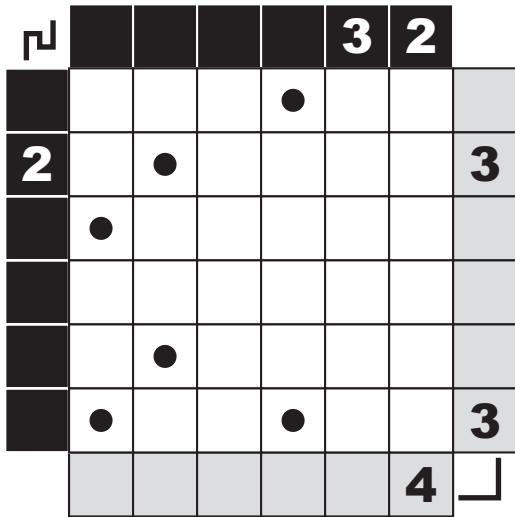
									2
									1
									1
									1
2	0	4	1	5	3	3	0	2	

									0
									2
			2	6	4		3		

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

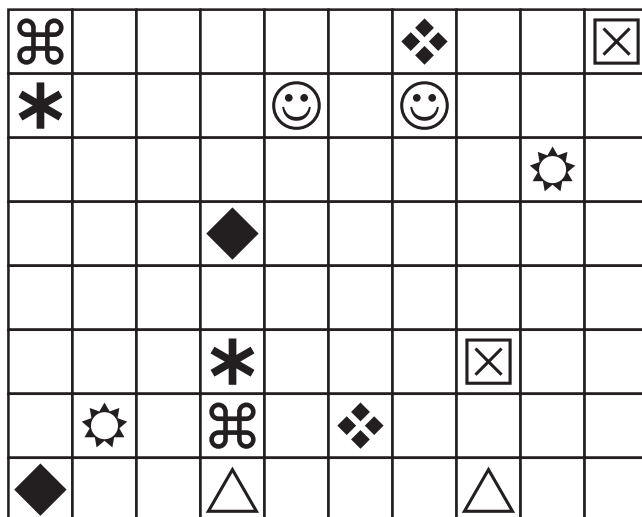
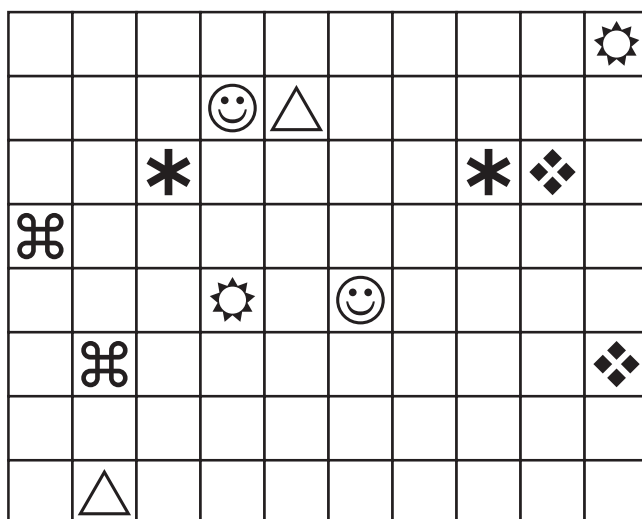
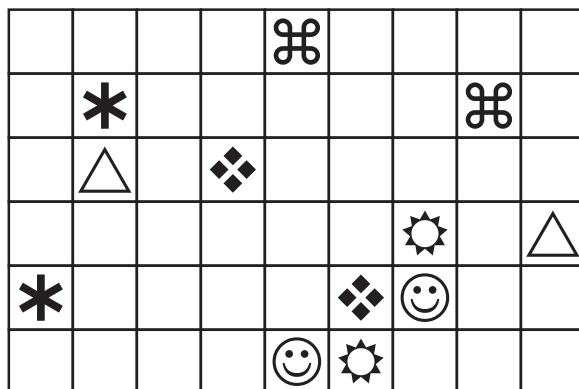
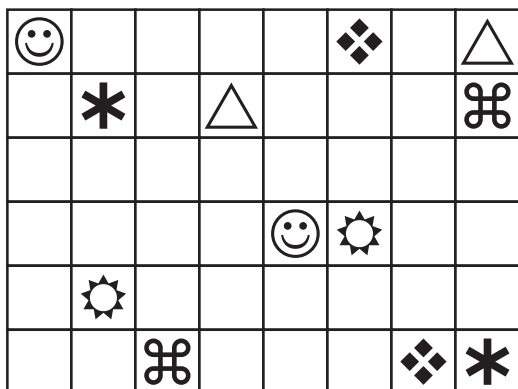
Earthworms

The grid represents a garden full of worms. The numbers on the left and above represent how many different worms are found, respectively, in each line and column. The numbers on the right and below indicate how many turns the worms make in each line and column. Each empty square must be filled in with a segment of one worm. The points in the grid indicate the extremities (beginning and end) of all worms. The goal is finding out how the worms are distributed.



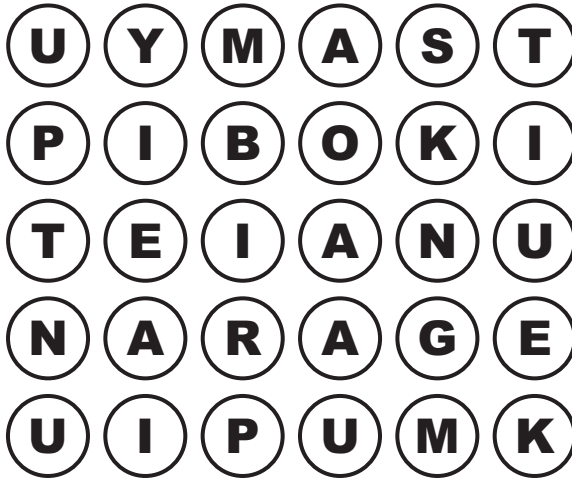
Connected Pairs

Some symbols are placed in the grid. The goal is to connect them in pairs, using lines (horizontal and vertical, but never diagonal, and always passing through the squares). All free squares can be used one single time, and the same symbols cannot be connected. The pairs connected are fixed in the puzzle, that is, a symbol [*] connected to a symbol [#] form a pair [*#], and every time those symbols appear again, they have to form the pair [*#]. The lines cannot touch themselves nor lines that connect the same pair.



Torto Backwards

Torto is a very popular cultural puzzle in Brazilian magazines. This version, unfortunately, is not cultural: you must connect characters to form a word in Tupi, language used by ancient Brazilian Indians. The rules are as follows: connect vertical, horizontal and diagonal adjacent characters. You cannot jump a character, or cross a path already made, and you cannot use the same character twice. To make it easier, a lot of words in Tupi are already found, but some of them cannot be found in the diagram. Tell us which words cannot be found in the diagram, according to the rules.



IAGUAR	PANEMA
KAAPIUARA	ETA
MBOI	IUB
PIRA	OBY
SOO	PIRANG
TAPYR	TING
ASU	UNA
BERABA	ABA
KATU	KARAIB
MIRI	KUNATAI

Twins

Skyscrapers:

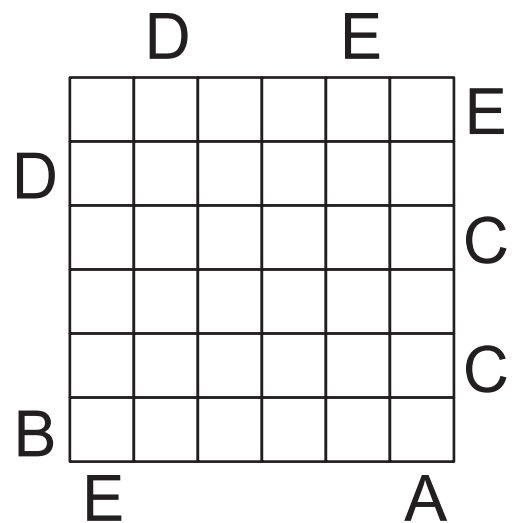
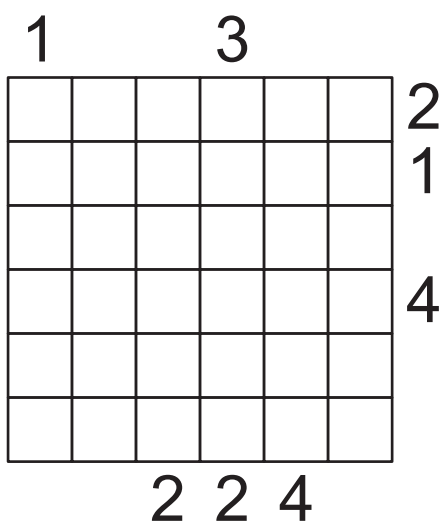
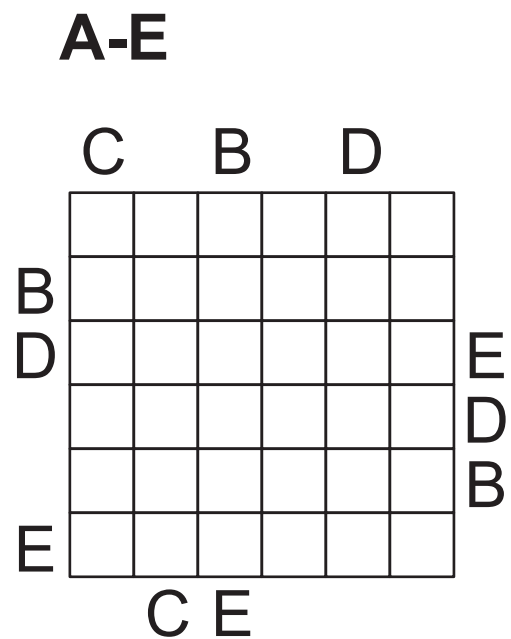
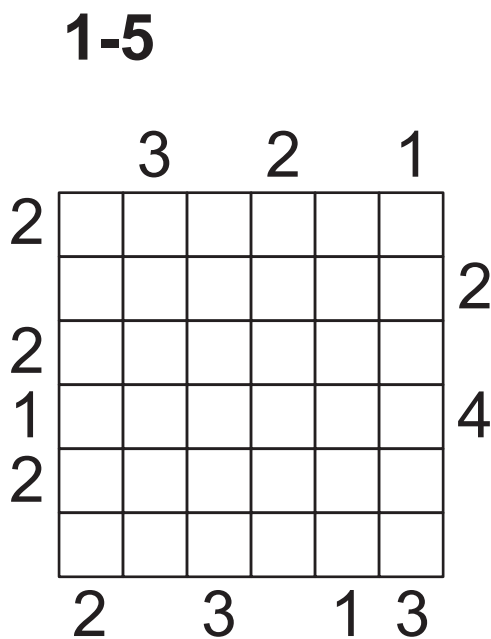
The grid symbolizes a neighborhood. Each row and column contains buildings of different heights. The numbers outside the grid indicate how many buildings are visible from that direction (the higher buildings hide the lower ones behind them). The numbers in brackets indicate the minimum and maximum building height for that grid.

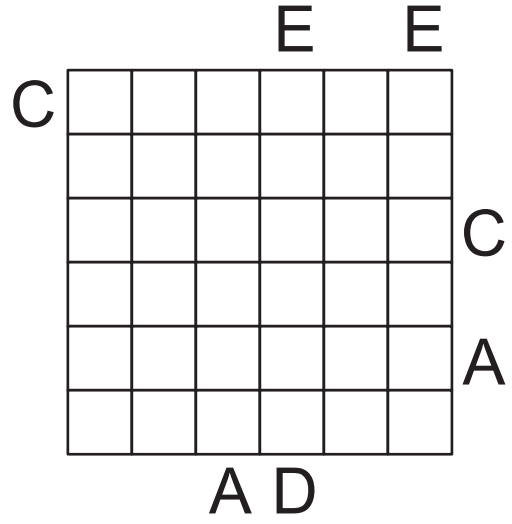
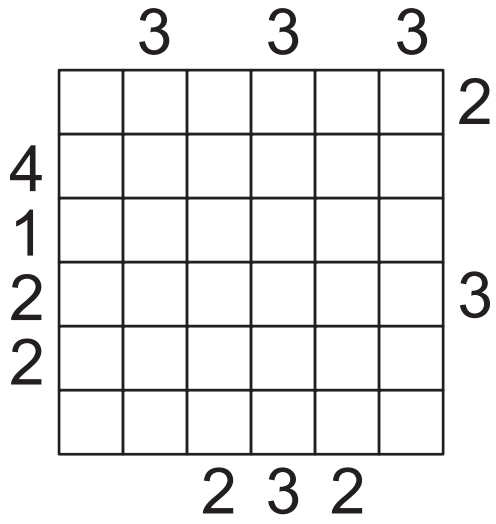
Simple as ABC:

Fill in the letters in the diagram. Each letter occurs once in each of the rows and columns. The letters outside the diagram indicate the letters you come across first from that direction. The letters in brackets indicate the minor and greater letters for that grid (in alphabetical order).

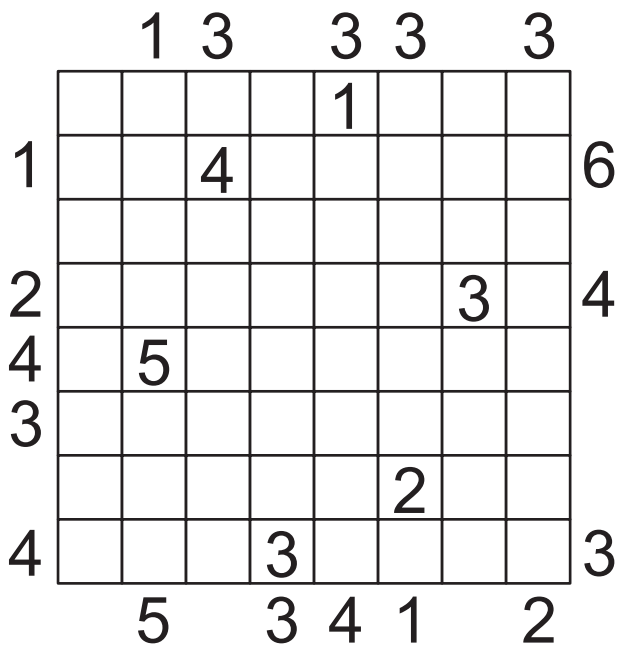
Twins:

In each pair (Skyscrapers and Simple as ABC) each letter corresponds to a number. The letters occupy the same position, in the grid, as their corresponding numbers.

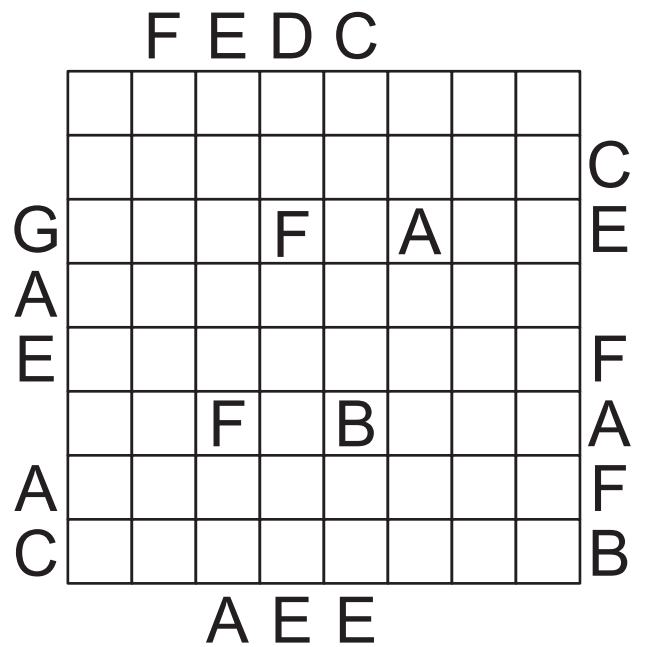




1-7

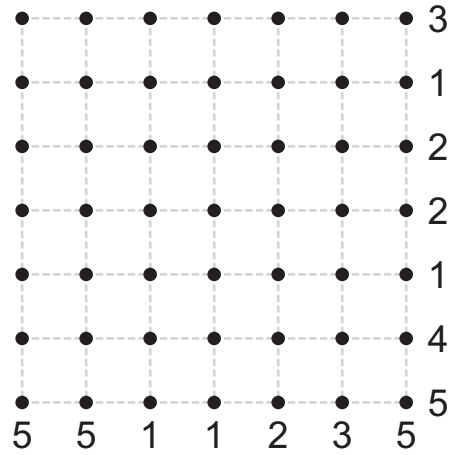
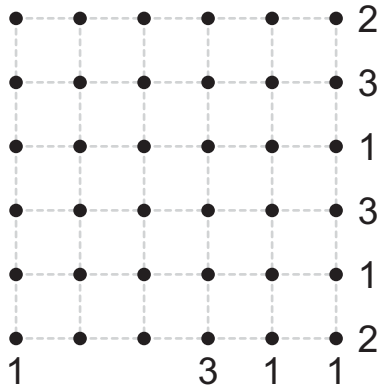


A-G



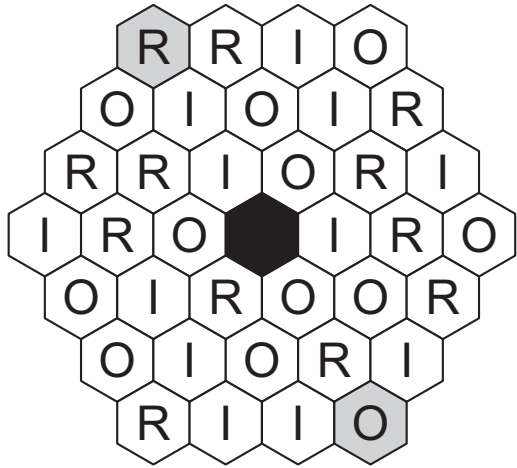
Fences Outside

This puzzle is similar to traditional fences (draw a single-closed path or loop without crossing or overlapping), but the hints are given outside the grid. Each number shows how many segments of the path there are in the given direction.

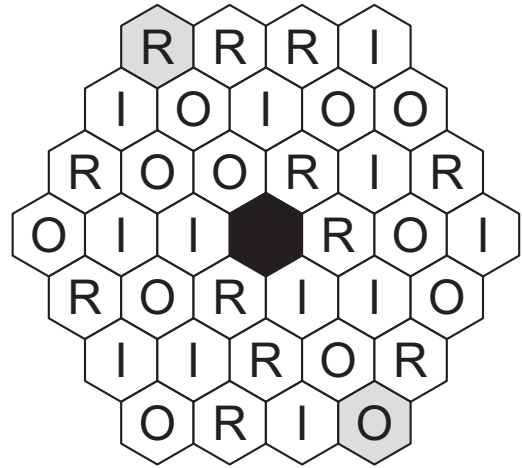


Hexagonal Password Path

Starting in the first password gray letter and finishing in the last, draw a path connecting the letters of the password in the sequence of reading. When you finish the first word, start again and so on. The path can travel through the edges and it passes through all hexagons, without crossing or overlapping.



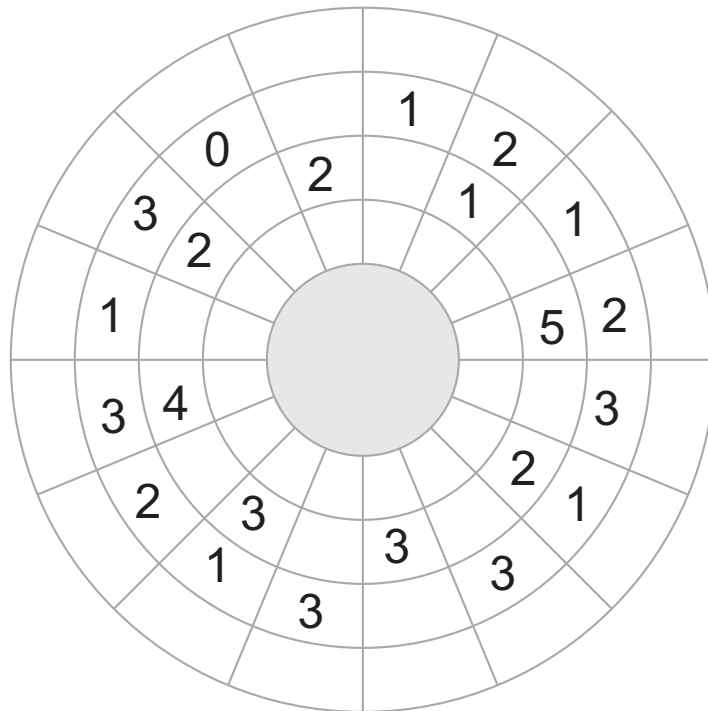
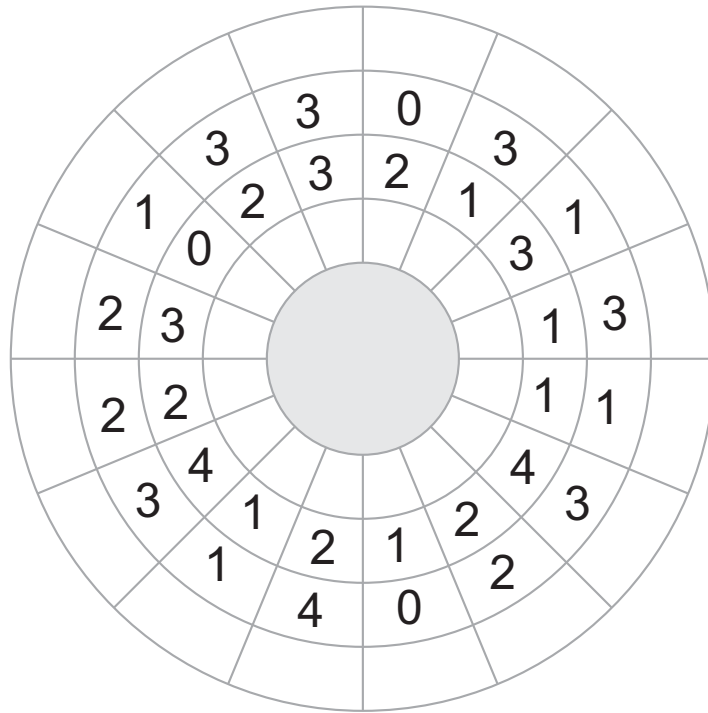
RIO



RIO

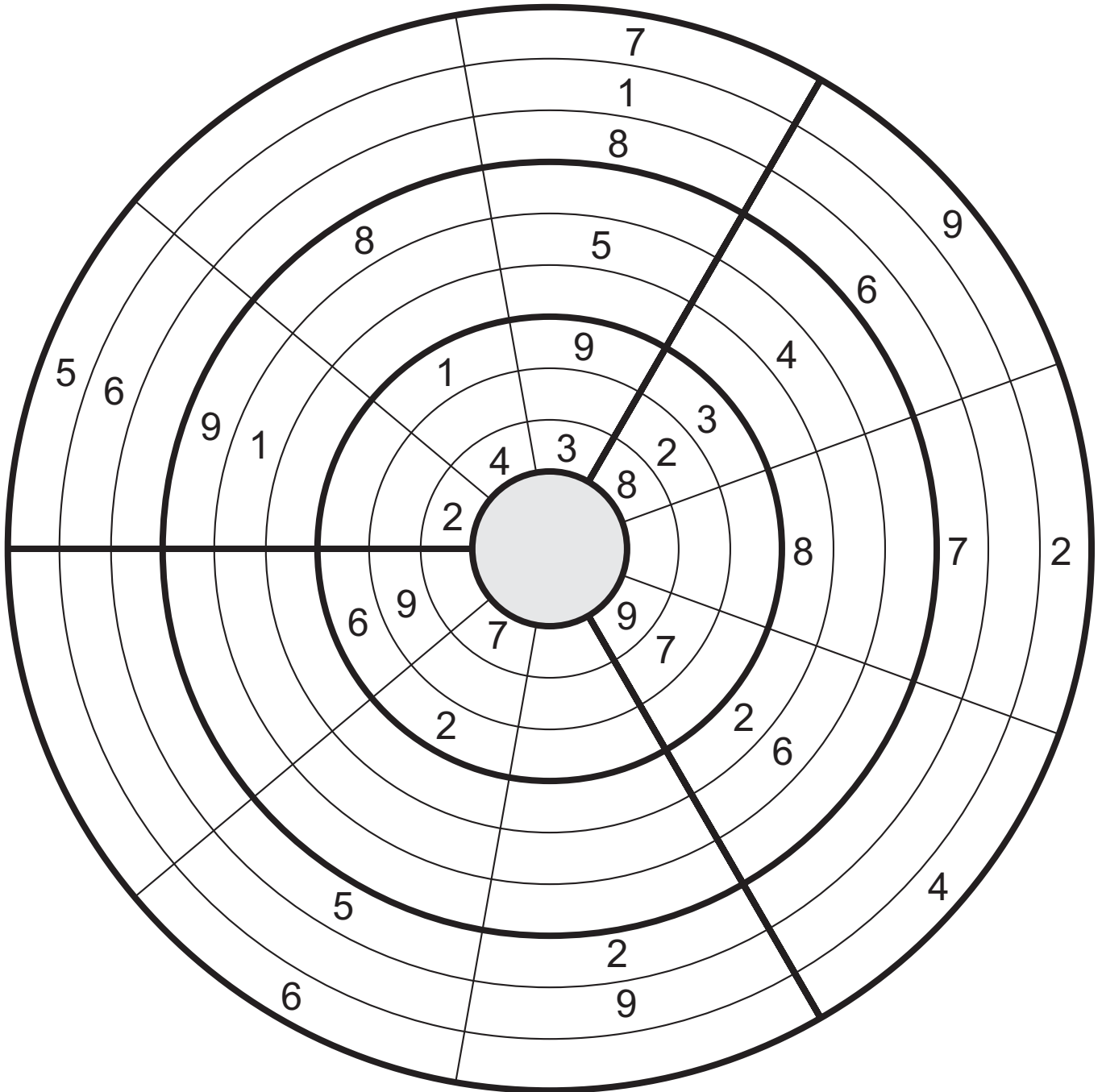
Circular Arrows

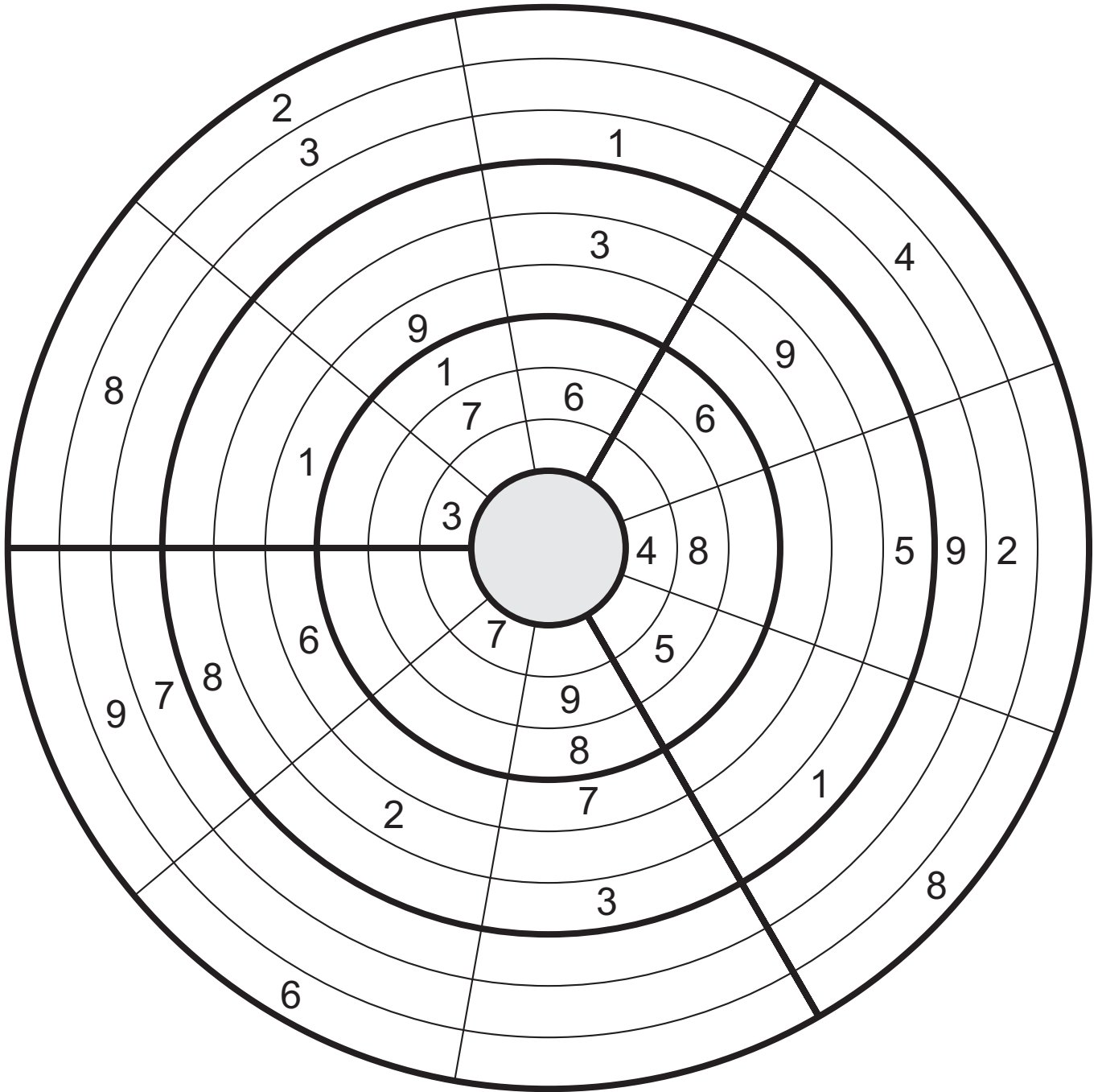
In each empty cell on the inner border and on the outer border, insert an arrow pointing at one of the three possible neighbor cells that contain numbers. Each number in the grid indicates the number of arrows pointing at it.

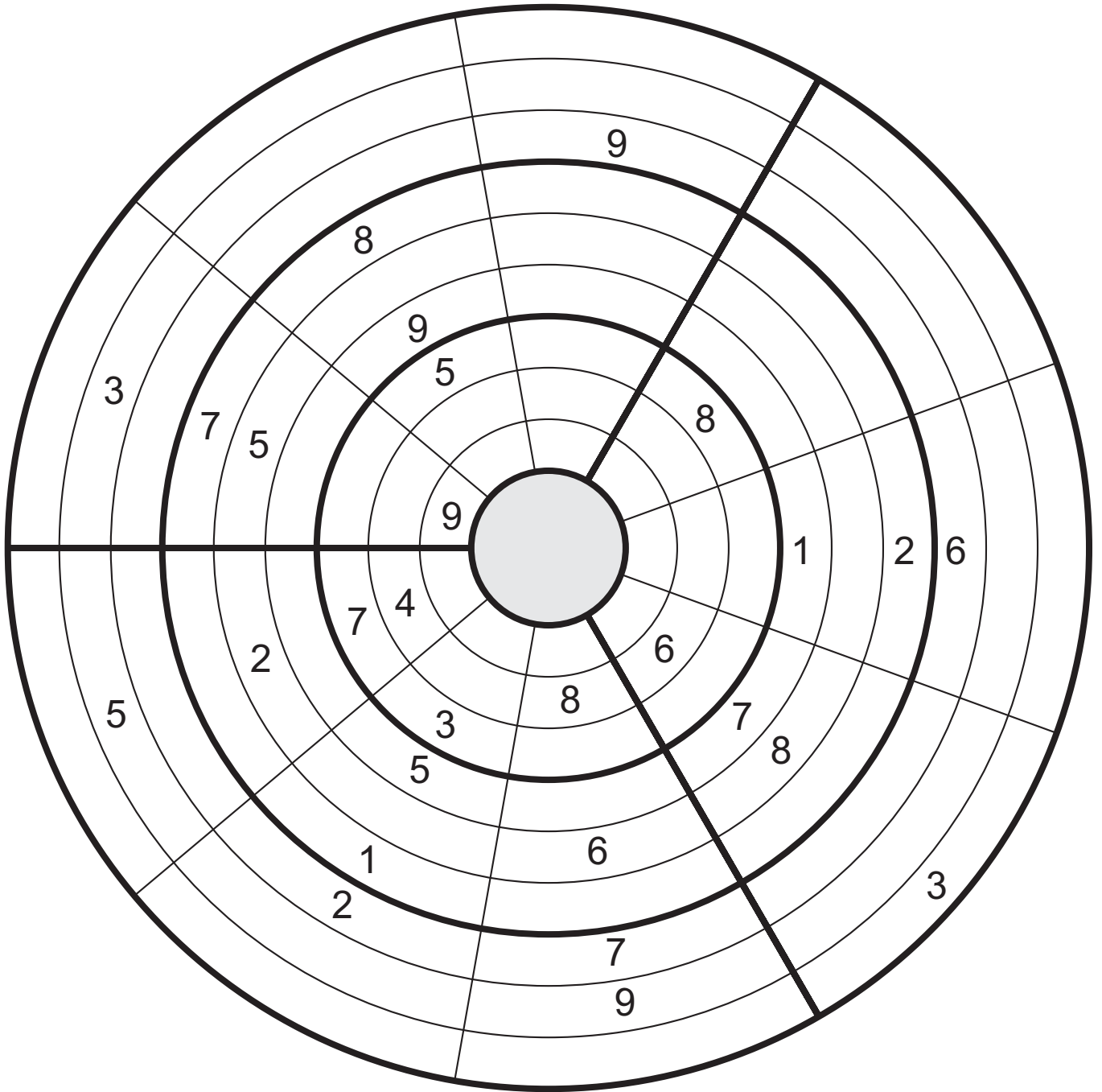


Circular Sudoku

Fill the grid with numbers 1 to 9 (1 to 4 in the example) so that every number appears in each annulus, sector and outlined region.

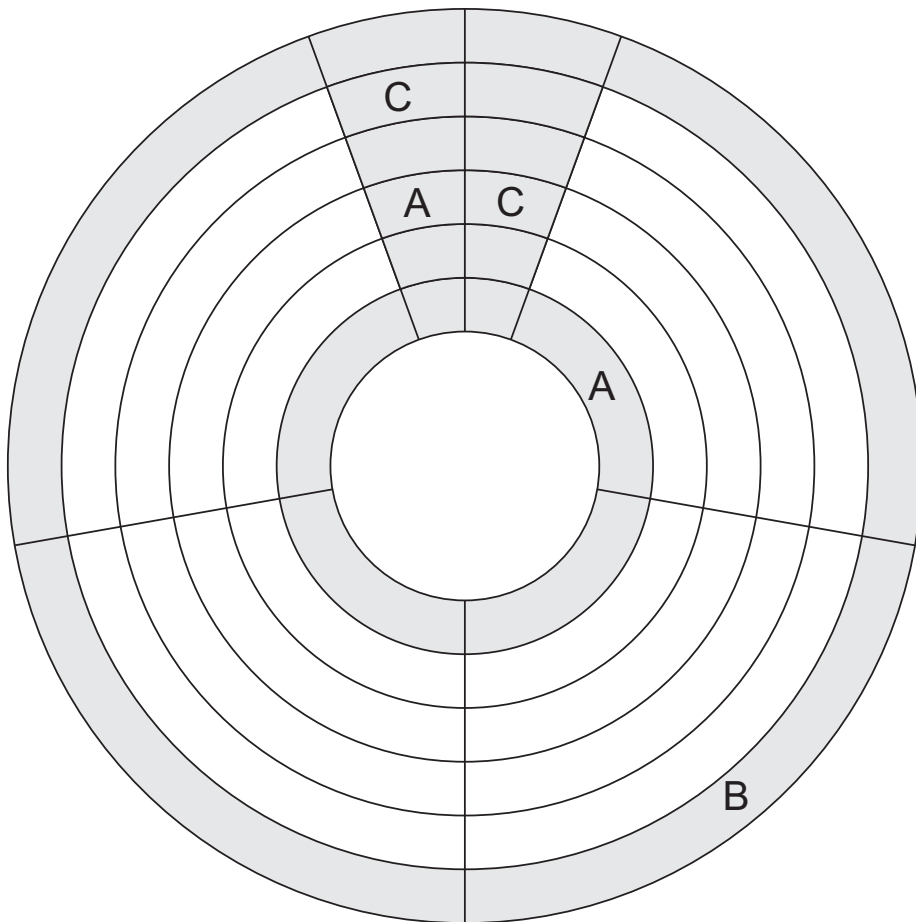


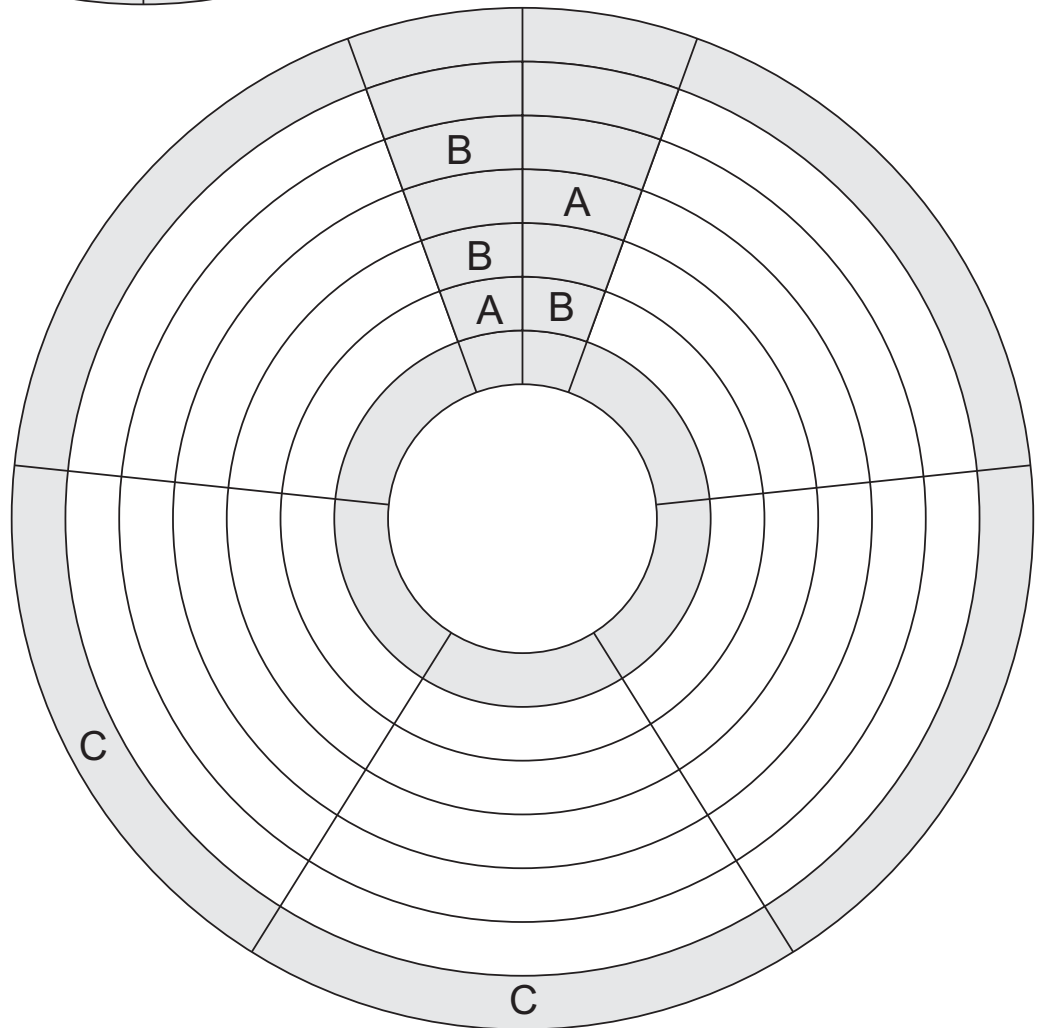
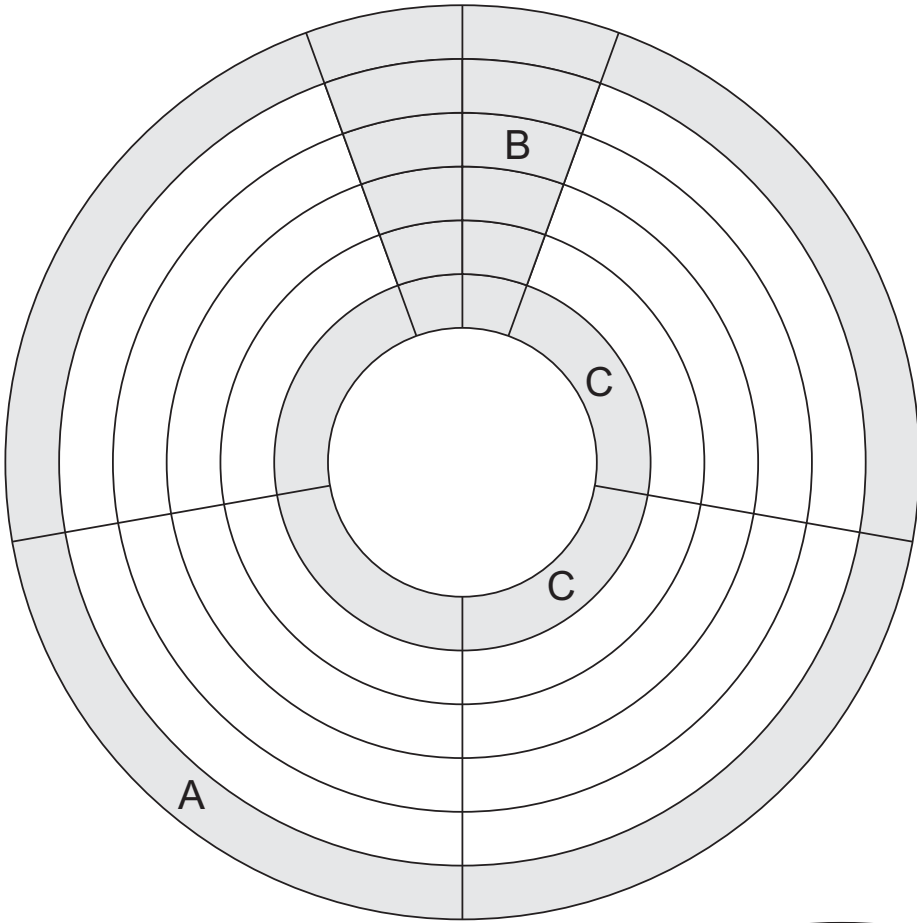




Circular Easy as ABC

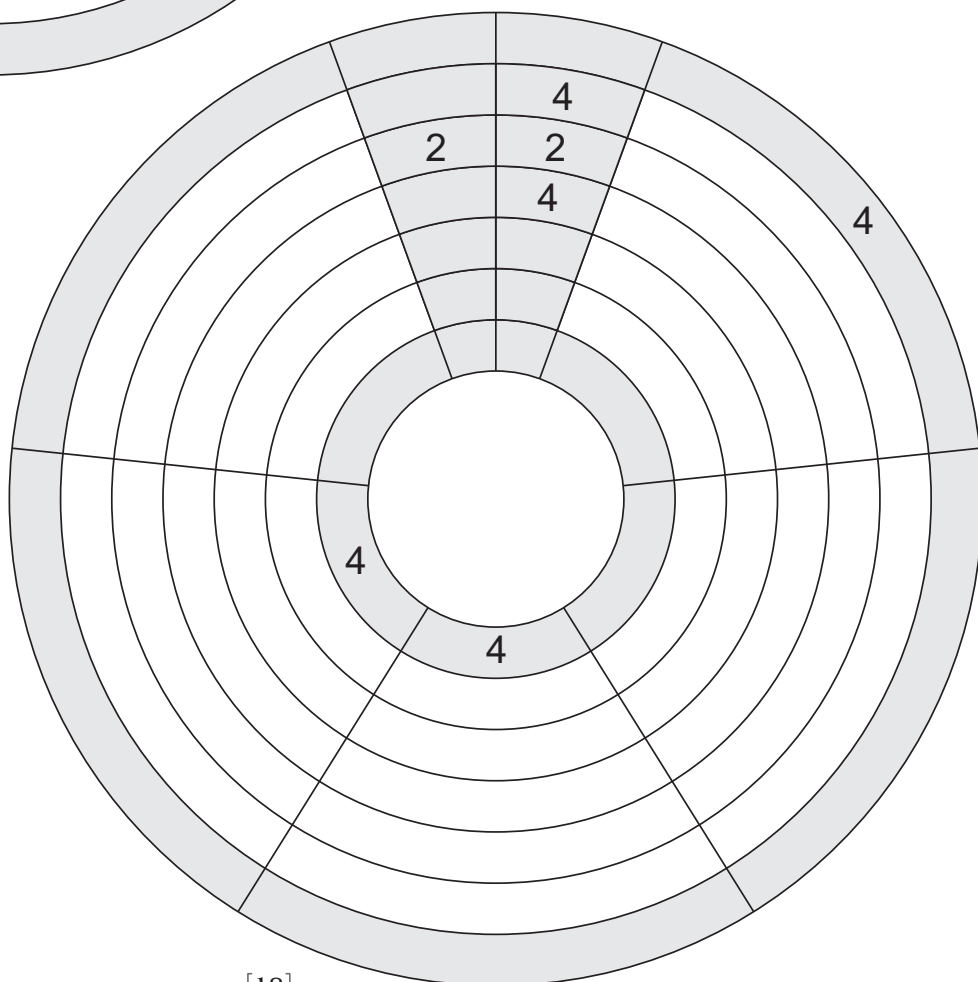
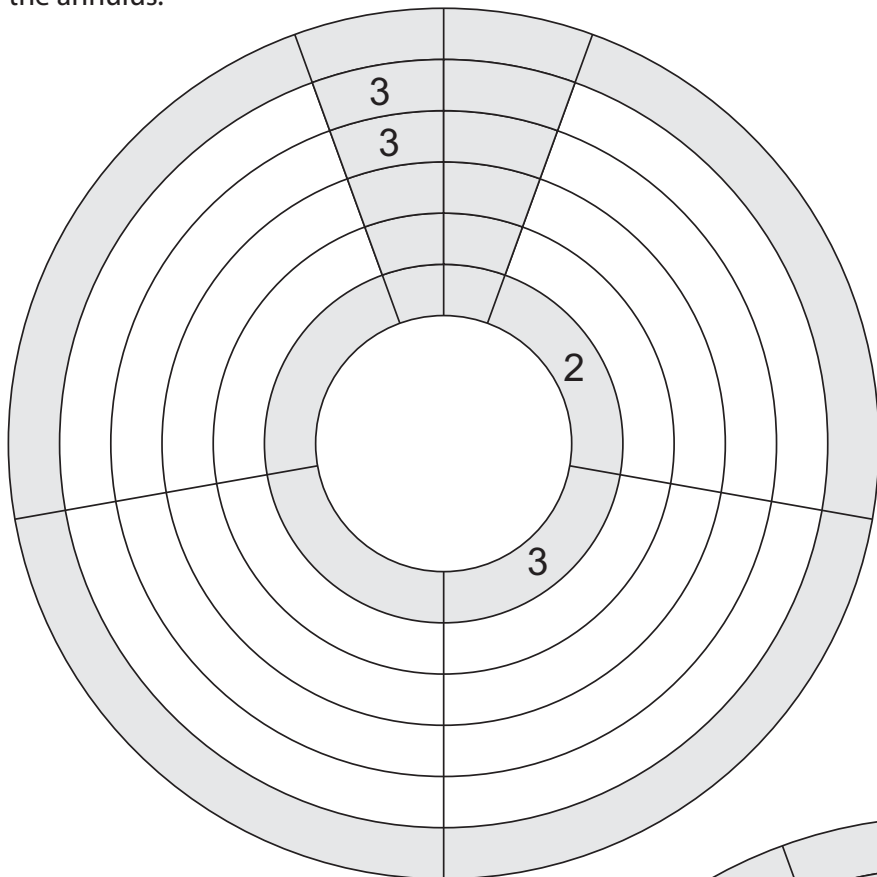
Fill the grid with letters A, B, C (or A, B, C, D), so that each circular sector and annulus contains exactly one instance of all these symbols. Letters outside the grid and at the top circular sector appear first in corresponding directions.

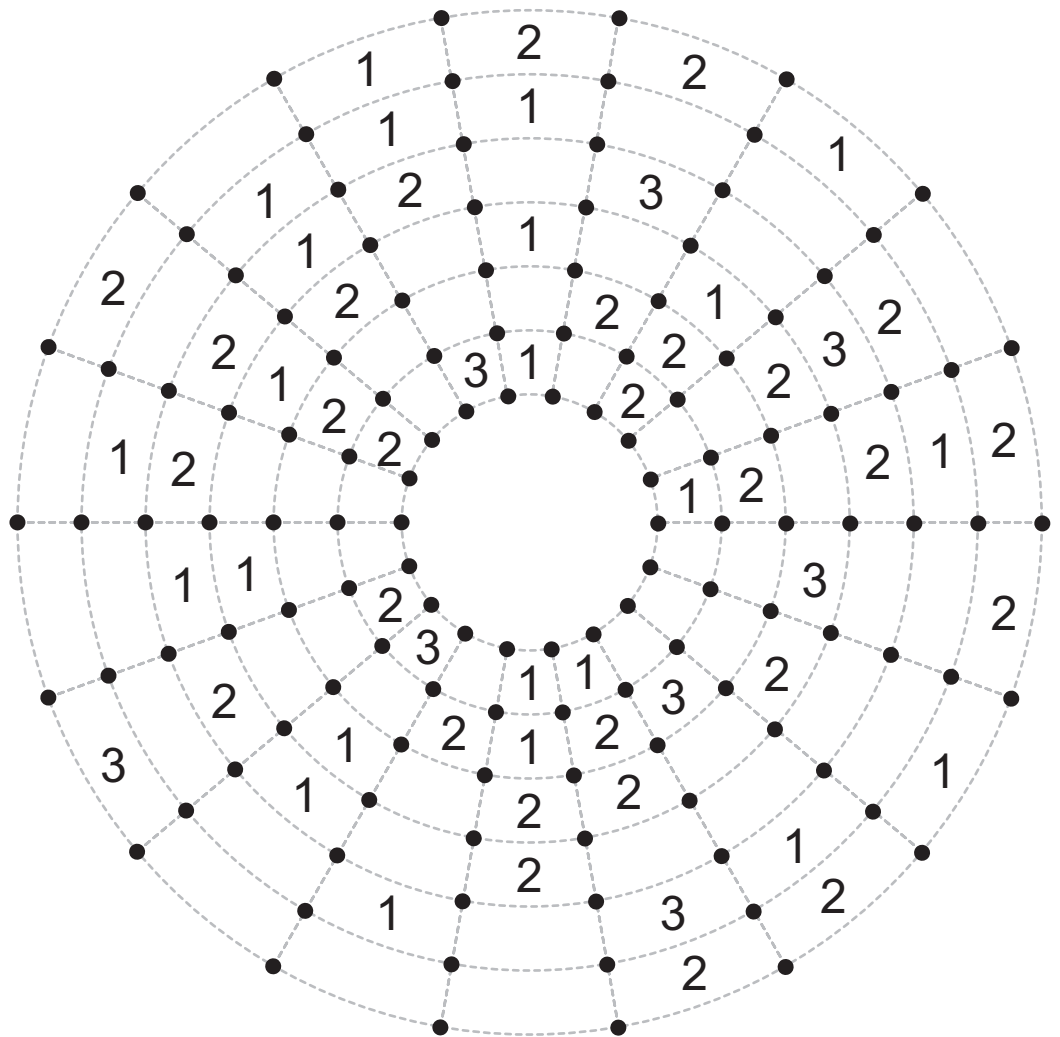
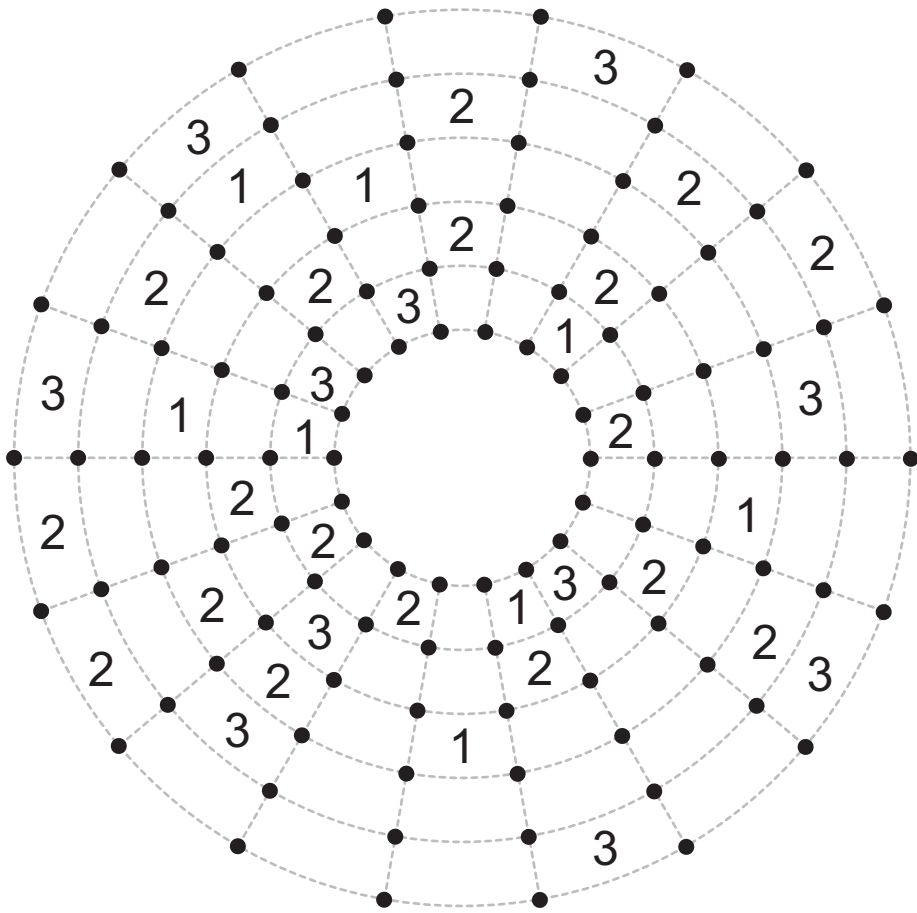




Circular Skyscrapers

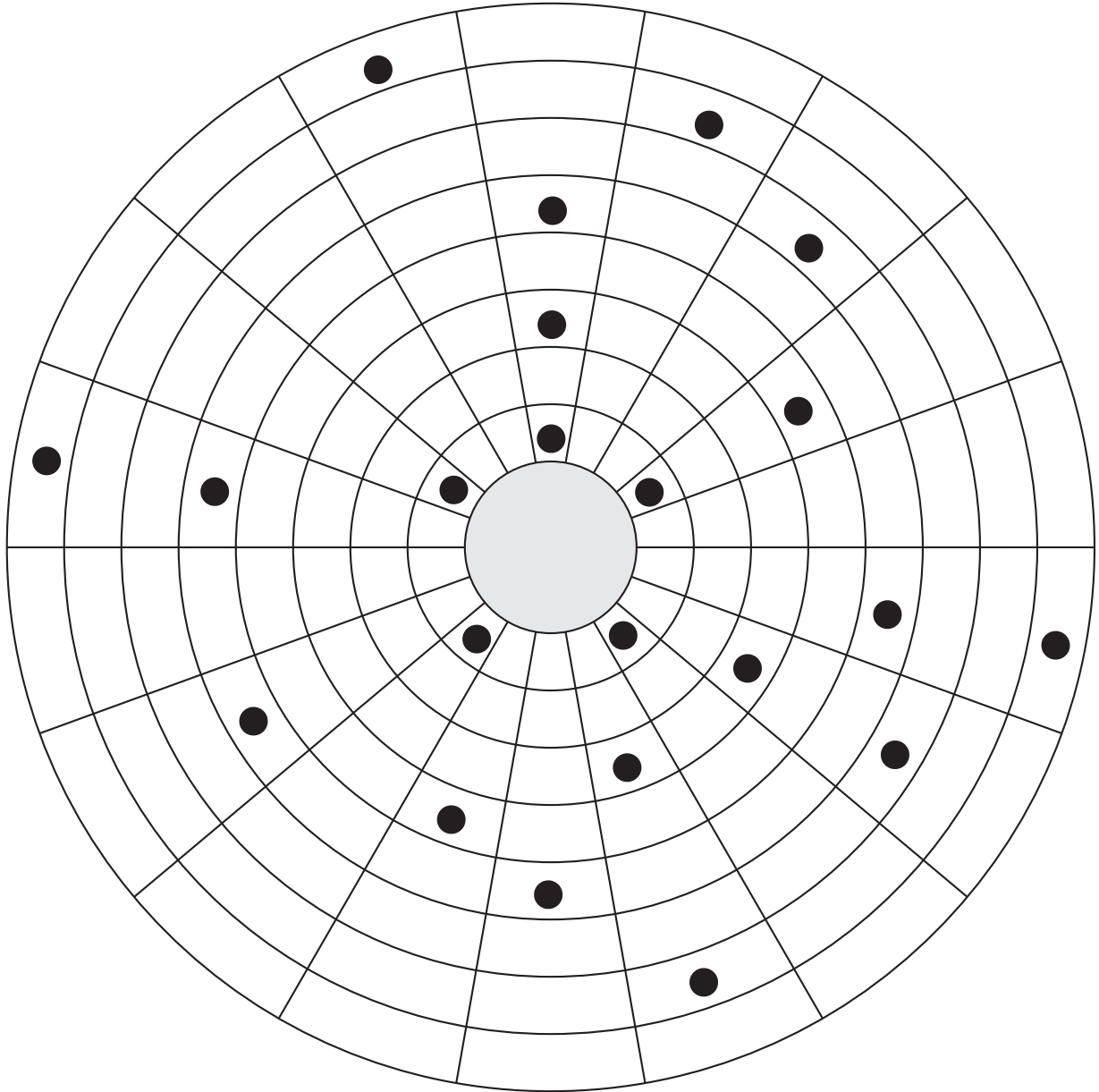
Fill the grid with numbers 1, 2, 3, 4 (or 1, 2, 3, 4, 5), so that each circular sector and annulus contains exactly one instance of all these numbers, representing the height of buildings in a neighborhood. Numbers at the inner and outer annulus and at the top circular sector show the number of visible skyscrapers from that direction (the higher buildings hide the lower ones behind them). At the annulus, use the same logic, considering a curved view along the annulus.

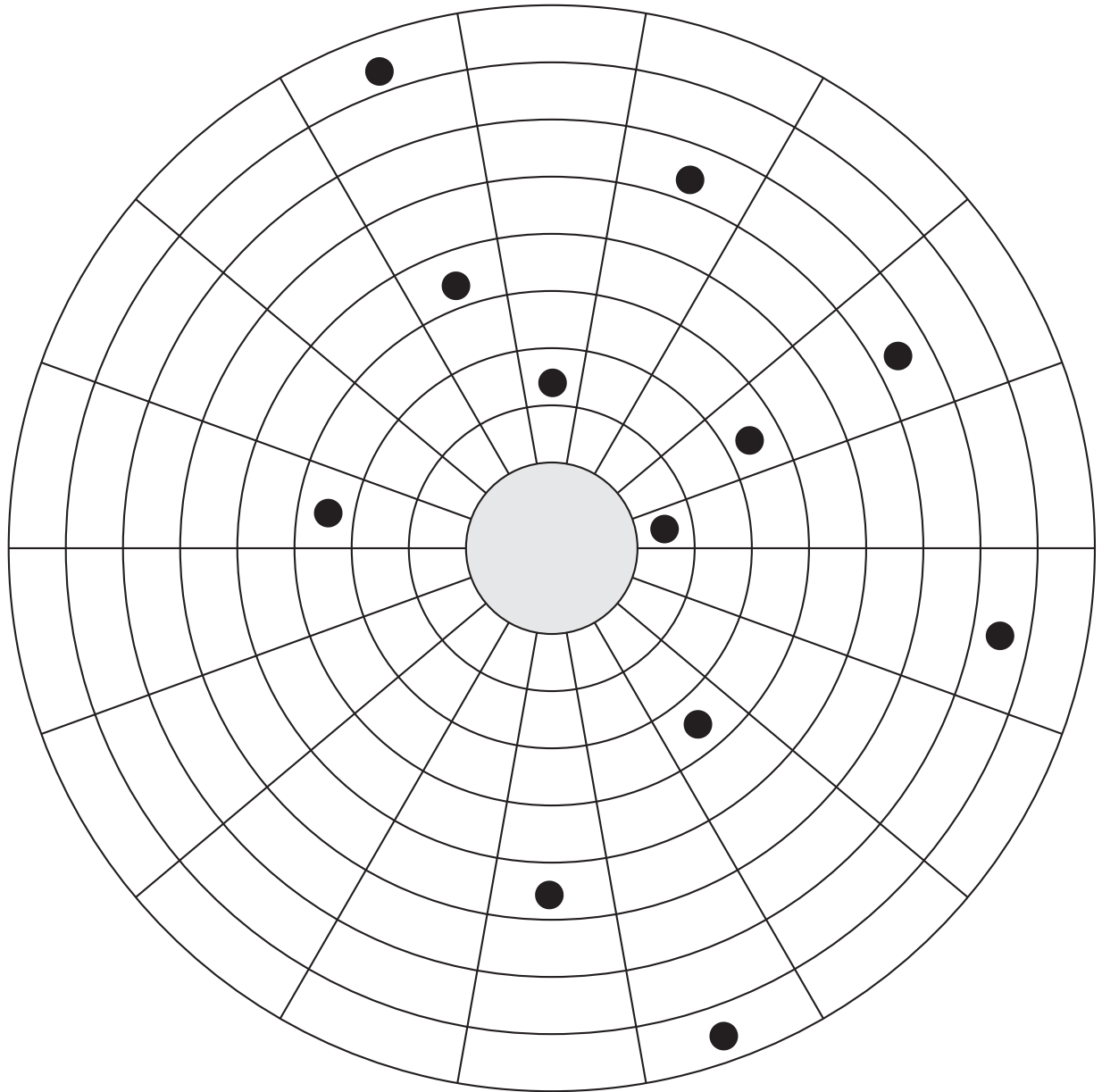




Circular Maze

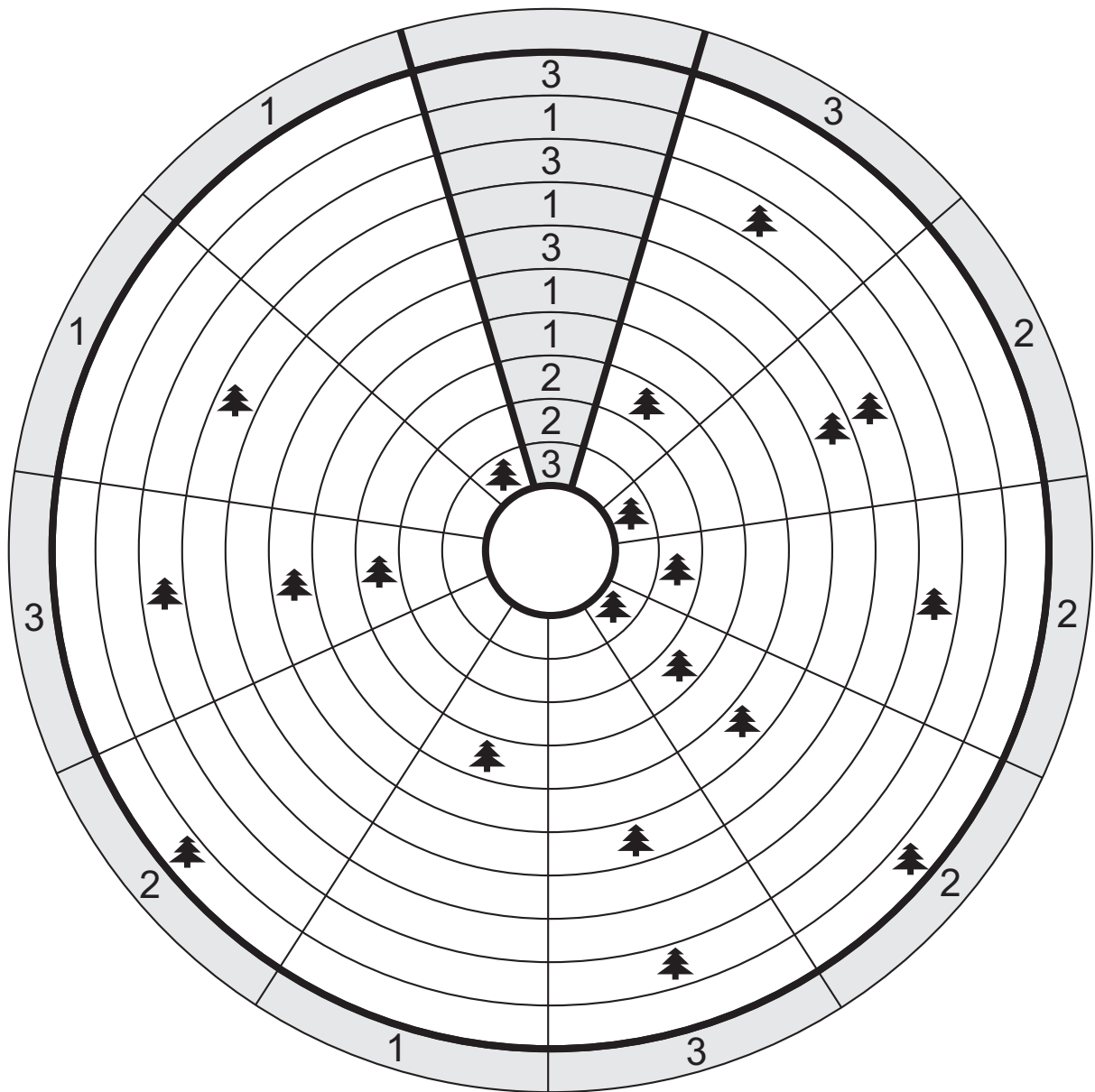
Draw a single continuous loop that passes through every cell of the grid that doesn't contain a black circle. The loop may not touch or cross itself.

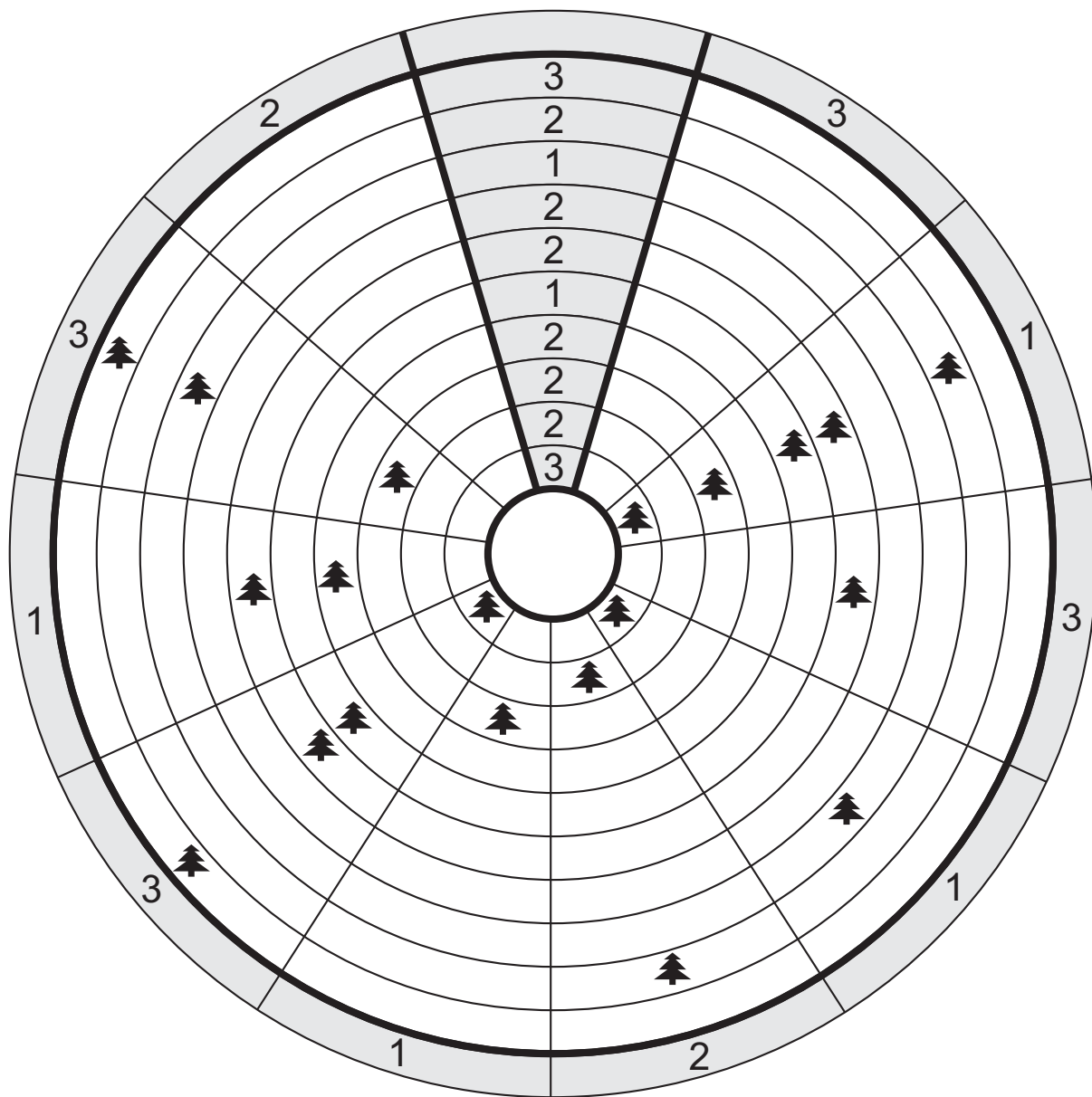


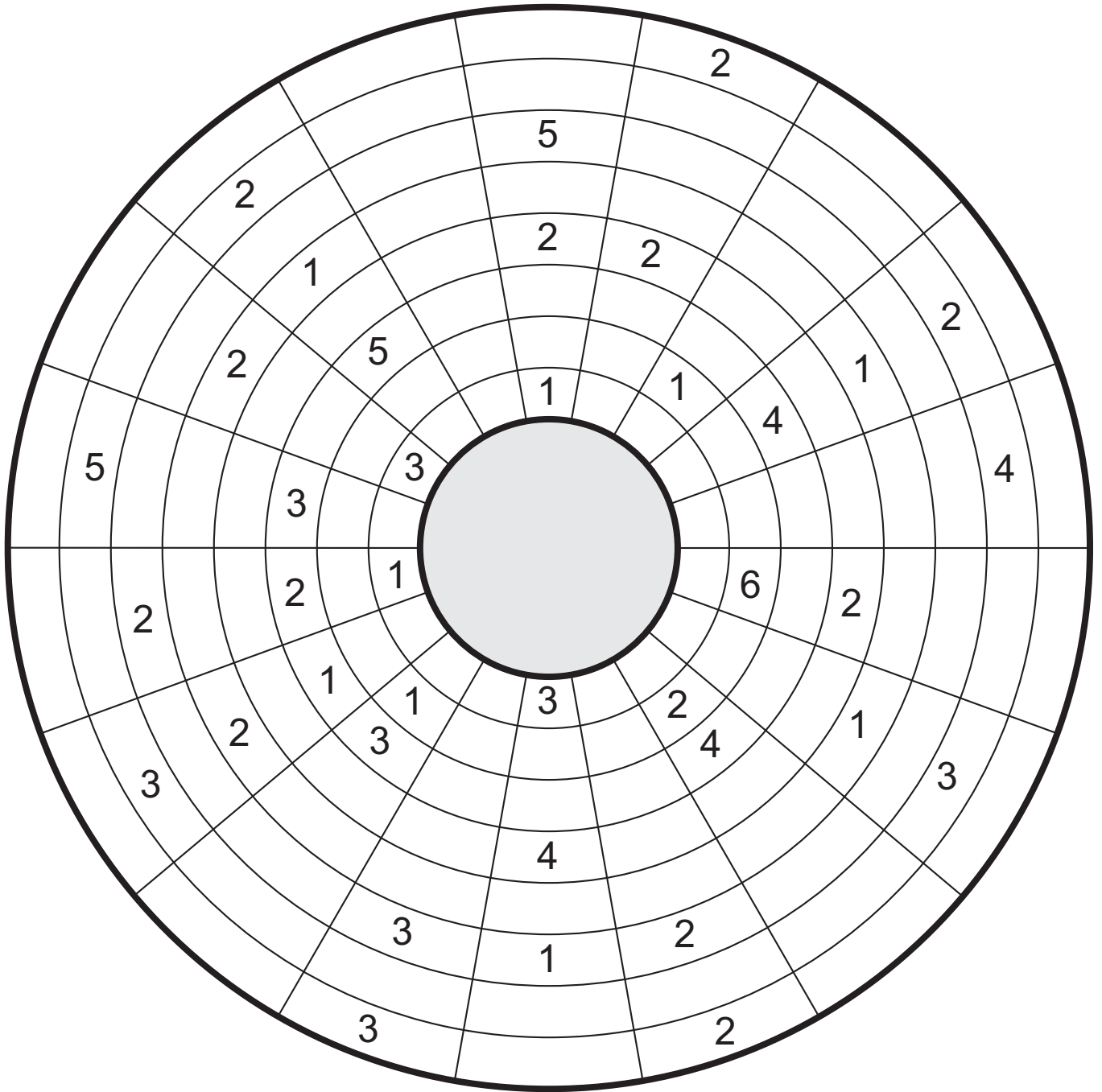


Circular Tree-Tents

Locate all the tents in the grid. Each tree is exactly connected to only one tent. A tent can be found in the same annulus or sector, adjacent to the tree. Tents are never placed adjacent to each other vertically, horizontally, or even diagonally. The numbers outside the grid and at the top sector give the total number of tents in the corresponding annulus or sector.







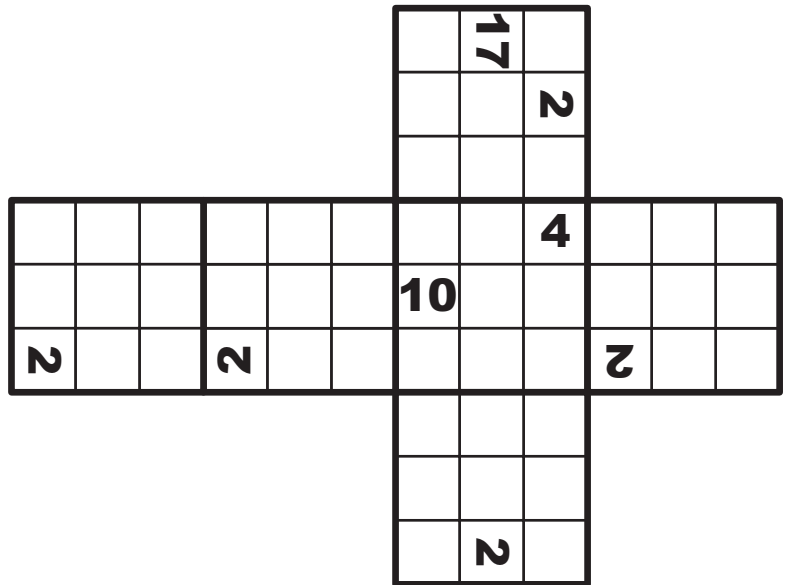
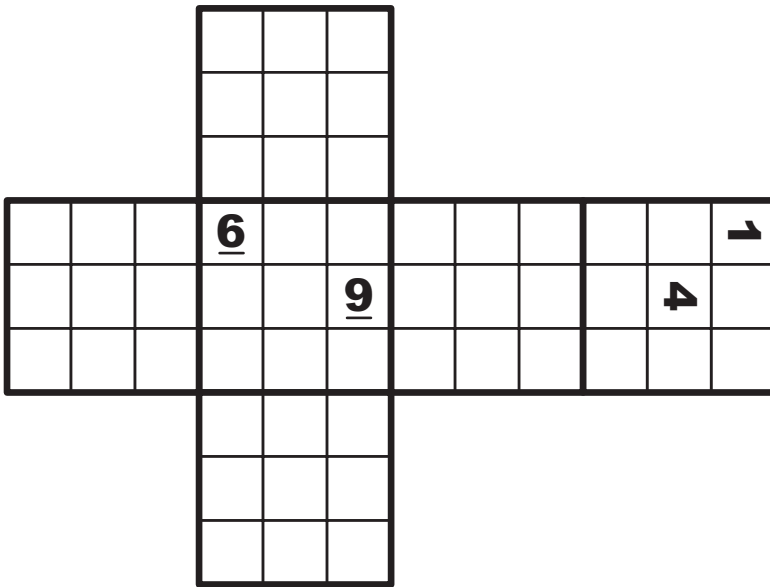
Four Winds in Faces

A Four Winds diagram was divided and glued to the faces of different pieces, being possible that the pieces also received false parts. The aim is to correctly solve the Four Winds, but, in order to do that, it's necessary to find the correct position for each piece. All faces of all pieces contain one letter that identifies them. Ignore those letters to solve the Four Winds. The rules to Four Winds are the traditional ones:

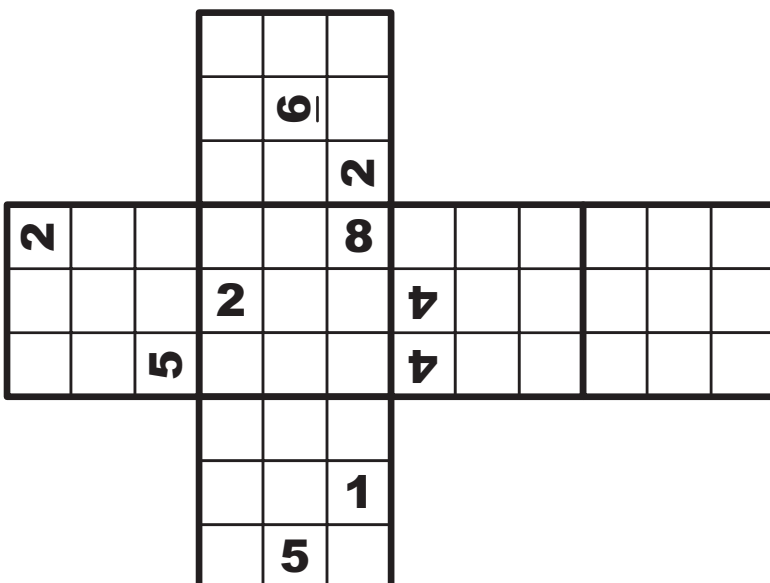
- Draw horizontal or vertical lines, starting from squares that contain numbers;
- The numbers always represent the addition of the length of the lines that start in that square;
- Lines can't overlap, and always pass through the center of the empty square;
- All squares have to be used.

To find out the correct assembling of the pieces, the following rules should be observed:

- All pieces must be used;
- Pieces must be positioned orthogonally in relation to the others;
- All visible faces should be used.

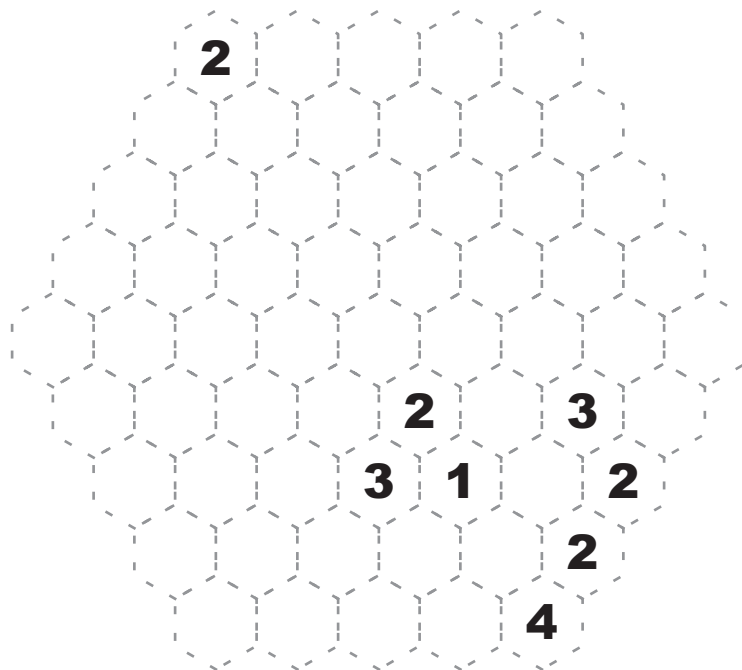
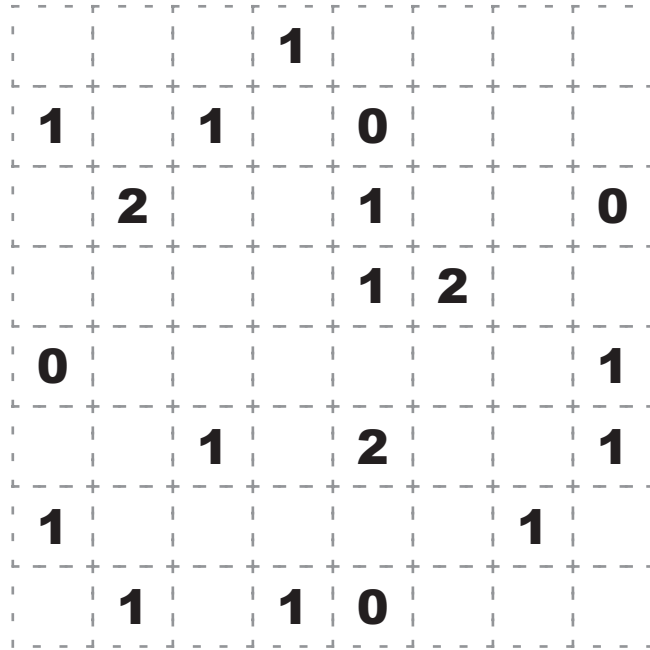


Üç Küp/Three Cubes



Tri-fences

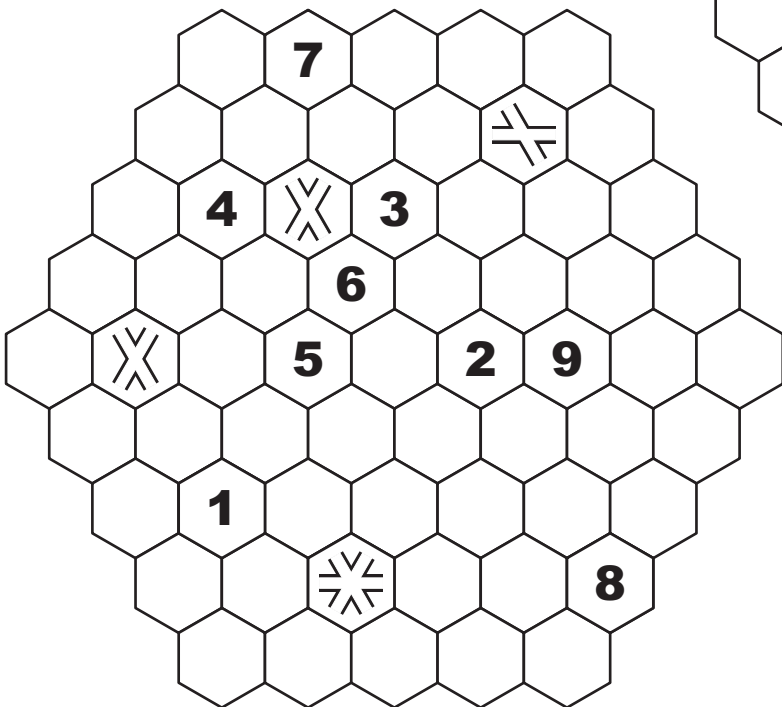
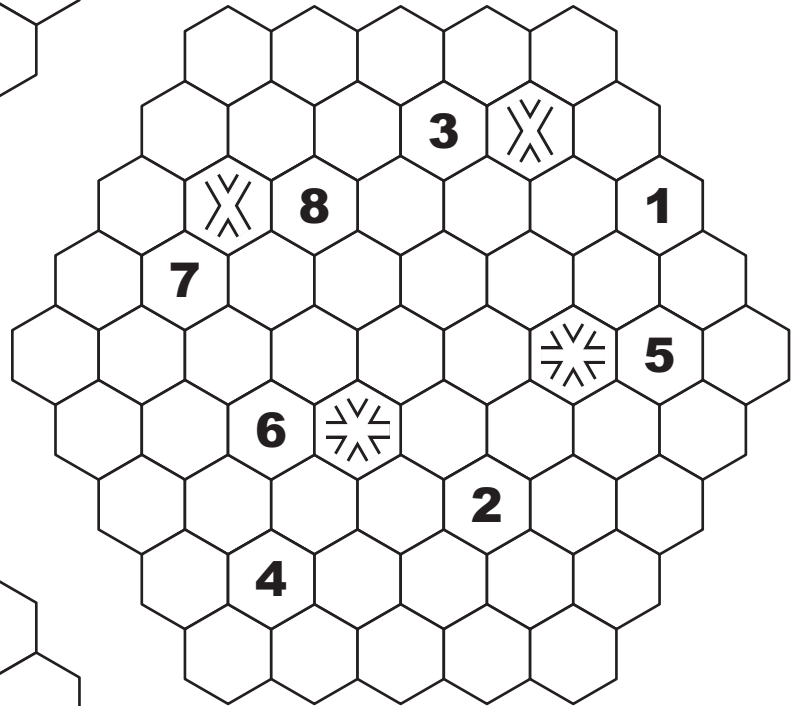
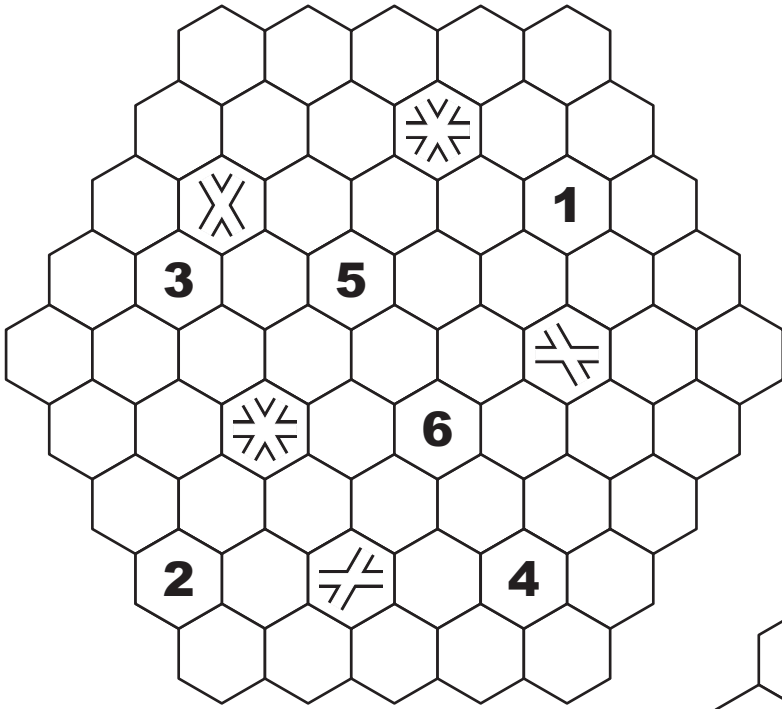
Three single closed loops (exactly like Fences puzzles) can be drawn over the dotted lines in the diagram and have exactly the same shape (can be rotated but not mirrored). Each number shows how many segments are used in that square. The three fences cannot touch each other, not even diagonally.



				3				0	
					3				
		3	3						2
		0			0				
						3			1
2								1	2

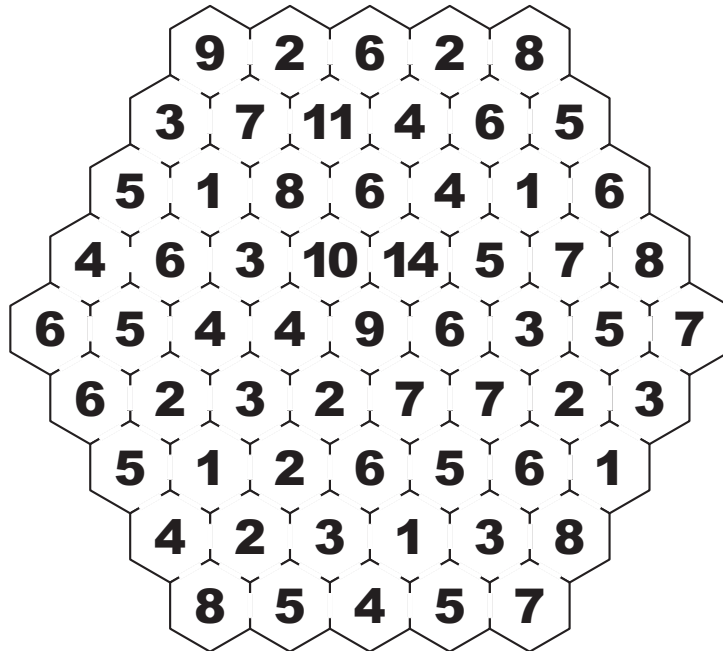
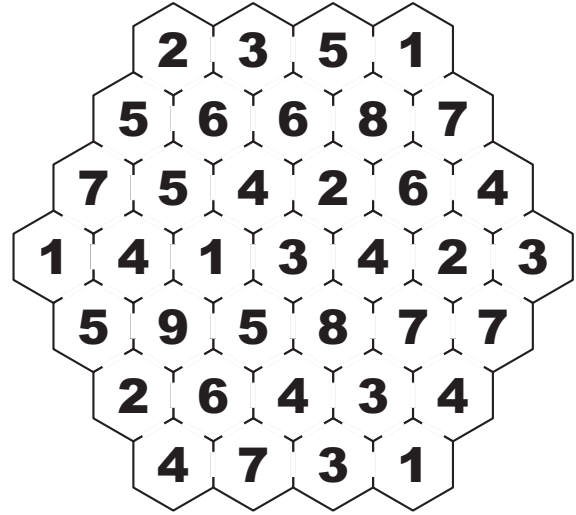
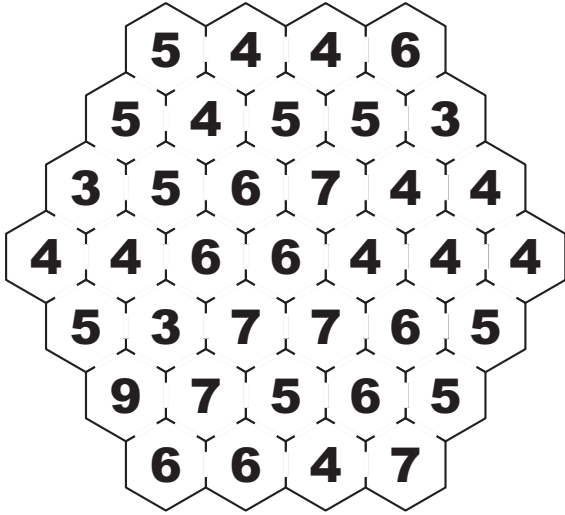
Railroad Track

Lay a single, closed loop of railroad track that levels through every cell of the grid. The track connects cells horizontally or diagonally, and crosses itself only in the cells with crosses (all the crossings are already placed). The track does not turn as it passes through the stations (which are the cells containing numbers) nor crosses. As you follow the track, visit all stations in numerical order and return to the first station.



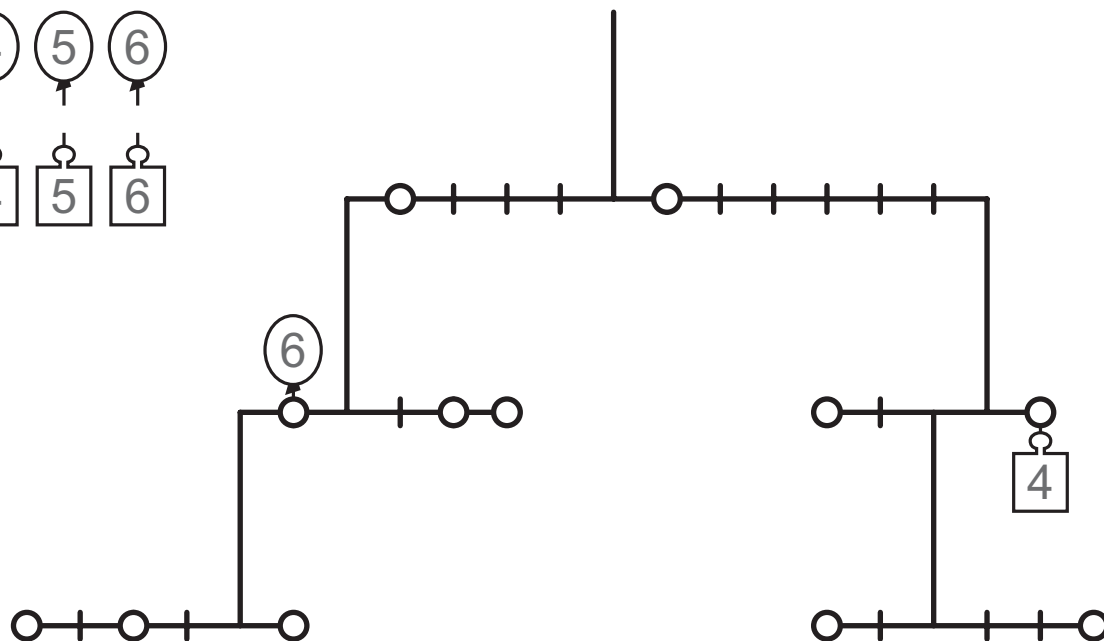
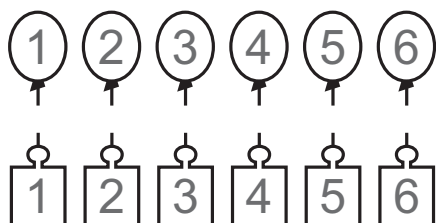
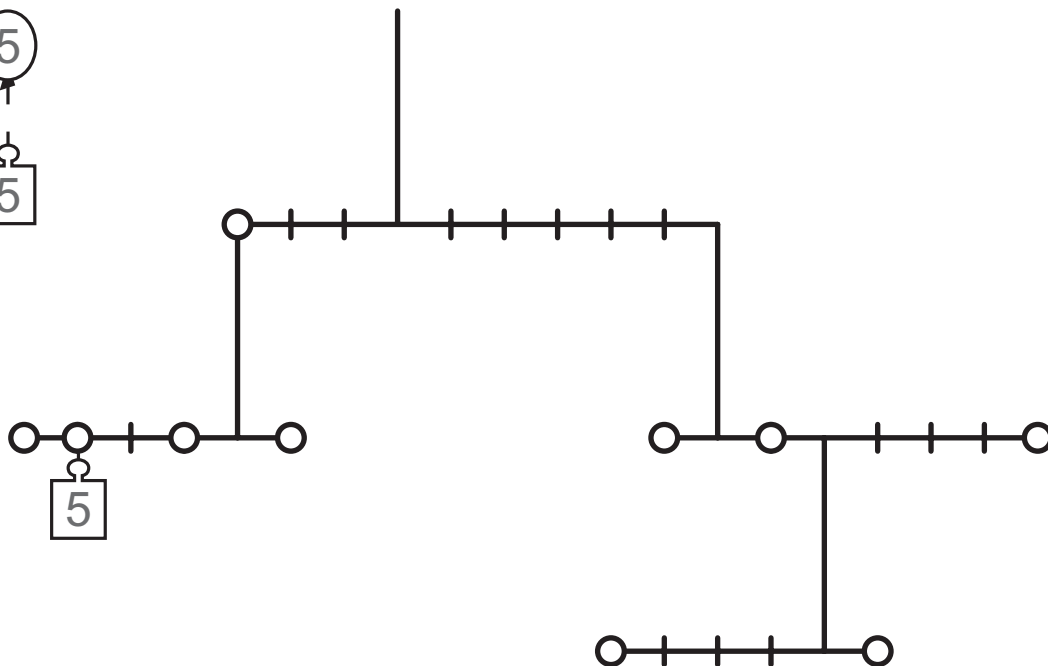
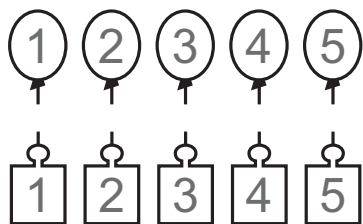
Doors

The floor has been divided into many rooms, which are all interconnected by doors. Some doors are open, others are closed. The rooms have numbers indicating how many other rooms can be looked into. Which doors are closed?



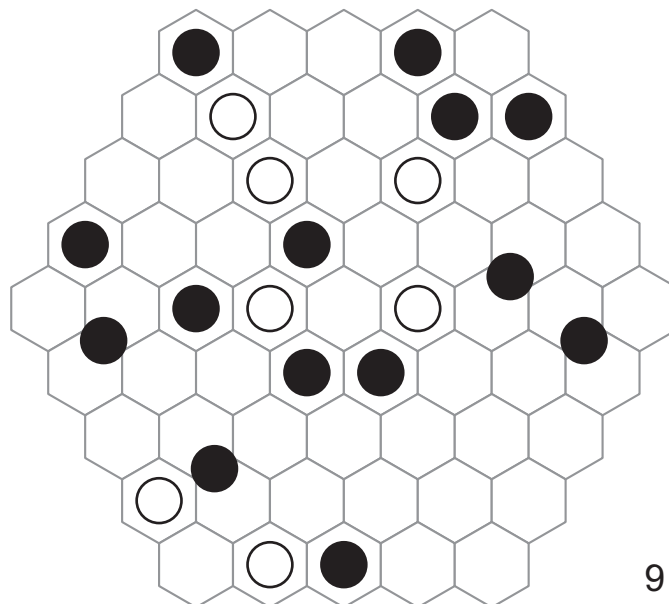
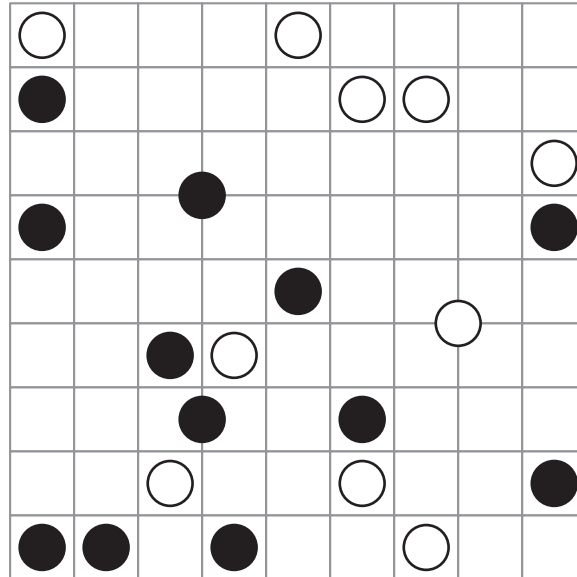
Balloon Balance

Add the weights and balloons to the diagram (in the white circles) so that the entire mechanism is in equilibrium. As happens with normal balance puzzles, the total torque at each fulcrum must be zero.



Rotator Mosaic

Divide the grid (along the grid lines) into exactly 10 symmetric pieces (each appearing unchanged if rotated 180 degrees, including its shape and the pattern of any white or black disks). There are no two equal shapes (independent of the pattern).

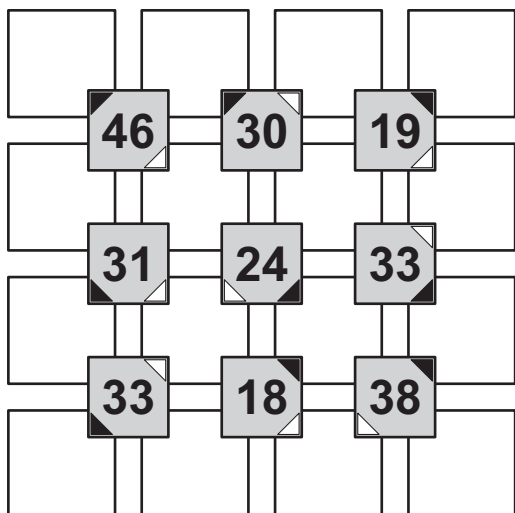


9 parça/9 pieces

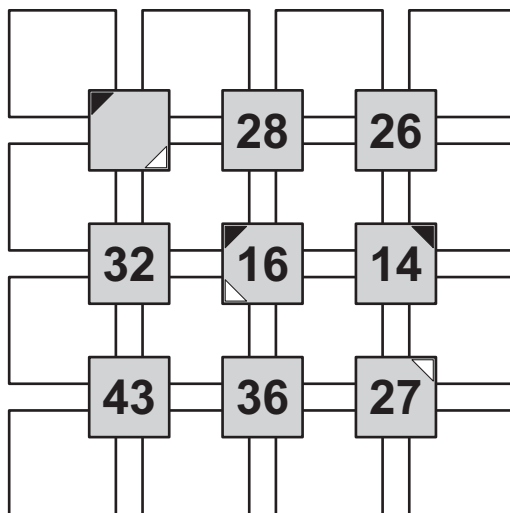
Biggest and Smaller

Place the numbers into the white cells so that the numbers in the gray cells are the sum of the numbers in the neighbouring white cells. The black arrows show the biggest of the neighbouring numbers (linked by the gray cell) and the white arrows show the smallest ones.

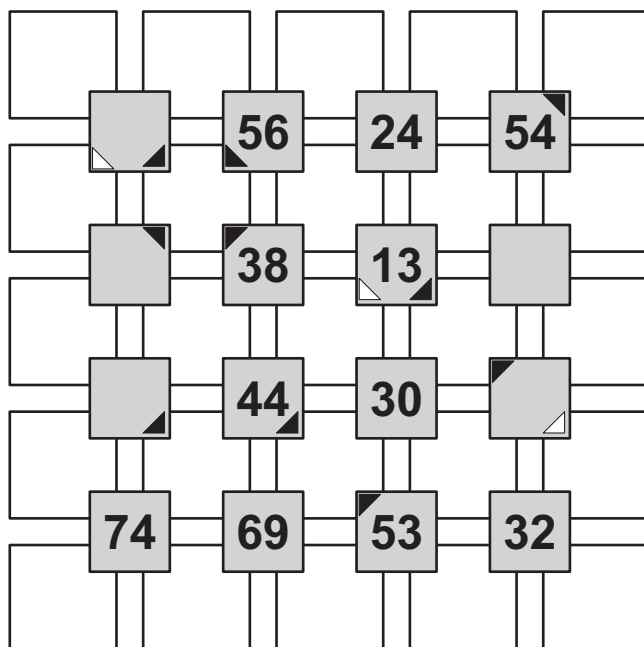
1-16



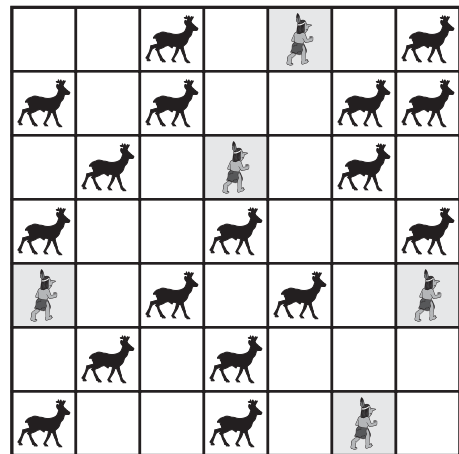
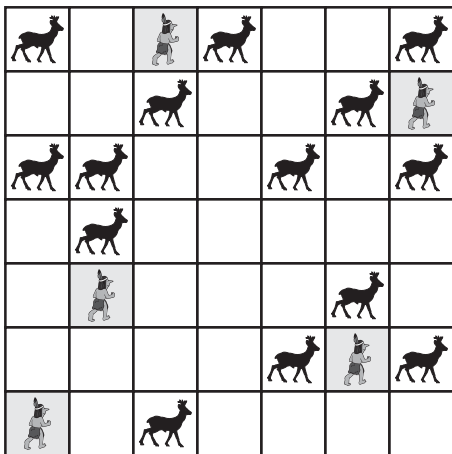
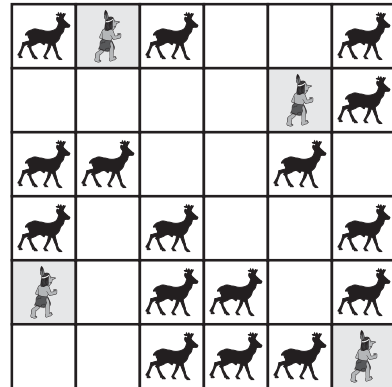
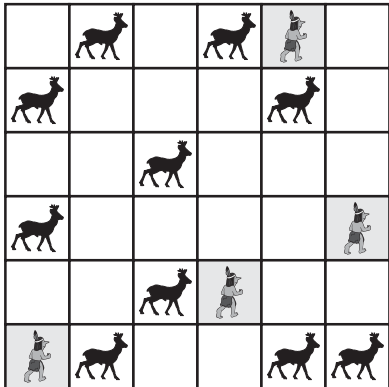
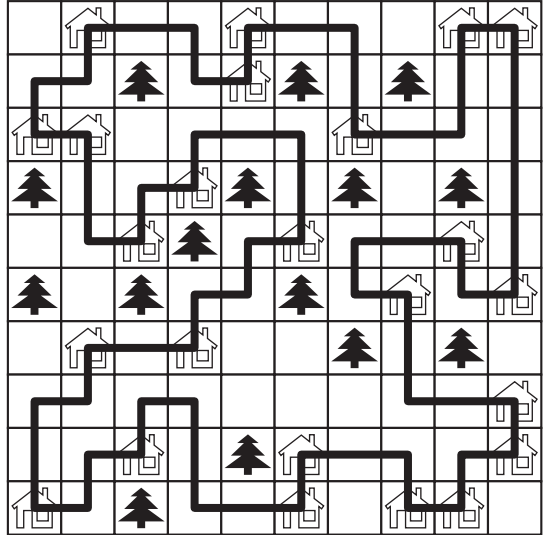
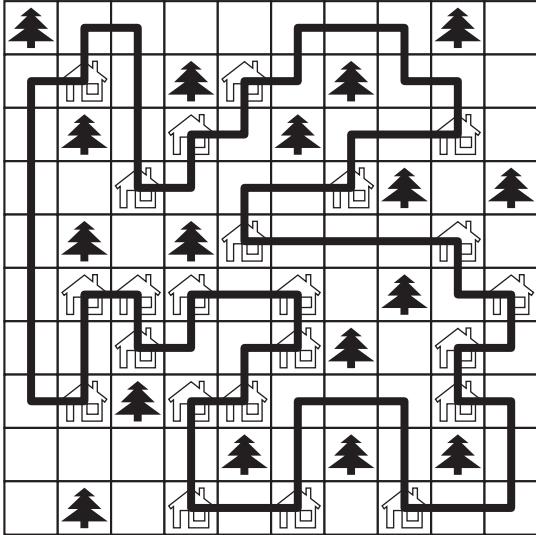
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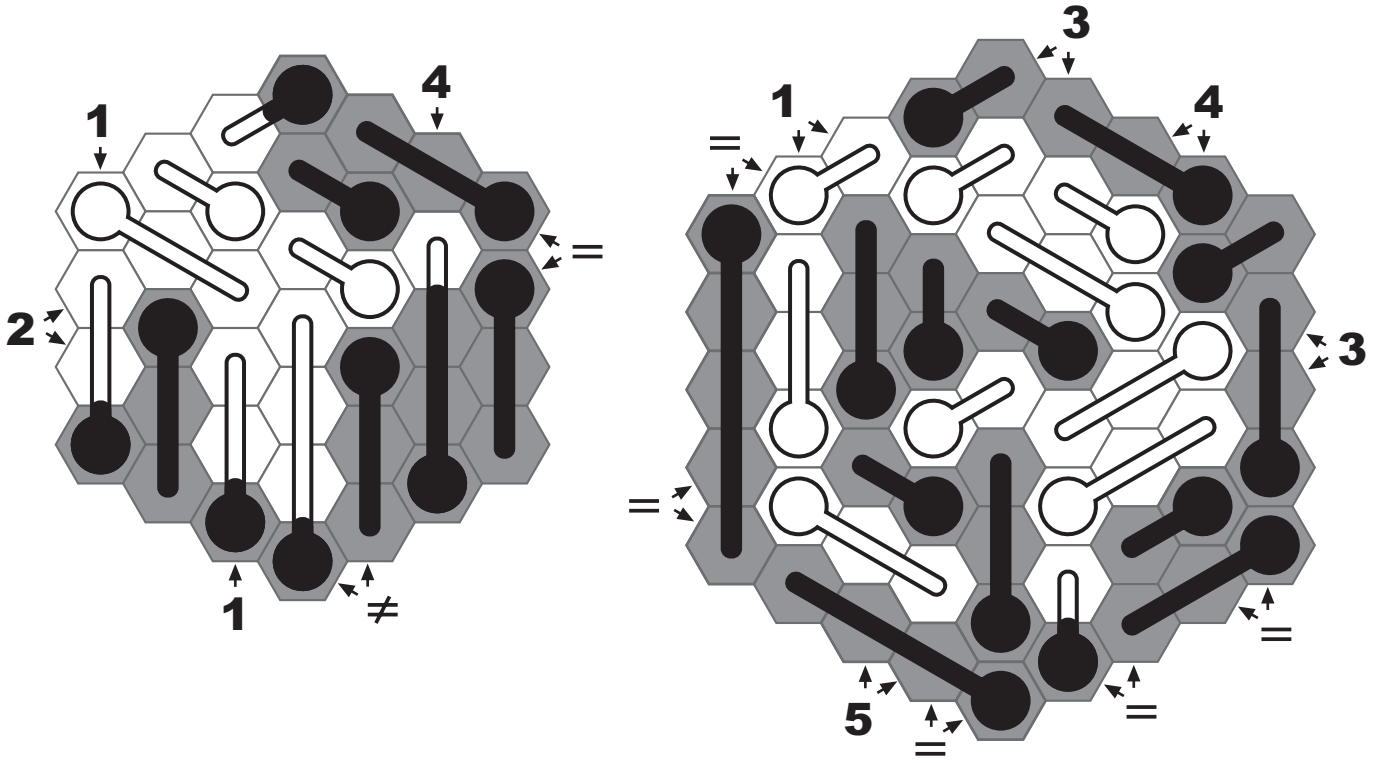


1-25



ÇÖZÜMLER SOLUTIONS

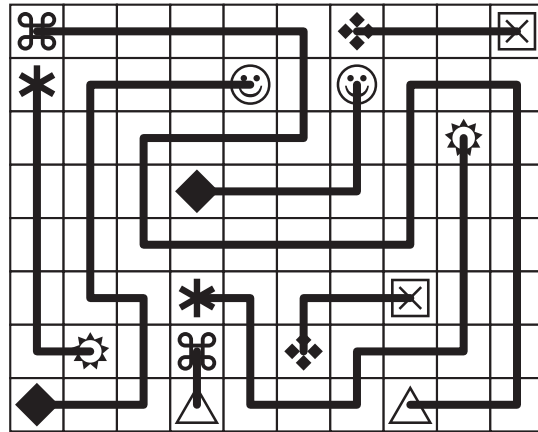
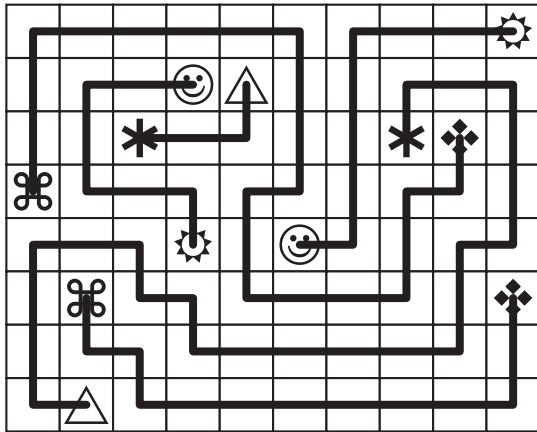
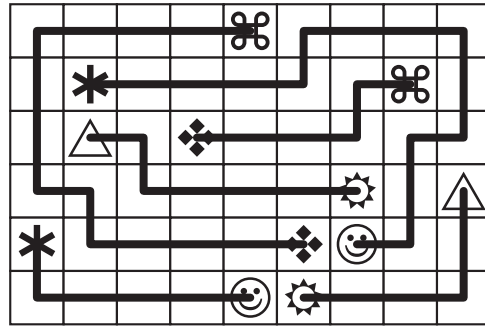
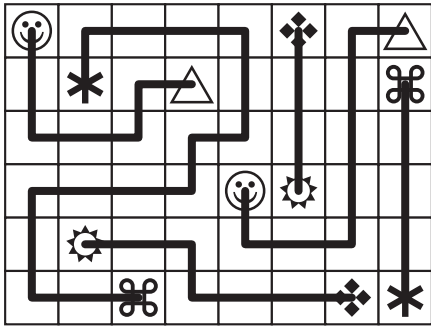




	●							
●	+	●			●		●	1
●	●	●			●	X	●	1
	X	●	+	●	●	X	●	3
●		●	●		●		●	
3					4	0	4	

			●		●	●			
●		●	X	●	+	●			2
	X	●		●	●	●		●	1
●		●		●			X		1
			●	+	●	●		●	1
2	0	4	1	5	3	3	0	2	

			●	●	●	●			0
		●	+	●	X	X			
●		●	●	●	●	●	●		
	X	●		●	●		●	+	2
●		●	X	●	+	●		●	
		●		●	●				
			2	6	4		3		



- | | |
|-----------|---------|
| IAGUAR | PANEMA |
| KAAPIUARA | ETA |
| MBOI | IUB |
| PIRA | OBY |
| SOO | PIRANG |
| TAPYR | TING |
| ASU | UNA |
| BERABA | ABA |
| KATU | KARAIB |
| MIRI | KUNATAI |

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

		C	B	D	
	C		B	E	D
B	B	E	D	A	C
D		D	A	B	C
	A	B	C		E
	D	A	E	C	B
E	E	C		D	A
		C	E		

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

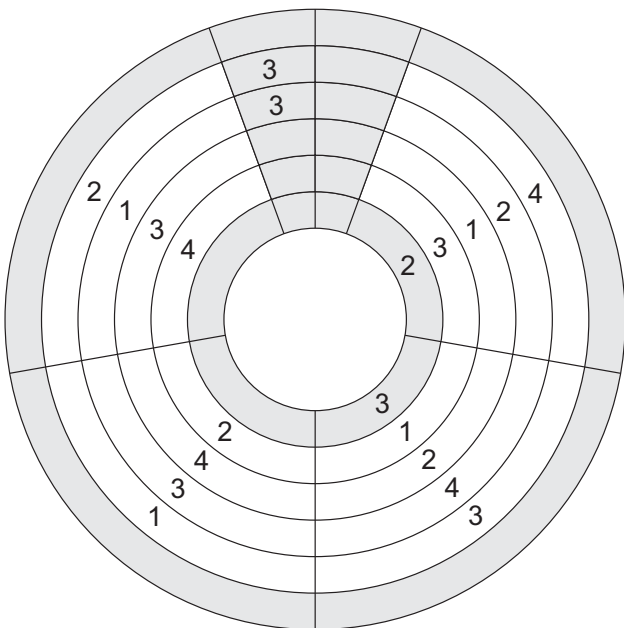
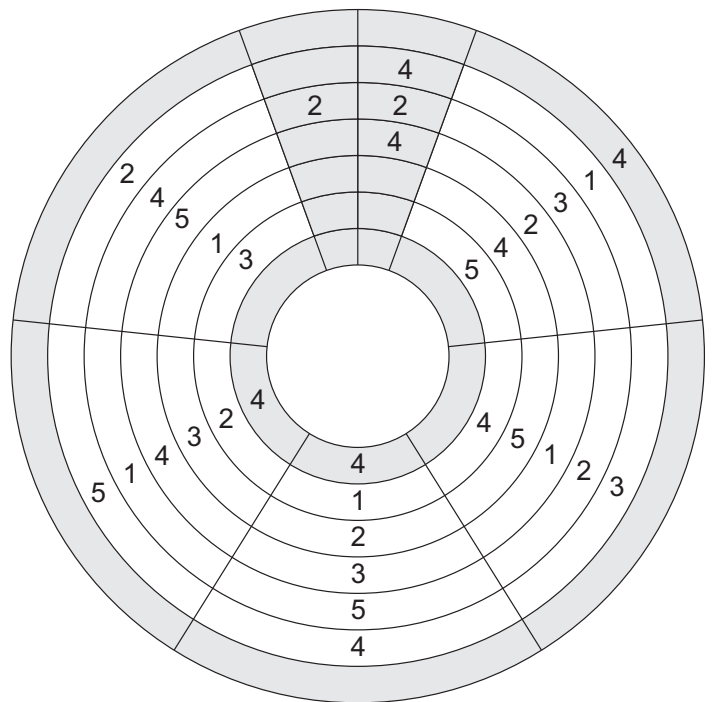
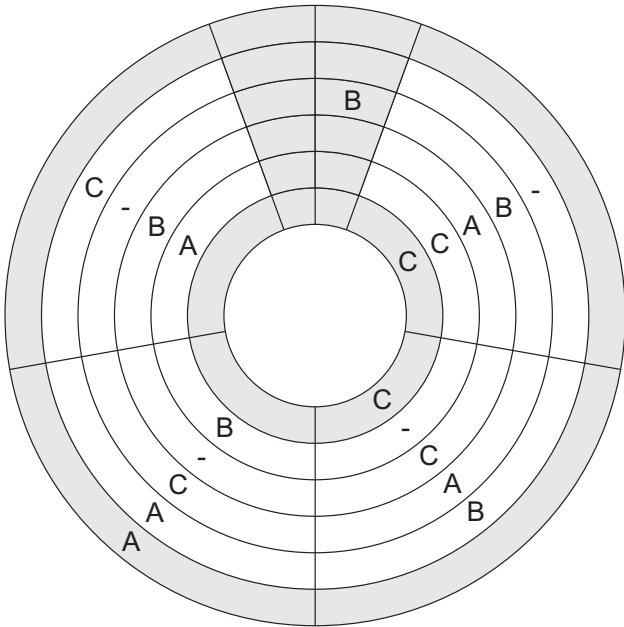
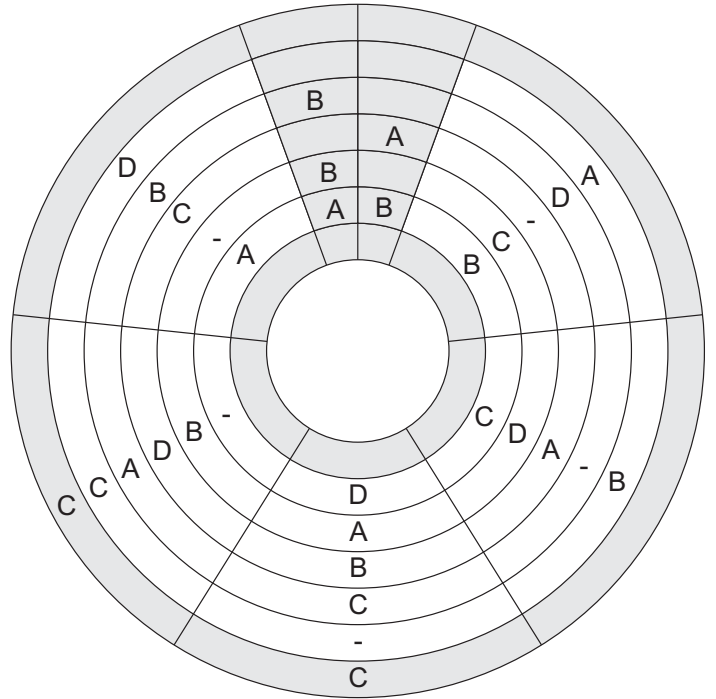
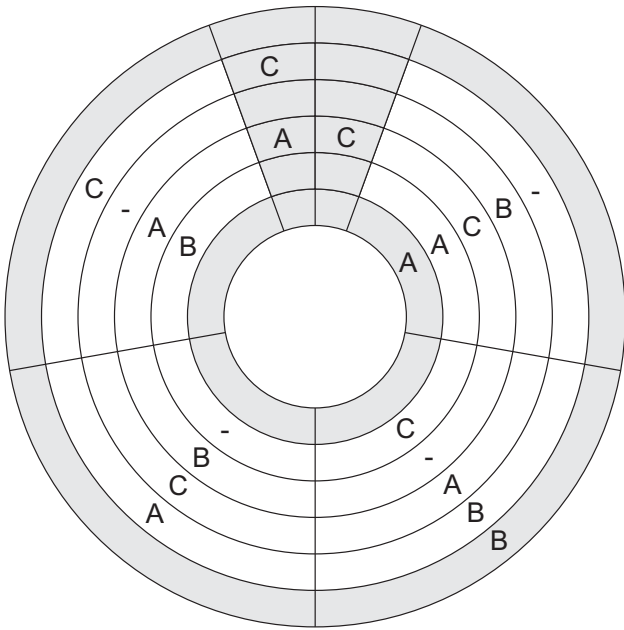
		D		E				
		B	D	C	A		E	E
D		D	C	A		E	B	
		A	E		D	B	C	C
		C		B	E	A	D	
		E	A	D	B	C		C
B			B	E	C	D	A	
		E					A	

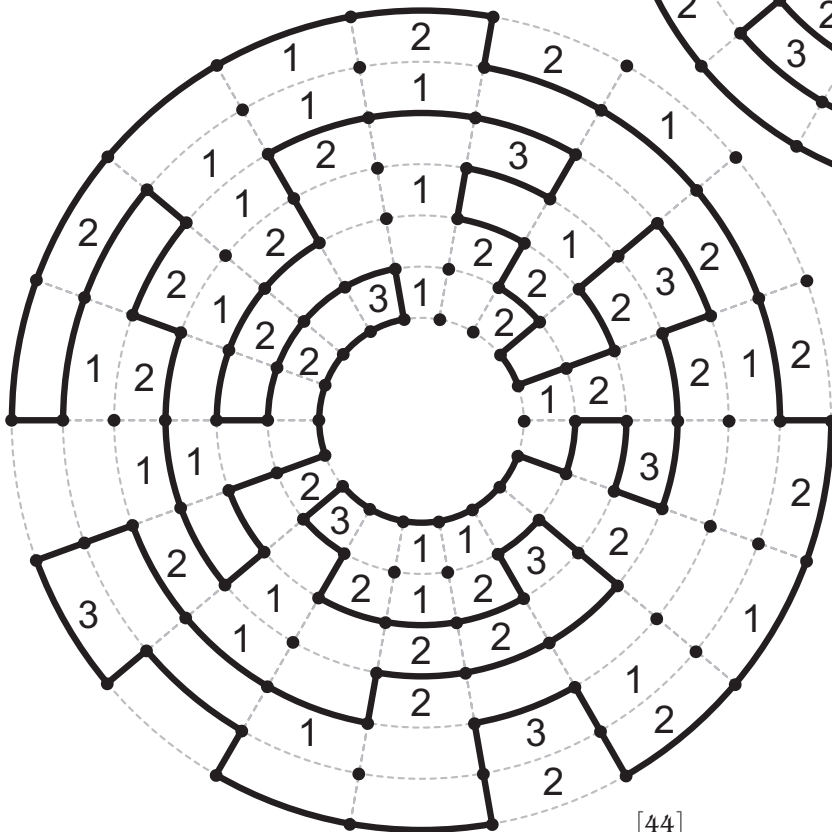
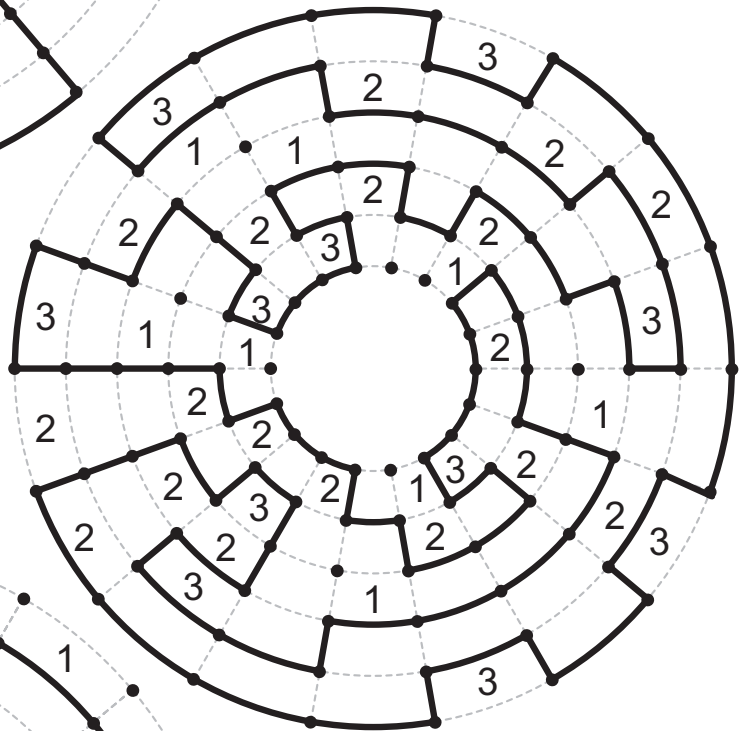
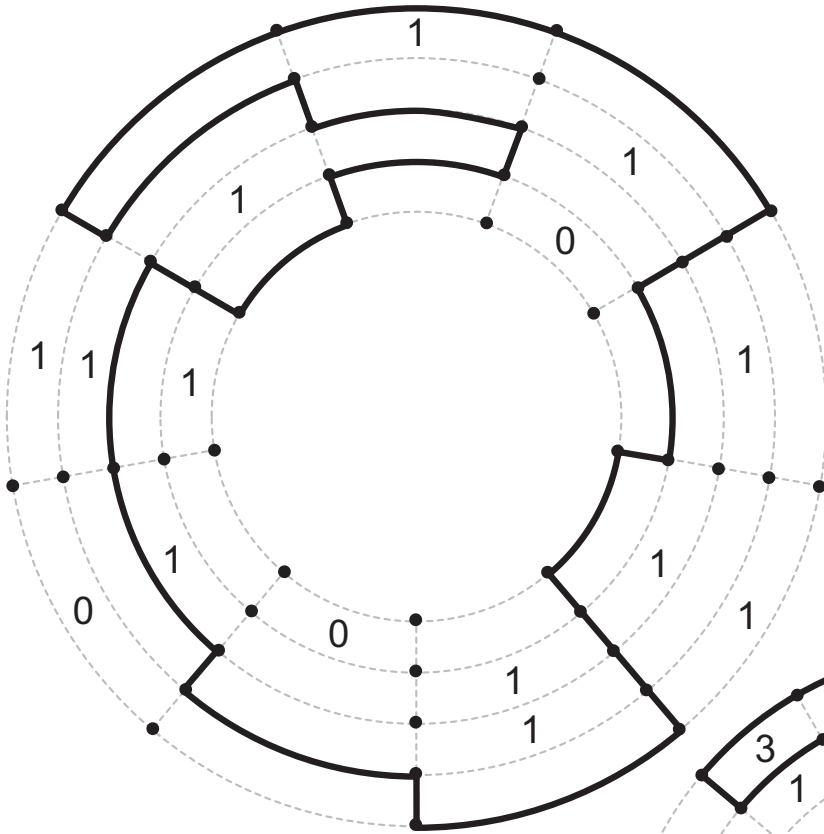
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		2	1	5	3	4		2
4		1		2	4	5	3	
1		5	4	3		1	2	
2		4	3		5	2	1	3
2		3	5	1	2		4	
			2	4	1	3	5	
			2	3	2			

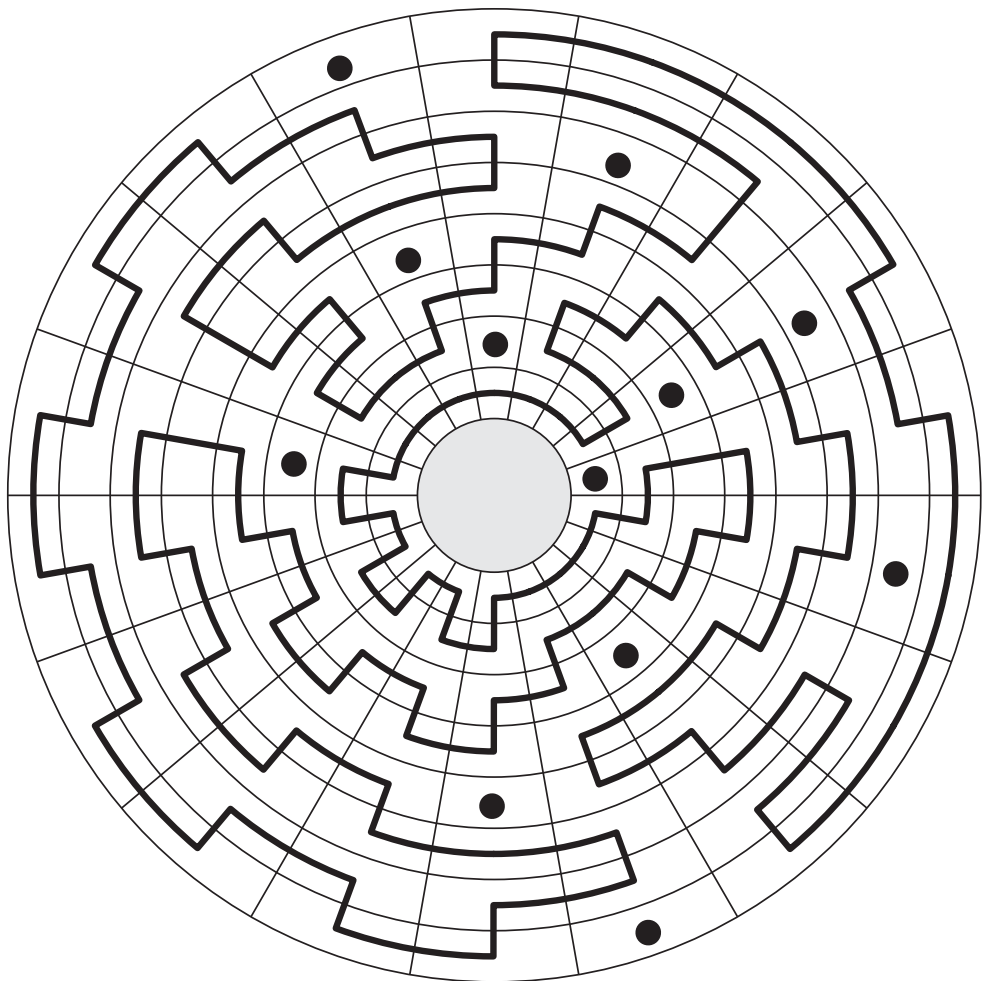
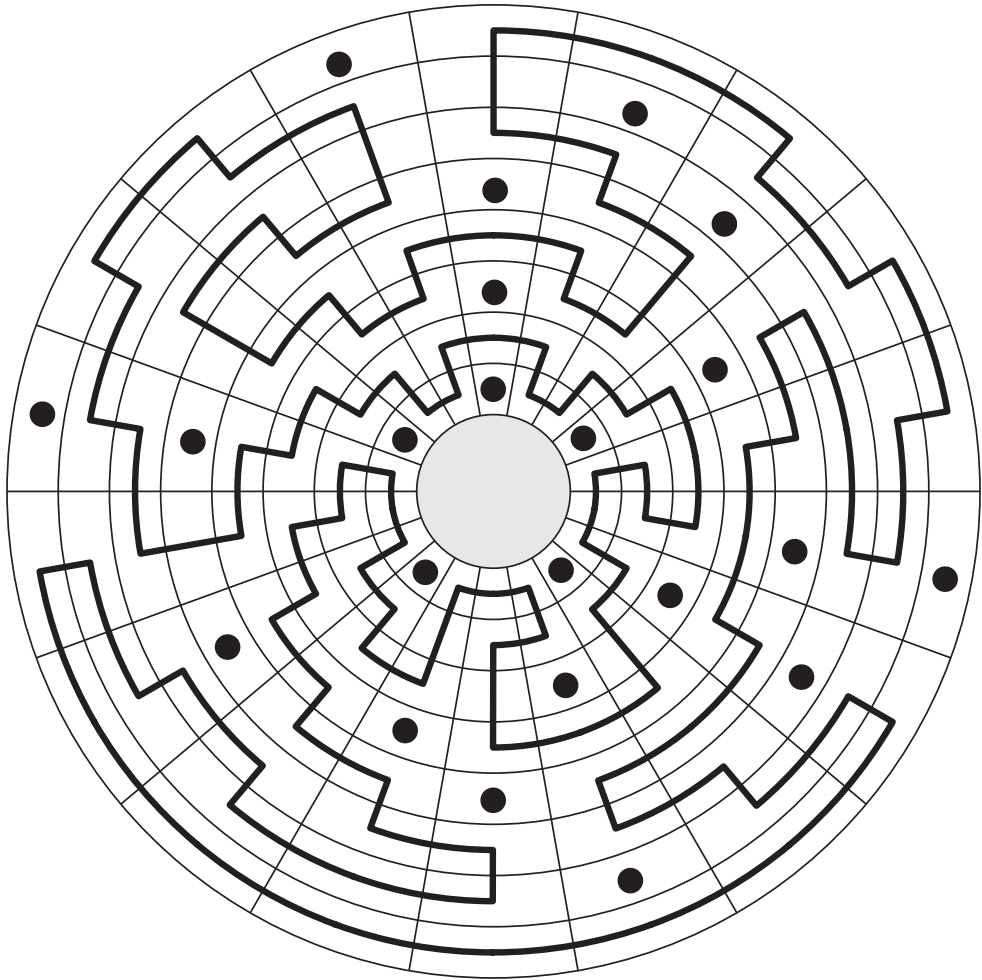
				E		E		
C		C	D	B	E	A		
		D		C	A	B	E	
		B	A	E		D	C	C
		A	E		B	C	D	
		E	B	D	C		A	A
			C	A	D	E	B	
			A	D				

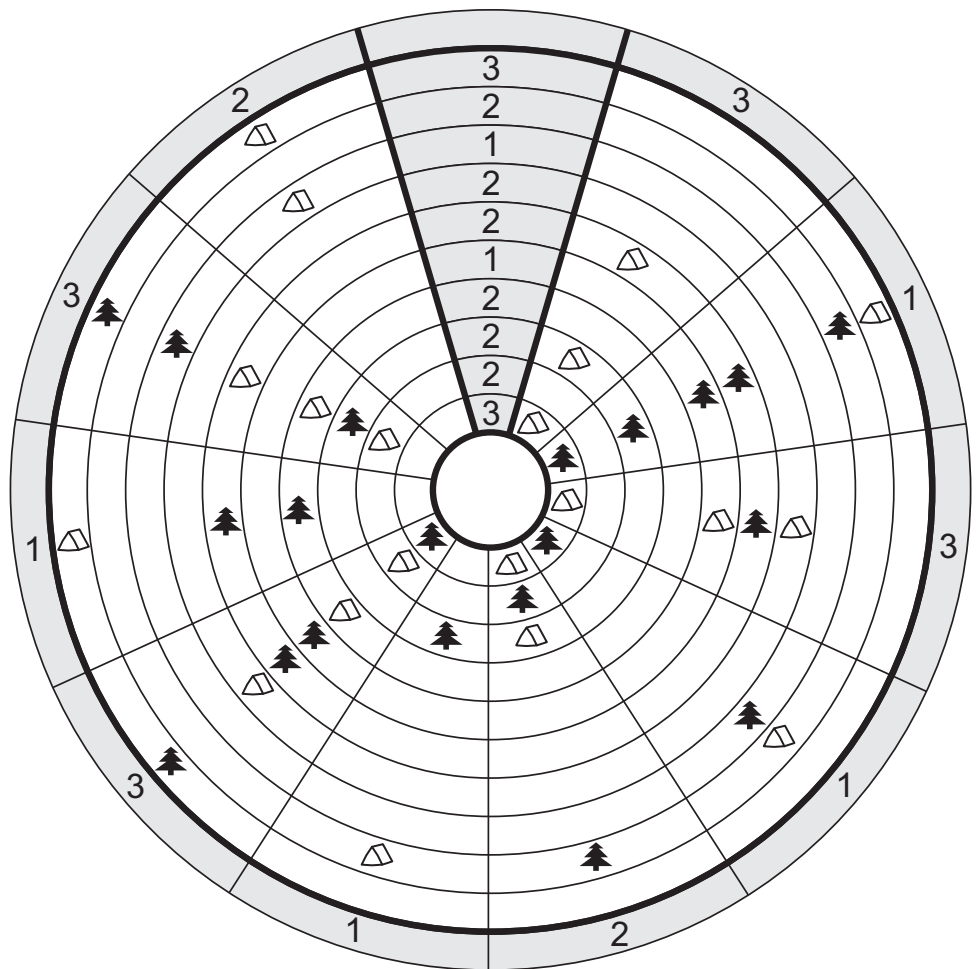
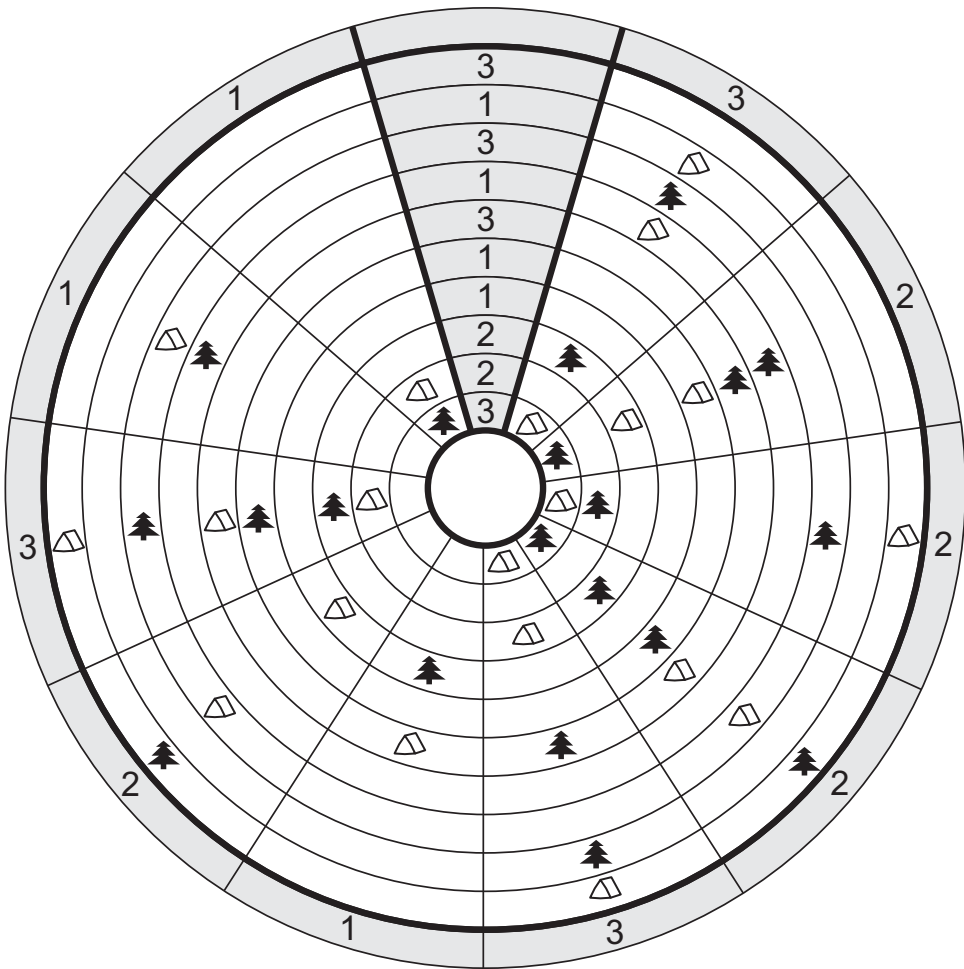
		1	3		3	3		3	
		4	7	3	2	1		6	5
1		7		4	6	5	3	2	1
		5	4		7	2	6	1	3
2			6	1	4	7	5	3	2
4		3	5	2	1	6	4	7	
3		2	3	7	5	4	1		6
		6	1	5		3	2	4	7
4		1	2	6	3		7	5	4
			5		3	4	1		2

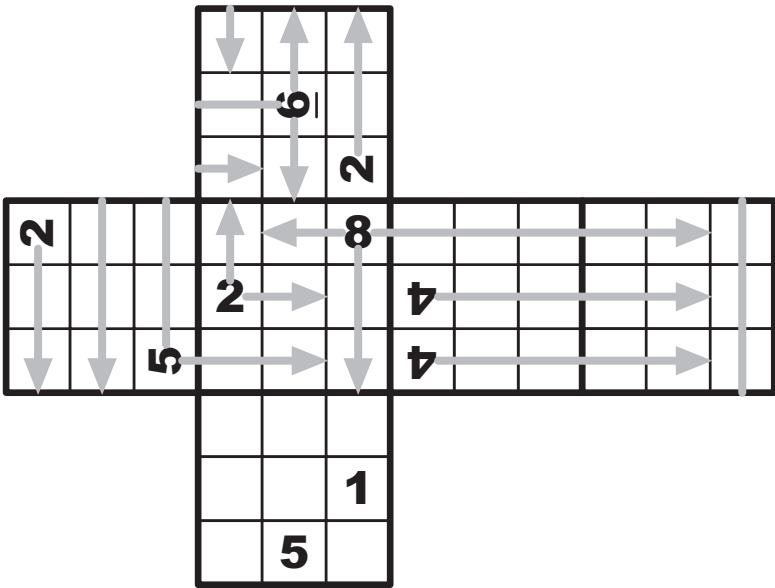
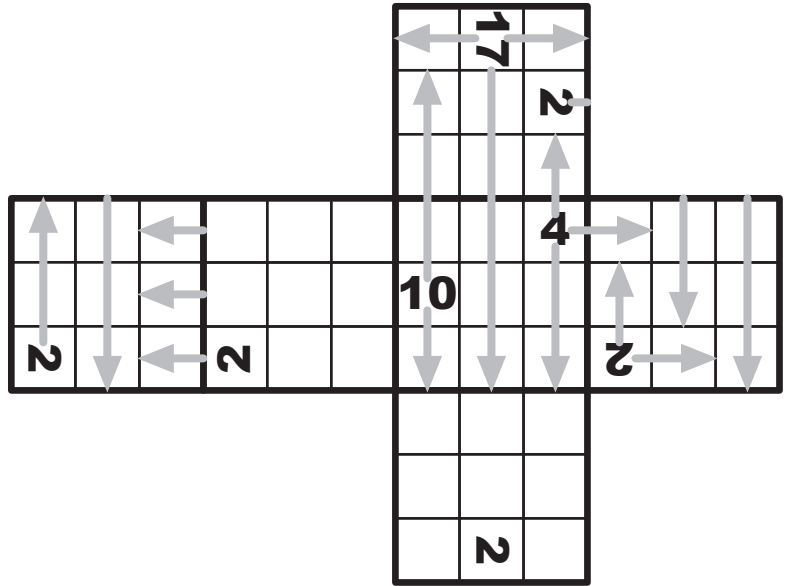
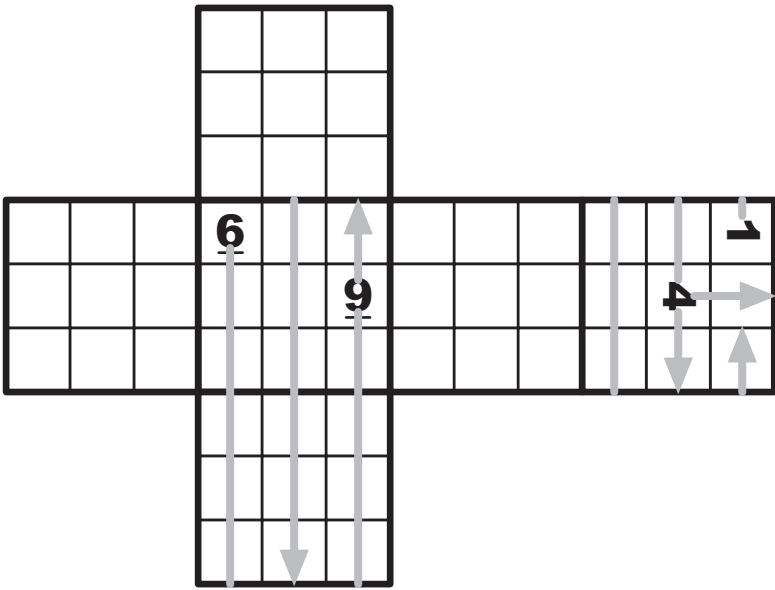
				F	E	D	C		
		B	F	E	D	C		A	G
		F		B	A	G	E	D	C
G		G	B		F	D	A	C	E
A			A	C	B	F	G	E	D
E		E	G	D	C	A	B	F	
		D	E	F	G	B	C		A
A		A	C	G		E	D	B	F
C		C	D	A	E		F	G	B
			A	E	E				

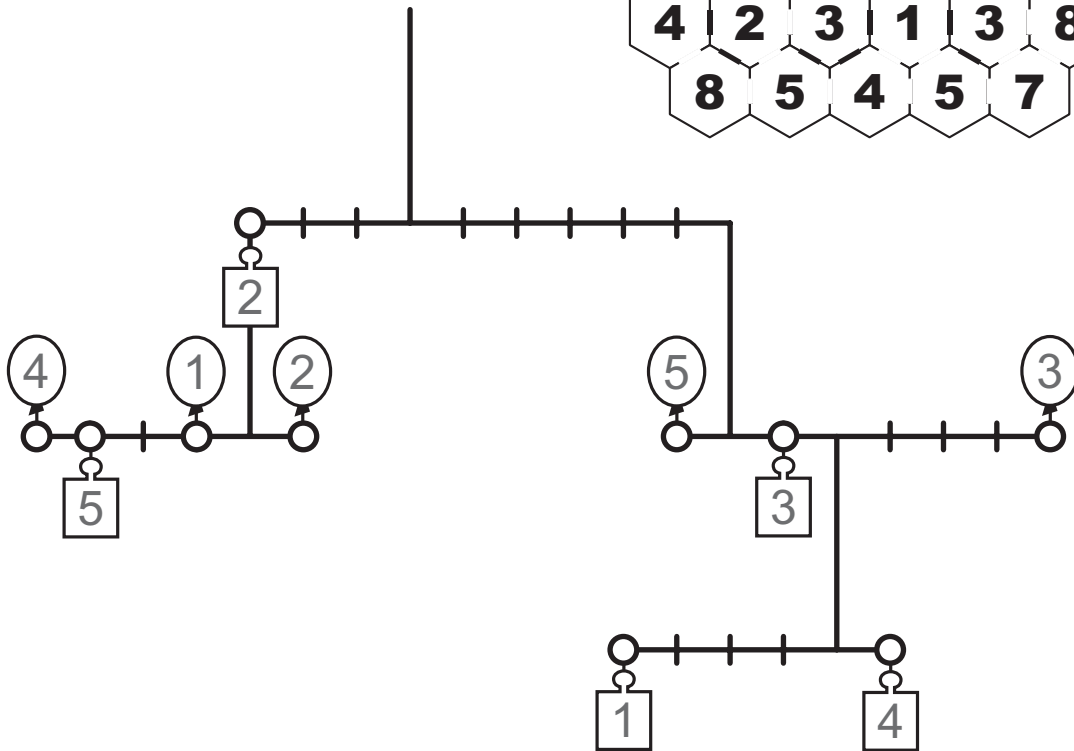
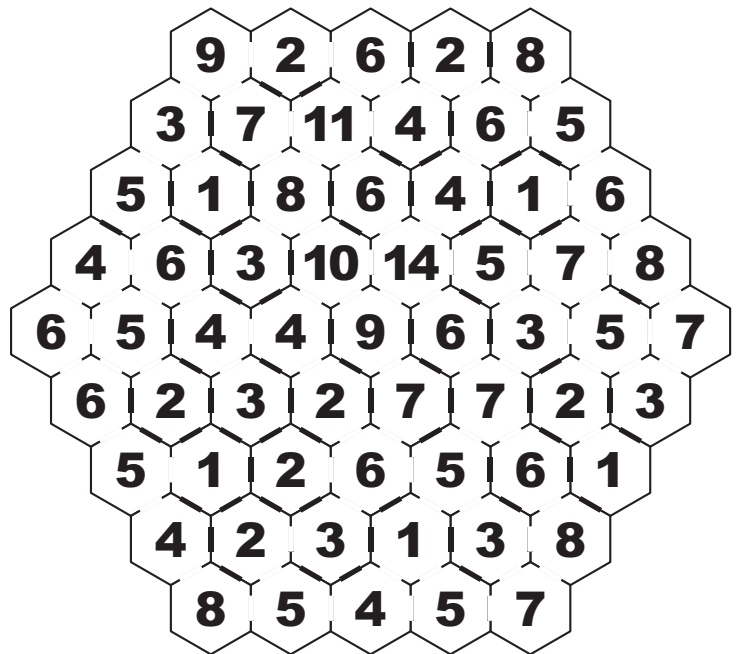
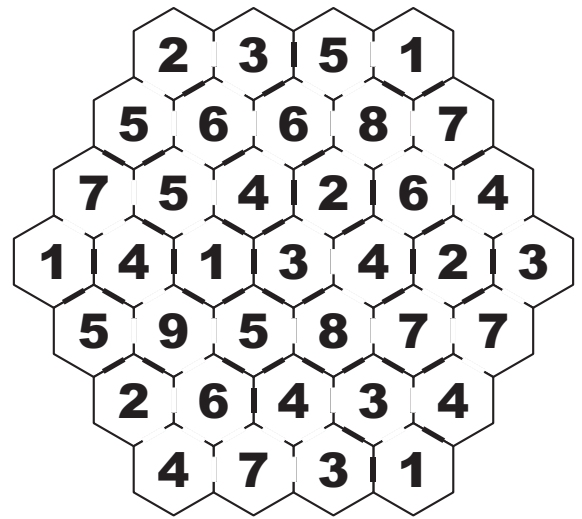
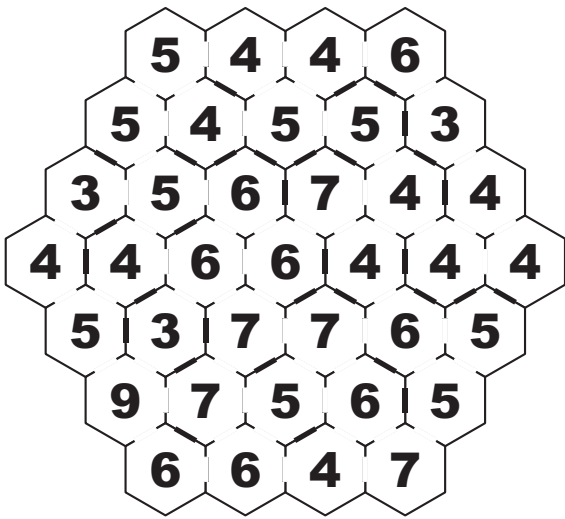


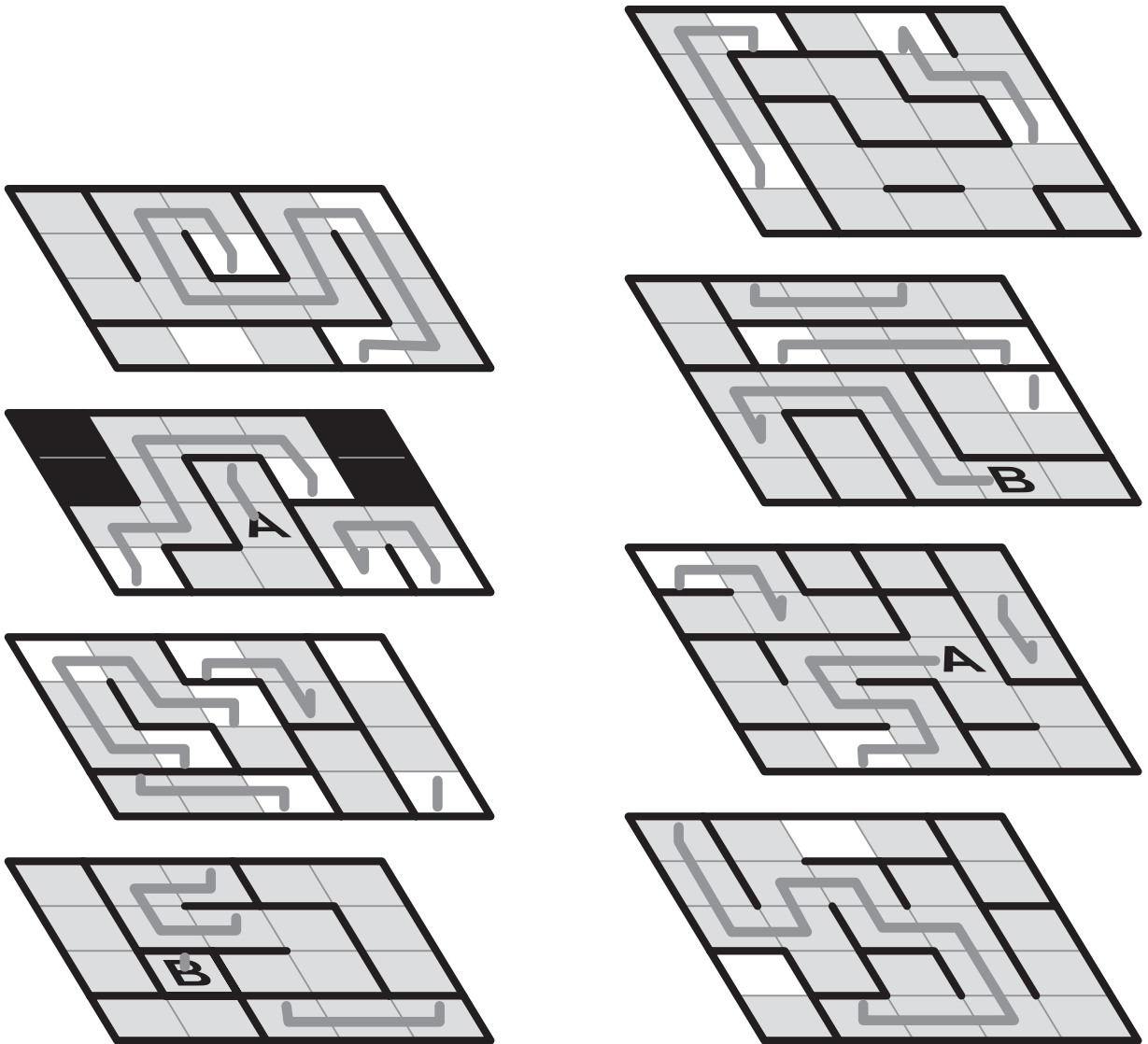
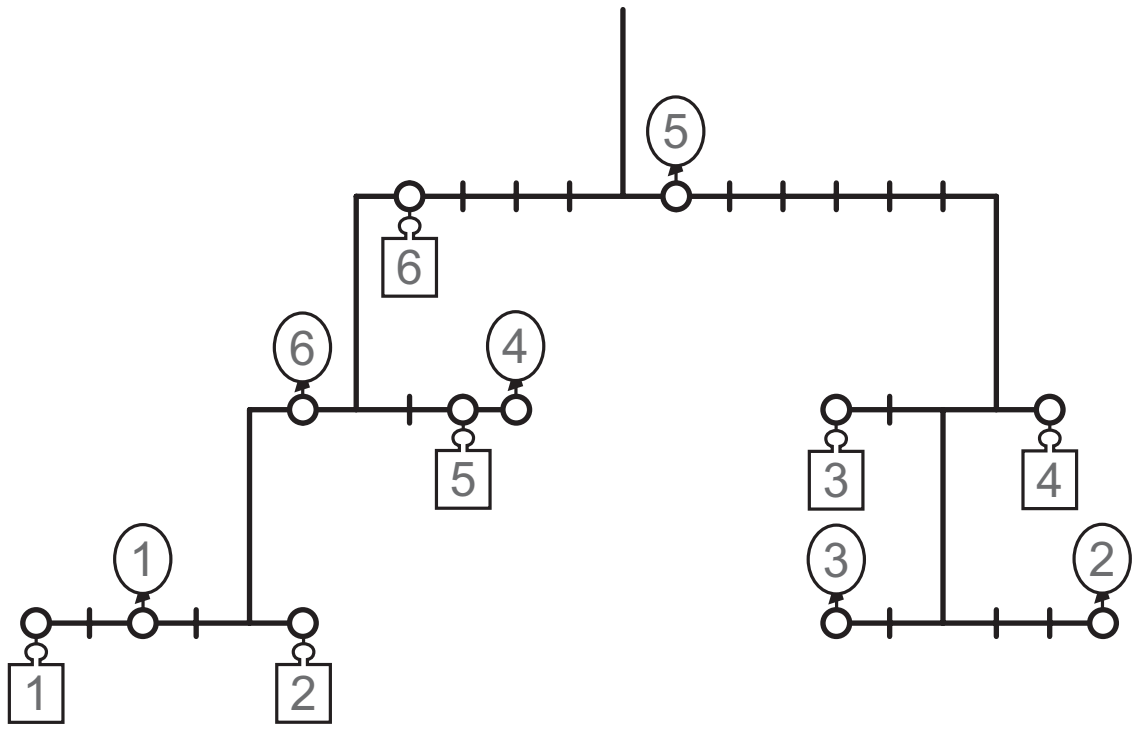


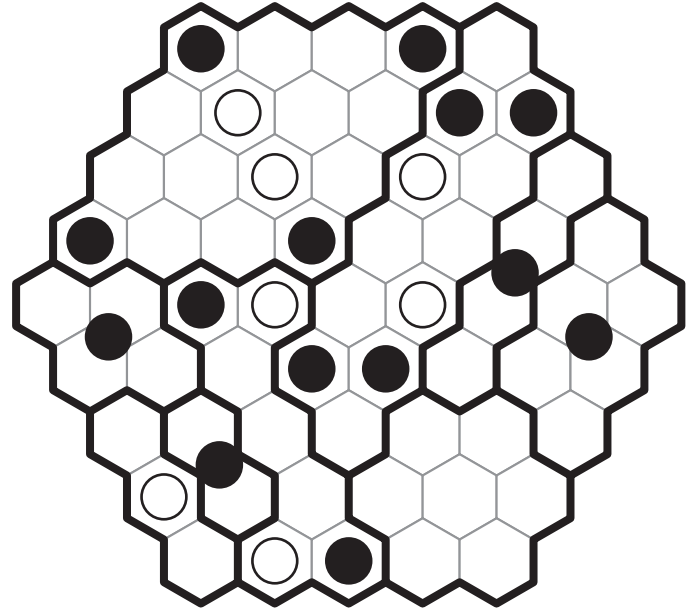
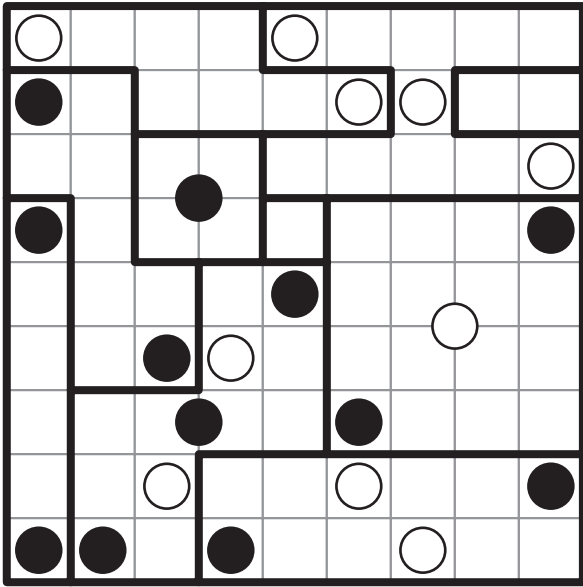












15	13	4	7
46	30	19	
10	8	5	3
31	24	33	
11	2	9	16
33	18	38	
14	6	1	12

13	10	7	11
	28	26	
9	8	3	5
32	16	14	
14	1	4	2
43	36	27	
12	16	15	6

20	21	10	9	24
	56	24	54	
19	23	2	3	18
	38	13		
11	12	1	7	6
	44	30		
13	14	17	5	4
74	69	53	32	
25	22	16	15	8