French Puzzle Champtionship – 2019 Finals

Round 1 – Classics – 45 minutes – 380 points + bonus

A competitor who submits correct answers to all puzzles before the end of the round will receive a bonus of 10 points for each remaining full minute.

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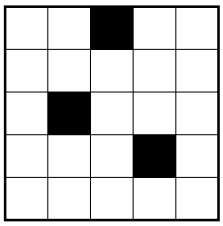
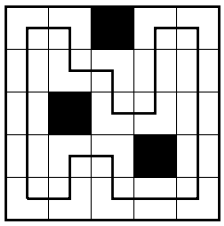
1. Simple Loop (15 points)

Draw a loop consisting of horizontal and vertical line segments connecting the centers of adjacent squares of the grid. The loop must not cross or overlap itself, and it must pass through all white squares of the grid.

Example:



Solution:



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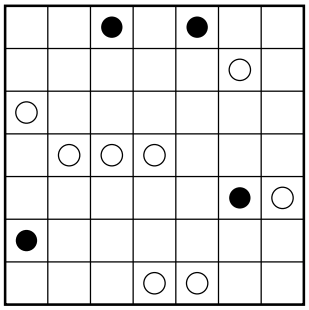
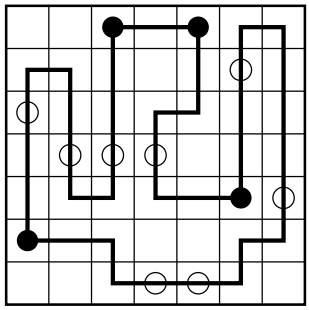
2. Masyu (15 points)

Draw a single closed loop passing through the centres of adjacent squares. The path must pass through every circle. When passing through a black circle, the path must make a 90^{o} turn and extend at least two squares in both directions. When passing through a white circle, the path must go straight and make a 90^{o} turn in at least one of the adjacent squares.

Example:



Solution:



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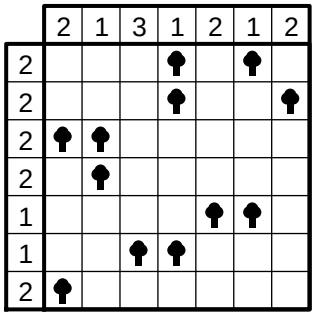
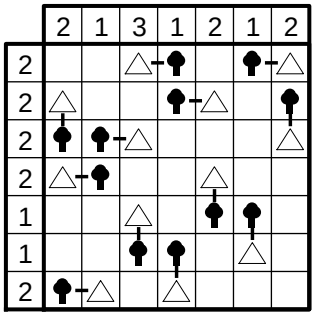
3. Tents (20 points)

Place tents in the grid, so that each tree is connected to exactly one tent, found in a horizontally or vertically adjacent square. Tents do not touch each other, not even diagonally. The numbers outside the grid reveal the total number of tents in the corresponding row or column.

Example:



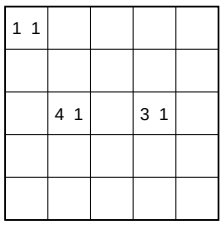
Solution:



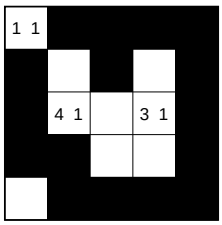
4. Tapa (20 points)

Paint some empty cells black to form a continuous wall of black cells (connected to each other horizontally or vertically). No 2x2 square can be completely black. The number(s) in a square indicate the lengths of the consecutive blocks of black cells among the adjacent squares (horizontally, vertically or diagonally): each number represents one block of black cells, and when there is more than one number in a square, the black cell blocks must be separated by at least one white cell. The order in which the numbers are given is irrelevant.

Example:



Solution:



5. Minesweeper (30 points)

Mines are hidden in the diagram, at most one per square. The numbers inside the diagram indicate the number of mines that can be found in the squares immediately adjacent to that square (horizontally, vertically, or diagonally). Squares with a number do not contain mines. Find the mines.

Example:

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

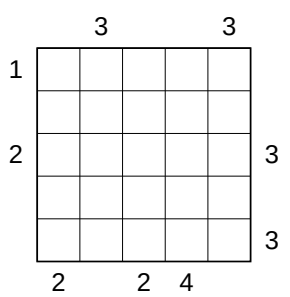
Solution:

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

6. Skyscrapers (30 points)

The grid represents a group of skyscrapers. Each row and column contains skyscrapers of different heights from 1 to 6. The numbers outside the grid indicate how many skyscrapers are visible from that direction (a building located behind a taller one in the same row is completely hidden).

Example: (de 1 à 5)



Solution:

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

7. ABCDE Partitioner (30 points)

Cut the grid along the dotted lines in order to form the complete pentomino set, in such a way that each pentomino contains each of the letters A, B, C, D and E. Pentominos can be reflected and rotated.

Example: (4 pentominos)

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

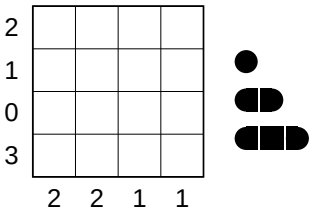
Solution:

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

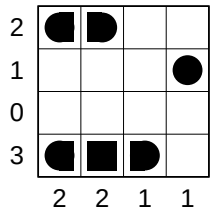
8. Battleships (40 points)

Locate the position of the given fleet (shown in the margin) in the grid. Each segment of a ship occupies a single cell. Ships are oriented either horizontally or vertically, and they do not touch each other, not even diagonally. The numbers outside the grid reveal the total number of ship segments that appear in each respective row or column.

Example:



Solution:



9. Scrabble (40 points)

Place the words from the list in the grid (across from left to right or down from top to bottom). All vowels A, E, I, O and U are already placed in the grid. The words are all interconnected, and no word other than those in the list can appear. (Note: the numbers in parentheses are for your information only and not part of the word list).

Example:

					E	E			
		E				E			
				E					
	E		E			E	E		
		E							

(3) THREE
(10) TEN
(11) ELEVEN
(12) TWELVE
(17) SEVENTEEN
(20) TWENTY

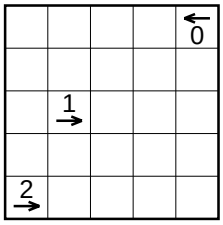
Solution:

		T	H	R	E	E			
		W				L			
		E		T	W	E	N	T	Y
		L		E		V			
S	E	V	E	N	T	E	E	N	
		E				N			

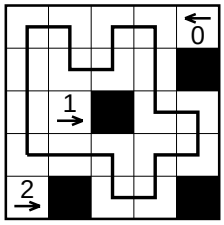
10. Yajilin (40 points)

Shade some cells black, and draw a loop formed by horizontal and vertical segments that passes through all squares of the grid except black cells or cells containing clues.
Each clue indicates the number of black cells in the direction pointed by the arrow; cells with clues cannot be shaded black, and black cells may not touch each other by an edge.

Example:



Solution:



11. Hitori (50 points)

Black out some of the numbers in the grid so that each row and each column contains only different digits. Black squares must not touch horizontally or vertically, and the remaining squares must all be connected to each other.

Example:

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

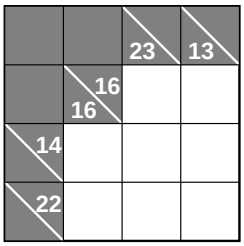
Solution:

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

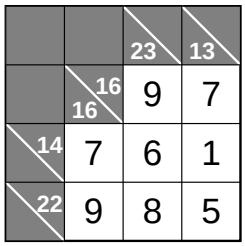
12. Kakuro (50 points)

Enter a single digit from 1 to 9 into each empty square of the grid, so that the digits in each series of white squares add up to the number given in the gray-colored cell at the top or to the left. A number above a diagonal bar refers to the digits to be filled in to the right of that cell. A number under a diagonal refers to the digits to be filled in below that cell. The digit 0 is not used, and no digit is ever repeated within a group.

Example:



Solution:



French Puzzle Champtionship – 2019 Finals

Round 2 – Almost classics – 50 minutes – 400 points + bonus

A competitor who submits correct answers to all puzzles before the end of the round will receive a bonus of 10 points for each remaining full minute.

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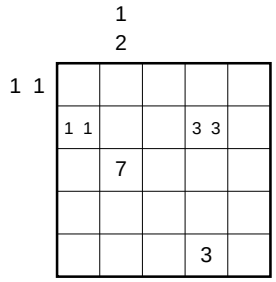
1. Tapa Paint (25 points)

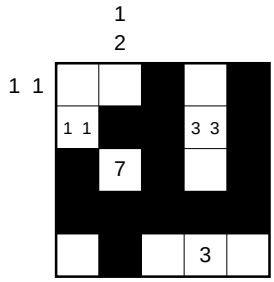
Paint some empty cells black to form a continuous wall of black cells (connected to each other horizontally or vertically). No 2x2 square can be completely black. The number(s) in a square indicate the lengths of the consecutive blocks of black cells among the adjacent squares (horizontally, vertically or diagonally): each number represents one block of black cells, and when there is more than one number in a square, the black cell blocks must be separated by at least one white cell. The order in which the numbers are given is irrelevant.

The numbers outside the grid indicate the lengths of the consecutive blocks of black cells in the corresponding row or column, in the order in which they appear in the grid. When there is more than one number, the black cell blocks must be separated by at least one white cell.

Example:



Solution:



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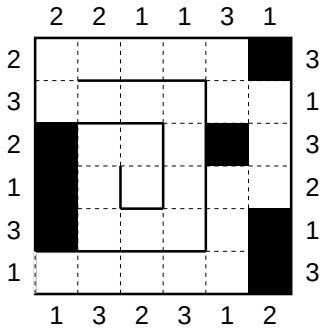
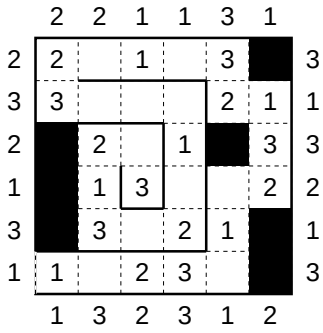
2. Spiral End View (25 points)

Place digits 1, 2 and 3 into the grid in such a way that each digit appears exactly once in each row and column. Going along the highlighted path from the edge of the grid to its center, one should read in order: 1, 2, 3, 1, 2, 3, etc.
The clues outside the grid indicate the first digit seen from that direction in the corresponding row or column.

Example:



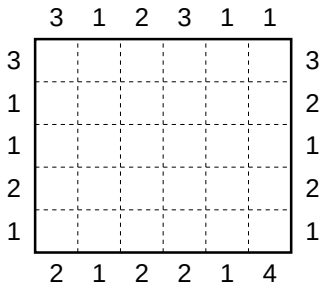
Solution:



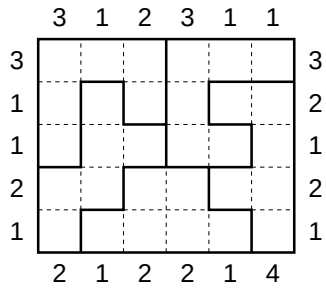
3. Equal Cut (40 points)

Split the grid into regions of equal areas. The numbers outside the grid indicate the distance from the edge of the grid to the first boundary encountered from that direction.

Example:



Solution:

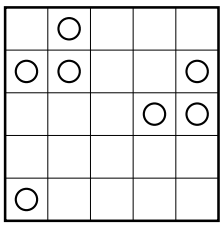


4. Colorblind Masyu (40 points)

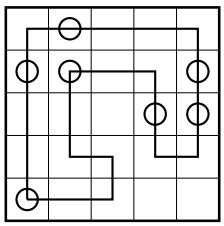
Draw a single closed loop passing through the centres of adjacent squares. The path must go through every circle.

When passing through a circle, if the path goes straight then it must make a 90^{o} turn in at least one of the adjacent squares, whereas if the path makes a turn on the circle then it must go straight in the two immediately adjacent squares.

Example:



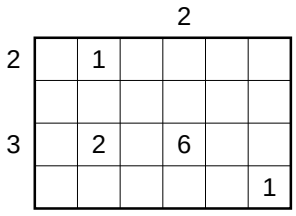
Solution:



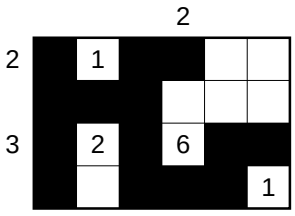
5. Nurikabe Count (45 points)

Shade some empty cells black so that the grid is divided into white areas (islands), separated by blackened cells which are linked together to form a continuous sea. Each island should contain exactly one of the given numbers, which is equal to its area. The islands may touch each other only diagonally. The sea cannot form any 2x2 square. *The numbers outside the grid indicate the number of blocks of consecutive black cells present in the corresponding row or column.*

Example:



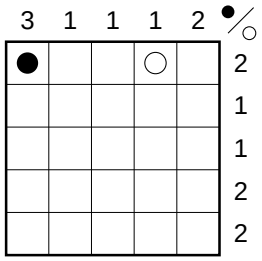
Solution:



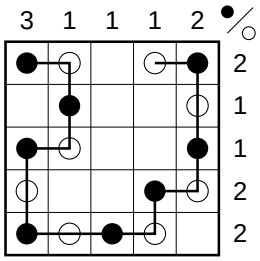
6. Striped Snake (50 points)

Draw a snake consisting of an alternating sequence of black and white circles, each occupying one square of the grid. The two extremities of the snake are given. The path of the snake cannot touch itself, not even diagonally. The clues above the grid indicate the number of black circles in each column, while the clues at the right of the grid indicate the number of white circles in each row.

Example:



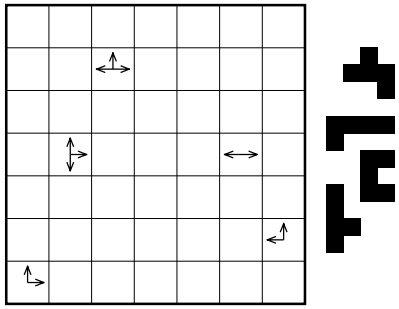
Solution:



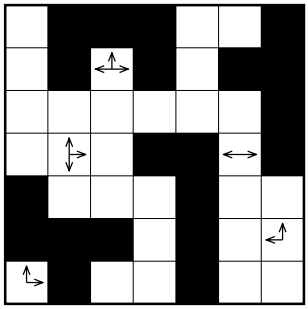
7. Pentopia (50 points)

Place the given set of pentominoes into the grid so that they don't touch each other, not even diagonally. Pentominoes can be rotated and reflected. Clues in the grid indicate the direction(s) in which the closest cells occupied by pentominoes can be found when looking horizontally or vertically from that cell. Pentominoes cannot cover clue cells.

Example: (4 pentominos)



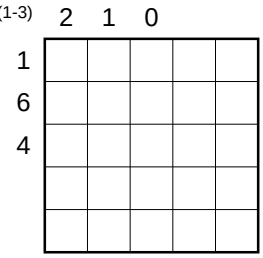
Solution:



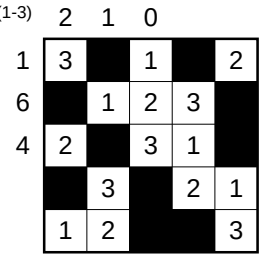
8. Doppelblock (60+65 points)

Color two squares black in each row and column of the grid, and place digits from 1 to N-2 (where N is the size of the grid) into the remaining cells, so that each digit appears exactly once in each row and column. The numbers outside the grid indicate the sum of the digits in between the two black squares in that row or column.

Example:



Solution:



French Puzzle Champtionship – 2019 Finals

Round 3 – Four in one – 45 minutes – 380 points + bonus

A competitor who submits correct answers to all puzzles before the end of the round will receive a bonus of 10 points for each remaining full minute.

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1. Yajilin+Striped Snake+Simple Loop+Masyu (4*25 points)

Draw a single closed loop consisting of horizontal and vertical line segments connecting the centers of adjacent squares of the grid. The loop must not cross or overlap itself. The portion of the loop which lies inside each of the four smaller grids consists of a single connected path. *Each grid separately may have more than one solution. Credit will only be given for the unique solution consistent with the other grids.* Specific rules for each grid:

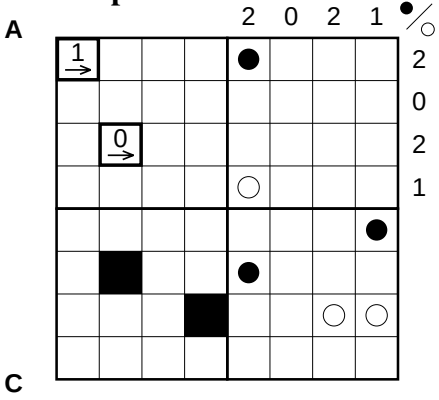
A: Shade some cells black, and draw a path that passes through all remaining empty squares of the grid. Each clue indicates the number of black cells in the direction pointed by the arrow; cells with clues cannot be shaded black, and black cells may not touch each other by an edge.

B: Draw a snake consisting of an alternating sequence of black and white circles, each occupying one square of the grid. The two extremities of the snake are given. The path of the snake cannot touch itself, not even diagonally. The clues above the grid indicate the number of black circles in each column, while the clues to the right of the grid indicate the number of white circles in each row.

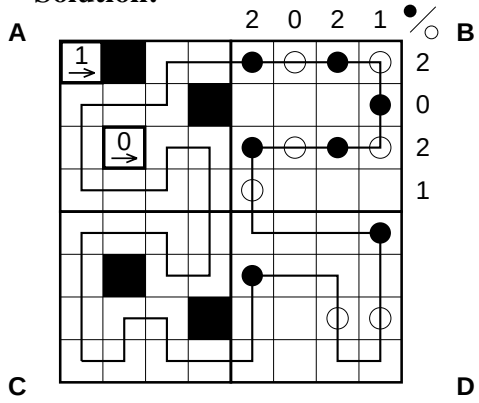
C: Draw a path that passes through all white squares in the grid.

D: Draw a path that passes through every circle. When passing through a black circle, the path must make a 90^{o} turn and extend at least two squares in both directions. When passing through a white circle, the path must go straight and make a 90^{o} turn in at least one of the adjacent squares. (The squares adjacent to the circle along the path must also lie inside grid D).

Example:



Solution:



2. Nurikabe+Skyscrapers+Tents+Minesweeper (4*25 points)

Fill in the four grids so that, when two rows or columns are facing each other in adjacent grids, the value of the clue that belongs in the margin between the two grids (whether given or not) must always be the same for both grids. *Each grid separately may have more than one solution. Credit will only be given for the unique solution consistent with the other grids.*

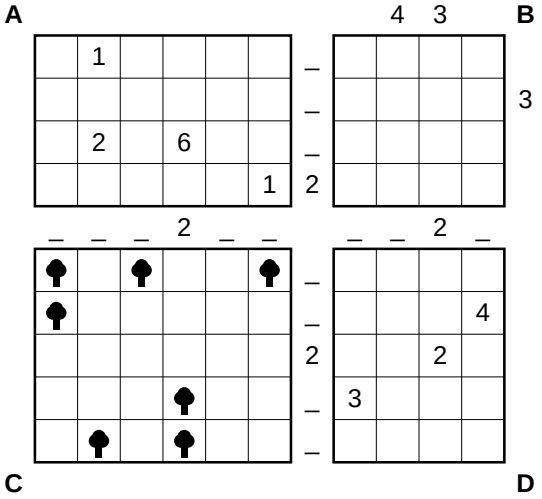
A: Shade some empty cells black so that the grid is divided into white areas (islands), separated by blackened cells which are linked together to form a continuous sea. Each island should contain exactly one of the given numbers, which is equal to its area. The islands may touch each other only diagonally. The sea cannot form any 2x2 square. *The numbers outside the grid indicate the number of blocks of consecutive black cells present in the corresponding row or column.*

B: The grid represents a group of skyscrapers. Each row and column contains skyscrapers of different heights from 1 to 6. *The numbers outside the grid indicate how many skyscrapers are visible from that direction* (a building located behind a taller one in the same row is completely hidden).

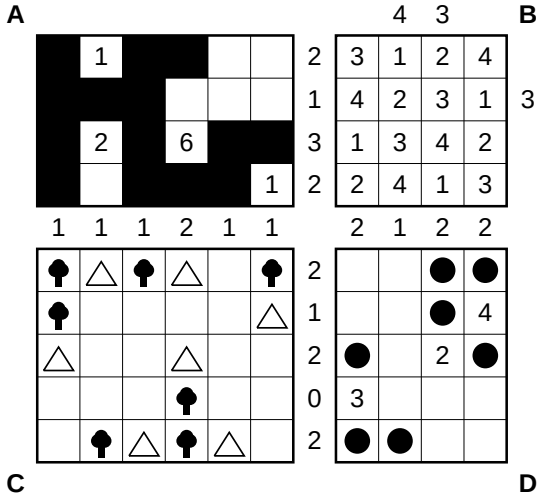
C: Place tents in the grid, so that each tree is connected to exactly one tent, found in a horizontally or vertically adjacent square. Tents do not touch each other, not even diagonally. *The numbers outside the grid give the total number of tents in each row or column.*

D: Mines are hidden in the diagram, at most one per square. The numbers inside the diagram indicate the number of mines that can be found in the squares immediately adjacent to that square (horizontally, vertically, or diagonally). Squares with a number do not contain mines. *The numbers outside the grid give the number of mines in each row or column.*

Example:



Solution:



3. Hitori+Battleships+Spiral End View+Equal Cut (4*45 points)

Fill in the four grids so that, when two rows or columns are facing each other in adjacent grids, the value of the clue that belongs in the margin between the two grids (whether given or not) must always be the same for both grids. *Each grid separately may have more than one solution. Credit will only be given for the unique solution consistent with the other grids.*

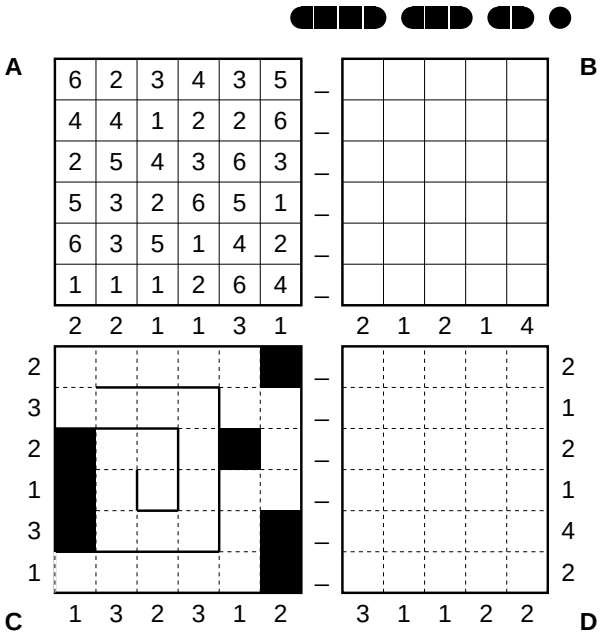
A: Black out some of the numbers in the grid so that each row and each column contains only different digits. Black squares must not touch horizontally or vertically, and the remaining squares must all be connected to each other. *The numbers outside the grid indicate the number of black squares in each row or column.*

B: Place the given fleet (shown in the margin) into the grid. Each segment of a ship occupies a single cell. Ships are oriented either horizontally or vertically, and they do not touch each other, not even diagonally. *The numbers outside the grid reveal the total number of ship segments that appear in each row or column.*

C: Place digits 1, 2 and 3 into the grid in such a way that each digit appears exactly once in each row and column. Going along the highlighted path from the edge of the grid to its center, one should read in order: 1, 2, 3, 1, 2, 3, etc. *The clues outside the grid indicate the first digit seen from that direction in the corresponding row or column.*

D: Split the grid into regions of equal areas. *The numbers outside the grid indicate the distance from the edge of the grid to the first boundary encountered from that direction.*

Example:



Solution: