

# WPF PUZZLE GP 2017 COMPETITION BOOKLET

Host Country: Netherlands

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Special Notes: None.

## B1-2. Easy As... (31, 17 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

		B	B	B	
→	(A,B,C)	C	B		A
A		A	C	B	
A		A	C	B	
→		B		A	C
A			A	C	B
	B				

1a →

				C	B	
{A,B,C,D}	C					
	C					
						A
	C					
	D		D			B

1b →

2a →

2b →

				A	A		C
{A,B,C,D}	B						
	C						
							D
							B
							C
	D						
				C	D		A



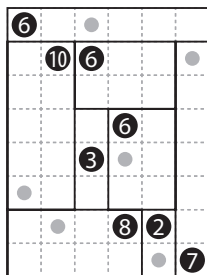
### B3-4. Shikaku (18, 10 points)

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 area of the rectangle (in cells).

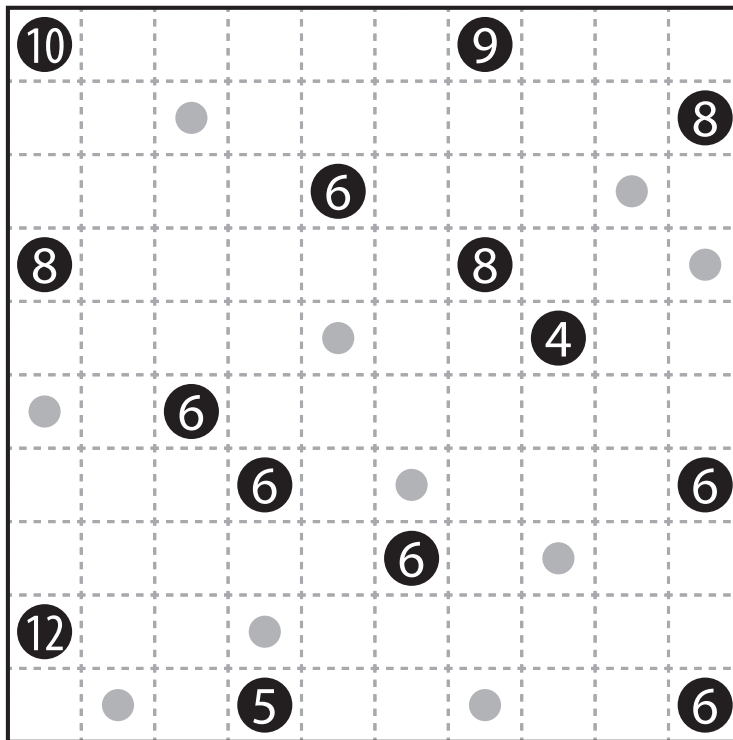
The dots in cells are only used for entering your answers.

**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.

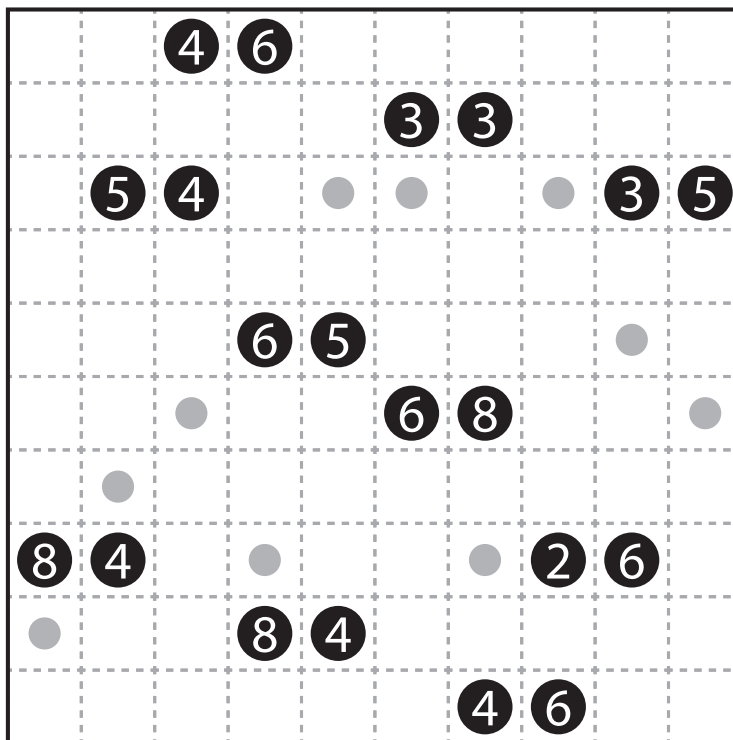
**Example Answer:** 086627



→ 0 8 6 6 2 7



3 →



4 →





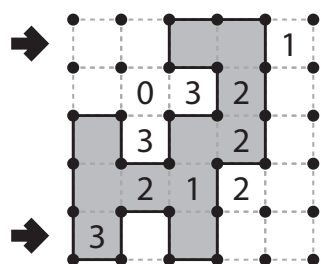
**B7-8. Slitherlink (33, 38 points)**

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

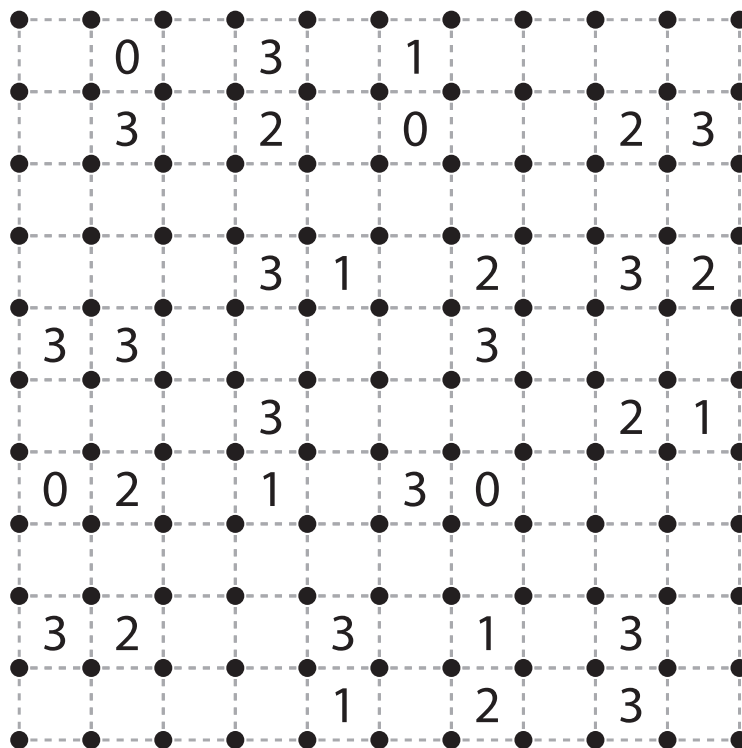
You may only draw on the grid along the dotted lines.

**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

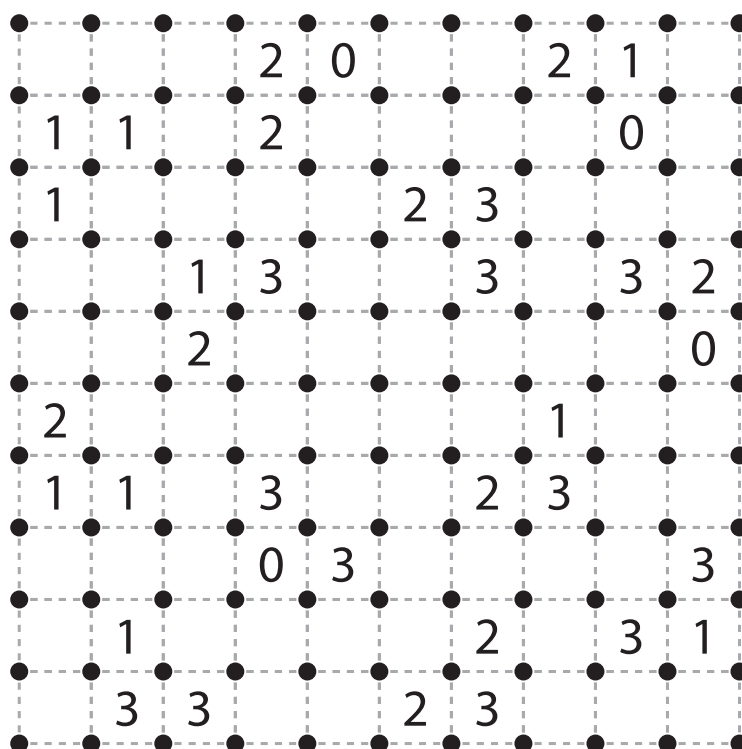


7a →



7b →

8a →



8b →



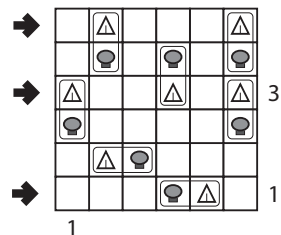
### B9-10. Tents and Trees (22, 71 points)

Place tents into the empty cells in the grid, at most one tent per cell. Tents may not be in adjacent cells, not even diagonally. There must be the same number of tents and trees. The tents and trees must match up in such a way that each tent is orthogonally adjacent to its own tree. (It is permissible for a tree to be adjacent to a tent that matches with another tree.)

Some rows and columns may be numbered. A number indicates the number of tents that must be in that row or column.

**Answer:** For each designated row, enter the length (number of cells) of empty segments (no trees and no tents) from left to right. If every cell in the row is occupied (by a tent or a tree), enter a single digit '0'. Use only the last digit for two-digit numbers; e.g., use '0' an empty segment of length 10.

**Example Answer:** 13, 21, 31



	3	1	3	1	0	4	1	2	1	2
1								🌲		
1			🌲				🌲			
9a → 2		🌲				🌲				
2	🌲								🌲	
2				🌲				🌲		
2			🌲				🌲			
9b → 3		🌲								
1					🌲					🌲
1				🌲					🌲	
3			🌲					🌲		

	2	2	1	2	2	2	1	3	1	2
					🌲					
			🌲						🌲	
								🌲		
10a →		🌲			🌲					
		🌲			🌲					
10b →									🌲	
	🌲					🌲				🌲
		🌲			🌲					
			🌲						🌲	
			🌲					🌲		



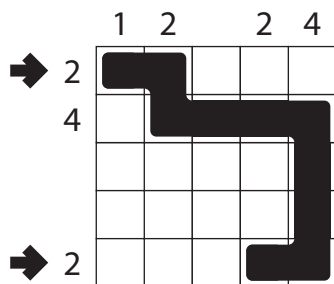
### B11-12. Snake (52, 64 points)

Locate a "snake" in the grid. The snake is a path that starts in a cell, goes through some number of cells orthogonally, and ends in a cell. Each cell is used at most once by the snake. The snake may not touch itself, not even diagonally. (In other words, if two cells in the snake touch orthogonally, then they must be exactly one cell apart along the path of the snake, and if two cells in the snake touch diagonally, then they must be exactly two cells apart along the path of the snake.) Numbers outside the grid, if given, indicate how many cells in that row or column are occupied by the snake.

The two cells containing the ends of the snake are shaded.

**Answer:** For each designated row, enter its contents. Use O for a cell occupied by the snake and X for a cell not occupied by the snake. You may reverse the two symbols, as long as you are consistent.

**Example Answer:** OOXXX , XXXOO



11a →

11b →

	3	3	6	4	5	7	2	6	5	6
5										
4										
5	■									
4										
5										
4										
5										
4										■
5										
6										

12a →

12b →

	5	8	6	6	4
9					■
7					
7					
5					
3					
				■	

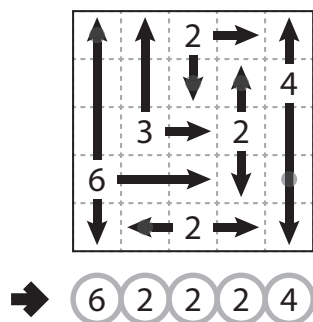
**B13-14. Four Winds (93, 59 points)**

Draw arrows in the empty cells in the grid. Arrows can only go in the four standard directions and must begin at the edge of a cell with a number. Each empty cell must be covered by exactly one arrow. Each number indicates the total length of all the arrows that begin at an edge next to that number's cell.

*The dots in cells and circles underneath the grid are only used for entering your answers.*

**Answer:** Enter the number whose arrow covers the dot, 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 number labeled 10.

**Example Answer:** 62224



	3				2		
		•		6			6
2				6		•	
		7				5	•
			5				4
	3			•	2		
			•	4		•	2
4				•	5		
•	•	3				4	
			4				3

**13** → ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

			3				2
6					5		
		6		•		6	•
			•	3	•		2
	2				5		•
•		•	4		•		4
3	•				5	•	
		4				3	
				4			4
	5				4		

**14** → ○ ○ ○ ○ ○ ○ ○ ○ ○ ○