

# WPF PUZZLE GP 2017 COMPETITION BOOKLET

Host Country: Serbia

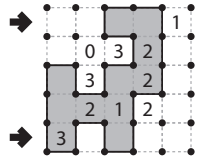
Čedomir Milanović, Nikola Živanović, Zoran Tanasić

Special Notes: None.

**A1. Slitherlink [Nikola Živanović] (12 points)**

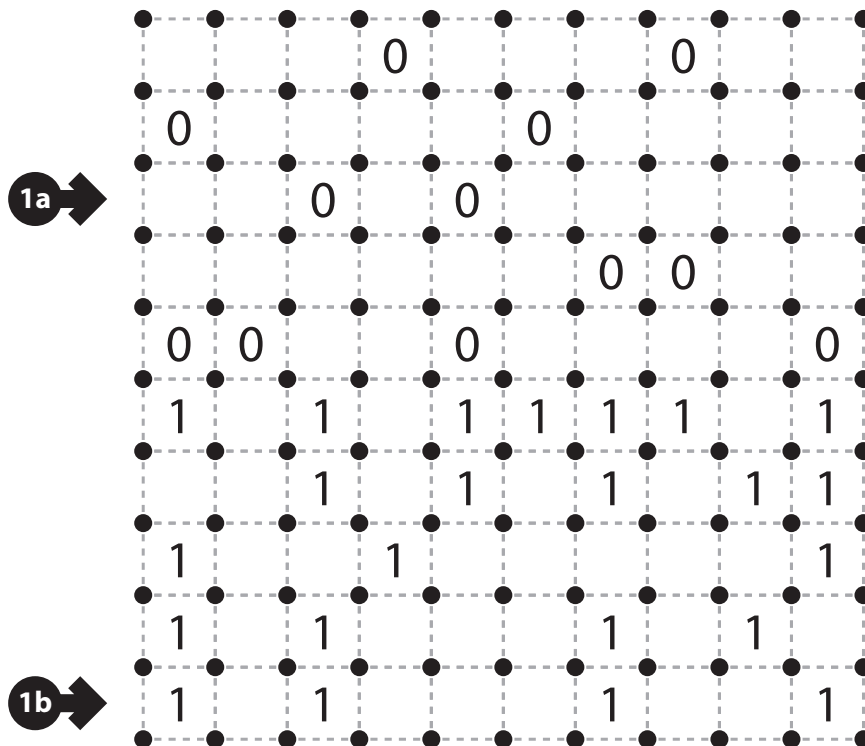
Draw a single, non-intersecting loop that only consists of horizontal and vertical segments between the dots. A number inside a cell indicates how many of the edges of that cell are part of the loop.

You may only draw on the grid along the dotted lines.



**Answer:** For each designated row, enter the lengths (number of cells) of each segment of cells *inside* the loop, from left to right. Use only the last digit for two digit numbers; e.g., use '0' for a segment of length 10. If there are no cells inside the loop for a row, enter the single digit '0'.

**Example Answer:** 2, 11

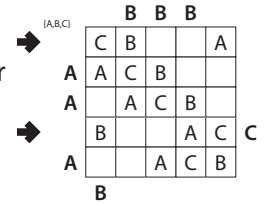






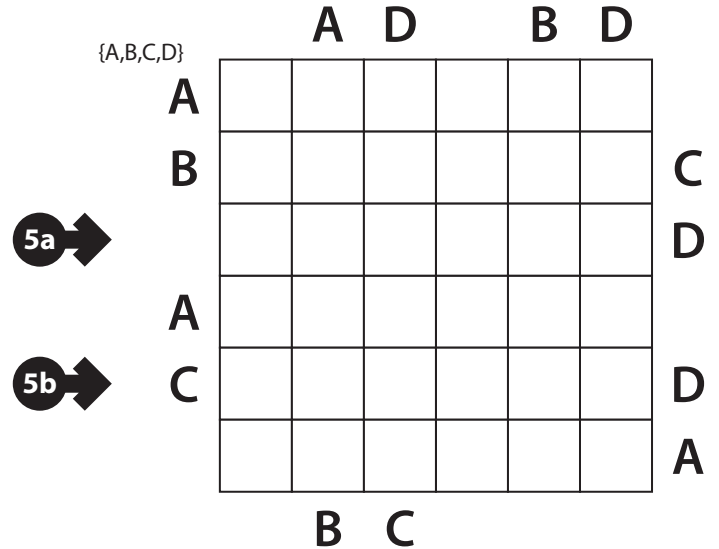
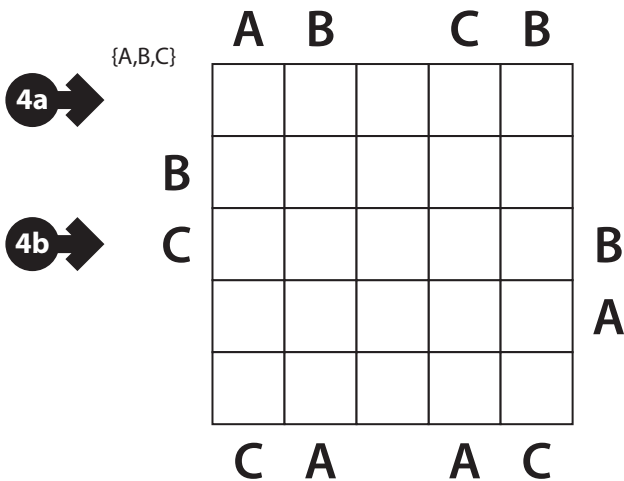
**A4-5. Easy As... [Čedomir Milanović] (7, 28 points)**

Place letters of the specified list into some cells, no more than one letter per cell, so that each letter appears exactly once in each row and column. The letters outside the grid indicate the first letter that can be seen in the respective row or column from the respective direction.



**Answer:** For each designated row, enter its contents. Do *not* include any letters outside the grid. Use 'X' for an empty cell.

**Example Answer:** CBXXA , BXXAC



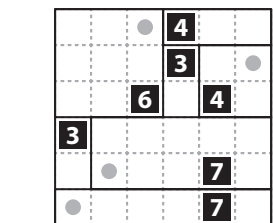
**A6. Recto [Zoran Tanasić] (10 points)**

Divide the grid into rectangles along the grid lines such that each cell is in exactly one rectangle and each rectangle contains exactly one given number. The number must equal the sum of the height and width of the rectangle (in cells).

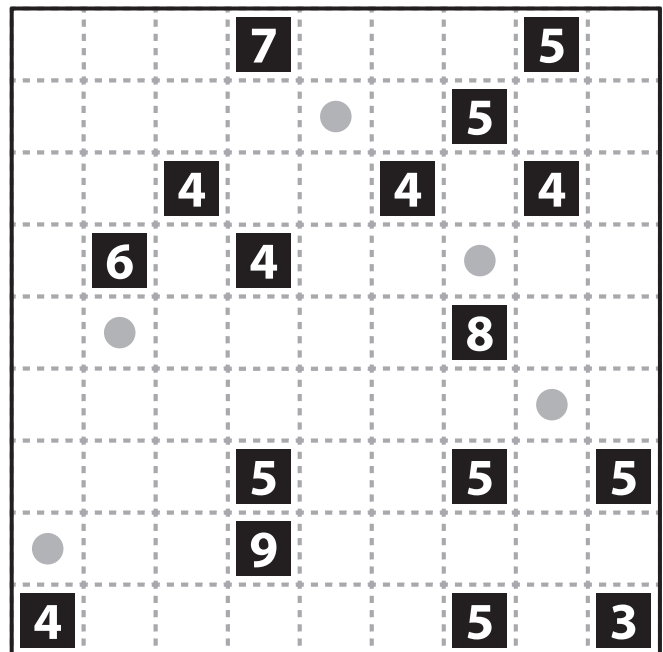
The dots in cells are only used for entering your answers.

**Answer:** Enter the number in the rectangle each dot is in, reading the dots from left to right. (Ignore which row the dots are in.) Use only the last digit for two-digit numbers; e.g., use '0' for a rectangle with a 10 inside it.

**Example Answer:** 7764



→ (7) (7) (6) (4)

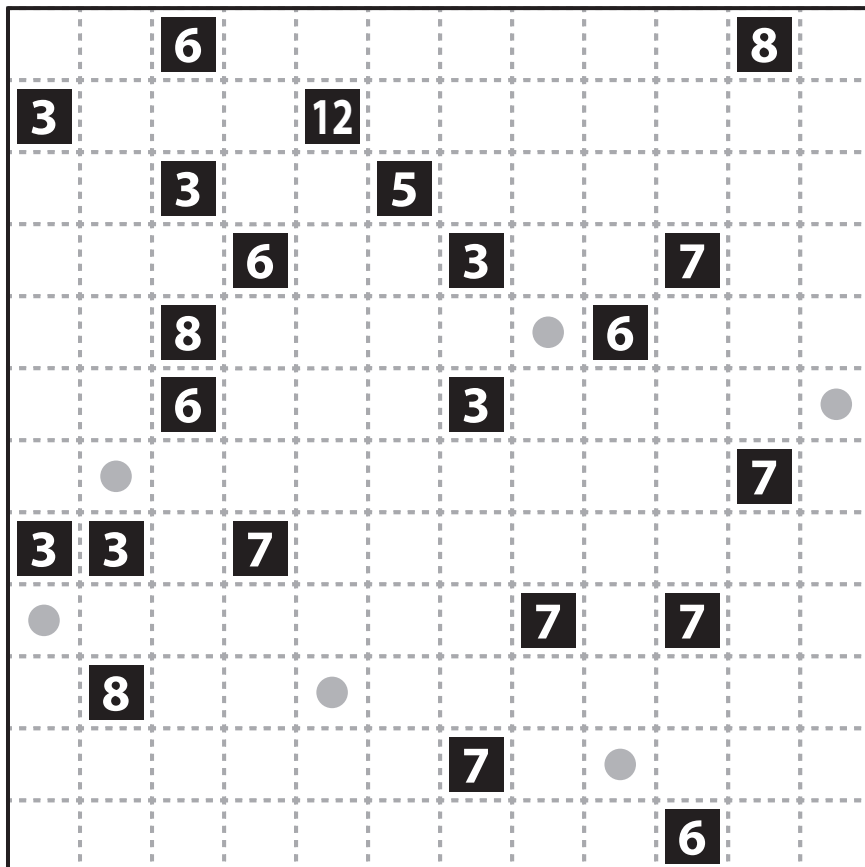
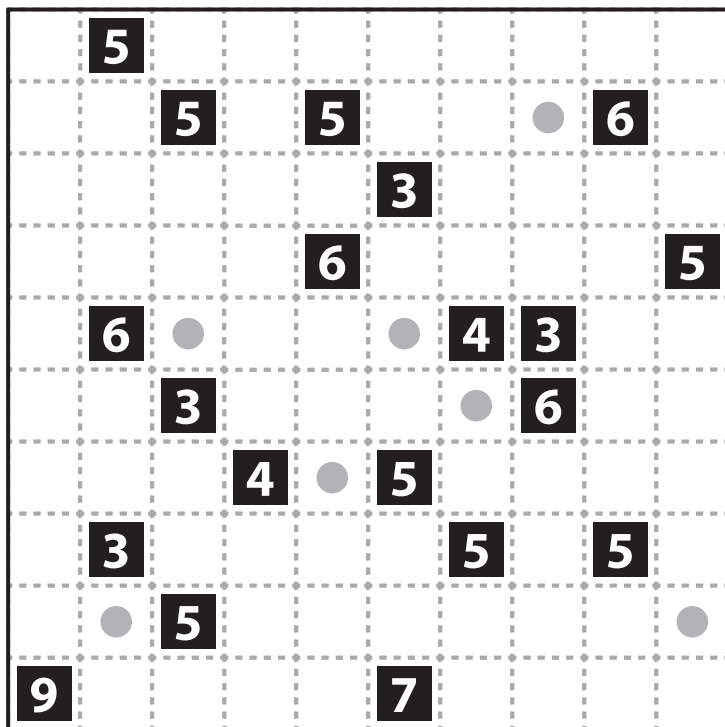
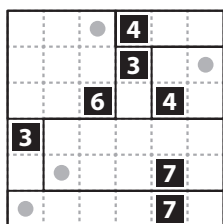




**A7-8. Recto [Zoran Tanasić] (21, 39 points)**

**Answer:** Enter the number in the rectangle each dot is in, reading the dots from left to right. (Ignore which row the dots are in.) Use only the last digit for two-digit numbers; e.g., use '0' for a rectangle with a 10 inside it.

**Example Answer:** 7764





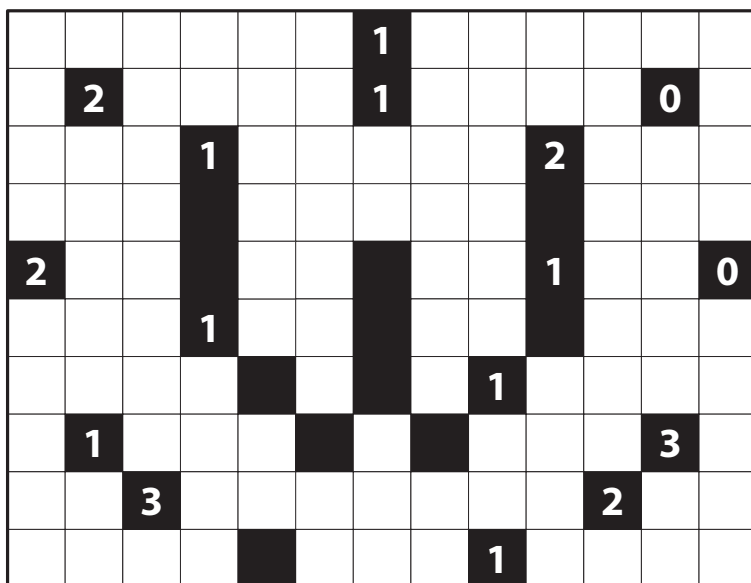
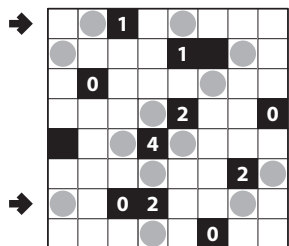
### A9-11. Bulbs (Akari) [Čedomir Milanović] (22, 19, 41 points)

Locate some "light bulbs" in the grid such that every white cell is "lit up". Each bulb occupies a single white cell, and lights up its own cell, as well as white cells in the four orthogonal directions until the light beam encounters a black square or the edge of the grid. A bulb may not illuminate another light bulb. All white cells must be lit up by at least one bulb. A given number in a black cell indicates how many cells orthogonally adjacent to it are occupied by bulbs.

**Answer:** For each indicated row, enter its contents from left to right. Use 'O' for a cell with a bulb and 'X' for a cell without a bulb. Ignore cell colors and numbers when entering your answer.

#### Example Answer:

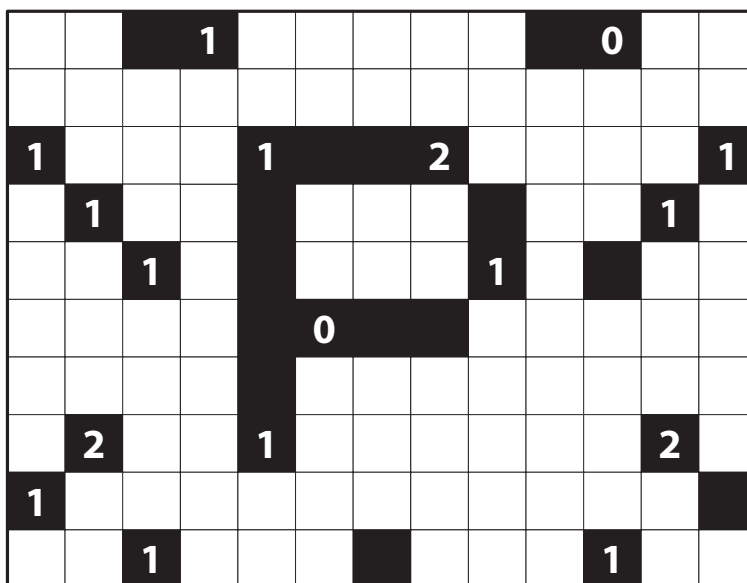
XOXXOXXX, OXXXXXOX



9a →

9b →

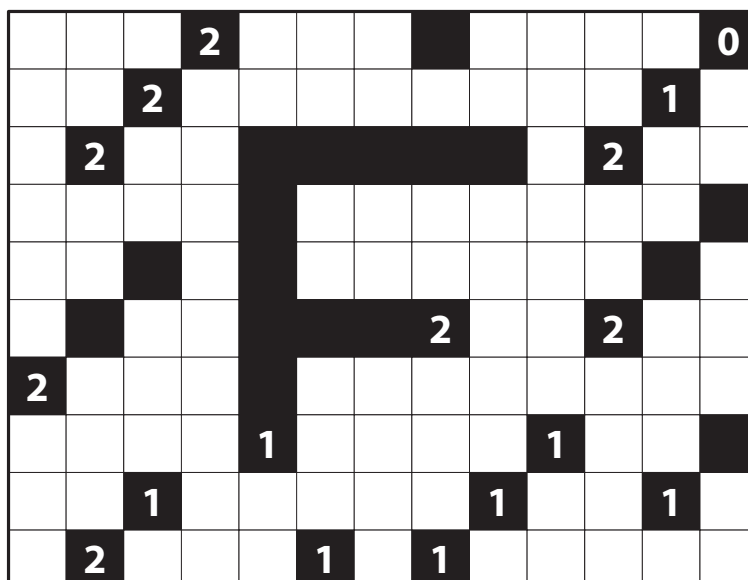
10a →



10b →

10c →

11a →



11b →

11c →



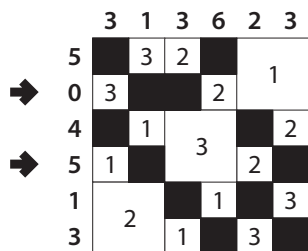
**A12-14. Irregular Doppelblock [Nikola Živanović] (17, 35, 89 points)**

Blacken or place a number from 1 to X into each cell so that each row and column has exactly two blackened cells and one of each number. (X is two less than the number of cells in each row.) The numbers on the left and top of the grid represent the sum of all the numbers between the two blackened cells in that respective row or column (if there are no numbers between the blackened cells, the sum is 0). A row or column without a number outside the grid may have any sum.

Some cells have shapes that span more than one row or column.

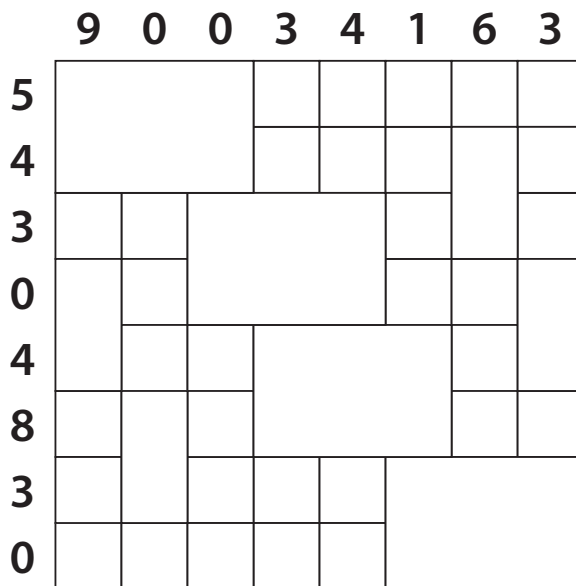
**Answer:** For each designated row, enter its contents. Use 'x' for a blackened cell. Do *not* include any numbers outside the grid.

**Example Answer:** 3XX21, 1X32X



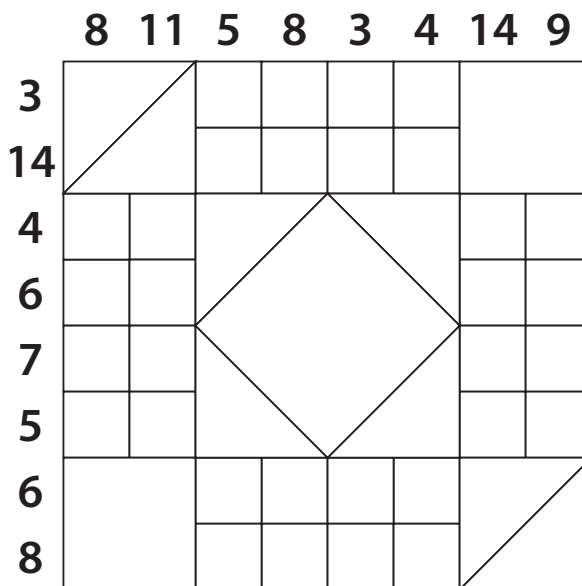
12a →

12b →



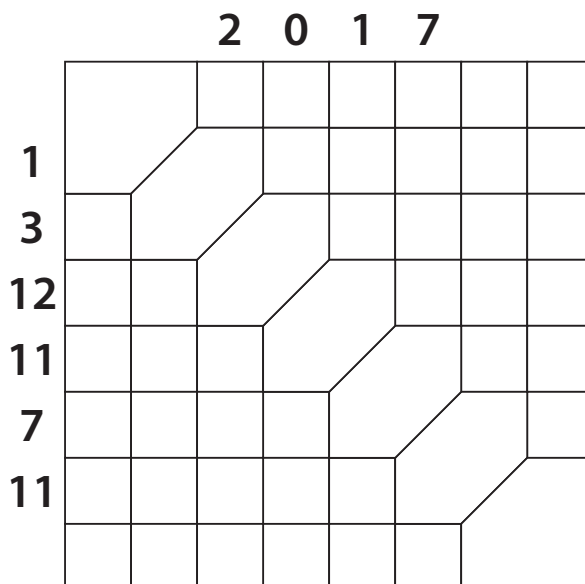
13a →

13b →



14a →

14b →





**A15-16. All or One [Zoran Tanasić] (23, 59 points)**

Place a digit from 1 to 3 into each cell so that each bold region either contains all the same digit or all different digits. If two cells are separated by a bold region boundary, they must contain different digits. Some digits may already be filled in the grid.



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



**Answer:** For each designated row, enter its contents (including any given digits).

**Example Answer:** 323123, 122232

15a →

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

15b →

16a →

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

16b →