



WPF
SUDOKU/PUZZLE
GRAND PRIX
2015

WPF PUZZLE GP 2015 INSTRUCTION **BOOKLET**

ROUND **3**

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Organised by



WORLD PUZZLE FEDERATION

**1-6. Tapa (5, 13, 13, 18, 33, 45 points)**

Shade some empty cells black (cells with numbers cannot be shaded). All black cells connect along edges to create a single connected region. (It is permissible for the region to touch itself at a corner, but touching at a corner does not connect the region.) No 2x2 group of squares can be entirely shaded black.

Numbers in a cell indicate the lengths of contiguous black cell groups along the "ring" of (up to) 8 cells touching that cell. (If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the black cell groups.) The numbers are given in *no particular order*. As a special case, if the number given in a cell is a zero (0), it means that none of the cells around that cell may be shaded black.

Answer: For each designated row, enter the length in cells of each of the shaded segments from left to right. Use only the last digit for two-digit numbers; e.g., use '0' for a segment of size 10. If there are no black cells in the row, enter a single digit '0'.

Example Answer: 212, 231

→

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

→

→

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

→

7-12. Skyscrapers (7, 5, 23, 17, 18, 41 points)

Place a digit from 1 to X into each cell so that each digit appears exactly once in each row and column. (X is the number of cells in each row.) The digits represent skyscrapers of their respective heights. The numbers outside the grid indicate how many skyscrapers can be seen in the respective row or column from the respective direction (smaller skyscrapers are hidden behind higher ones).

Answer: For each designated row, enter its contents. Do *not* include any numbers outside the grid.

Example Answer: 45312, 23541

→

4					
3					

→

5 3
3
4 2

→

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

→

5 3
3
4 2

**13-18. Scrabble (7, 4, 9, 9, 10, 15 points)**

Put at most one letter into each cell so that the given words can be read either across (left-to-right) or down (top-to-bottom) in consecutive cells in the grid. Every word must appear in the grid exactly once, and no other words may appear in the grid (that is, if two cells are filled and are adjacent, then there must be a word that uses both of them). Every word must have either a blank cell or the edge of the grid before and after it. All letters must be (orthogonally) connected in a single group.

Each grid has a "special letter": every instance of that special letter is already placed for you (so you may not put that letter into any more cells).

Answer: For each designated row, enter its contents from left to right, ignoring any blank cells. If all cells in the row are blank, enter a single letter 'X'.

Example Answer: CYPRUSO, ONMUO, AUR, GA

→

A								
		A						
						A		
					A			A
A								
							A	
						A		

A U S T R I A
C R O A T I A
C Y P R U S
G E O R G I A
I C E L A N D
L U X E M B O U R G
M A C E D O N I A
M O L D O V A
S P A I N

→

M								
A		S		L				M
C	Y	P	R	U	S			O
E		A		X				L
D		I	C	E	L	A	N	D
O		N		M		U		O
N				B		S		V
I		C	R	O	A	T	I	A
A				U		R		
		G	E	O	R	G	I	A
				G		A		

19-24. Magic Summer (2, 7, 6, 11, 23, 39 points)

Place a digit from 1 to X into some cells, at most one digit per cell, so that each digit in the range appears exactly once in each row and column. (The range of permitted digits will be provided to you above the grid.) The digits in the grid connect with horizontally and vertically adjacent digits to form multi-digit numbers. The numbers outside the grid indicate the sums of the numbers appearing in the respective rows and columns, where empty cells separate numbers.

Answer: For each designated row, enter its contents. Use "X" for empty cells.

Example Answer: 1X4X32, 41X2X3

→

37
46
424
19
46
3142

37 37 28 37 37 145

→

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

37
46
424
19
46
3142

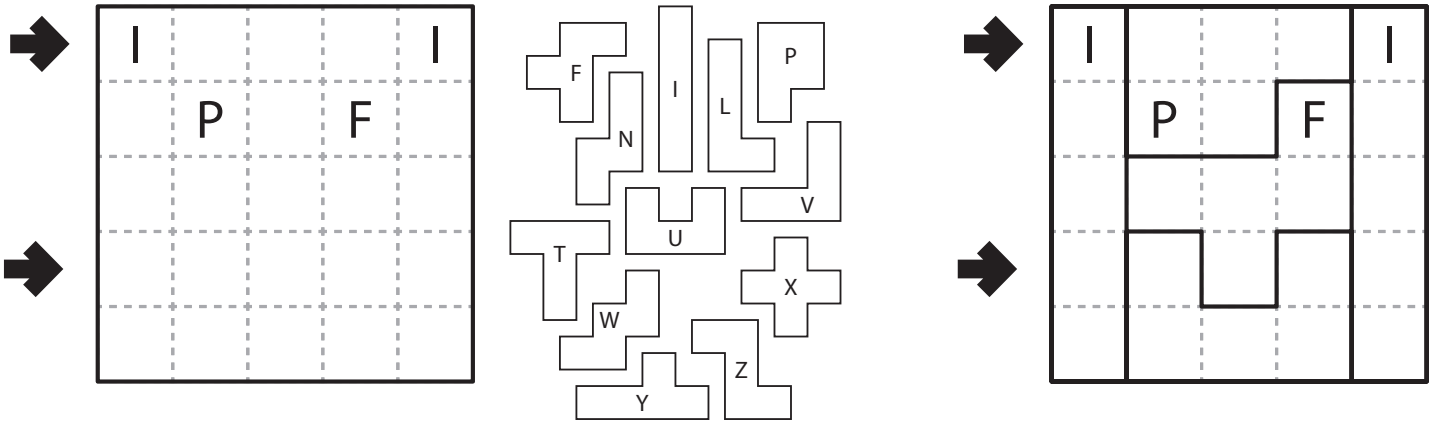
37 37 28 37 37 145

**25-30. Pentominous (4, 8, 6, 5, 11, 16 points)**

Divide the grid into pentominoes such that every cell in the grid is part of exactly one pentomino. Pentominoes of the same shape (rotations and reflections of a pentomino count as the same shape) cannot touch each other along an edge (but they may touch diagonally). Some letters are given in the grid. Each letter must be part of a pentomino with that letter's shape. It is permissible for a pentomino to contain more than one letter. (It is possible for some pentomino shapes to never appear in the grid, or more than once.)

Answer: For each designated row, enter the letter for the pentomino that each cell belongs to, from left to right.

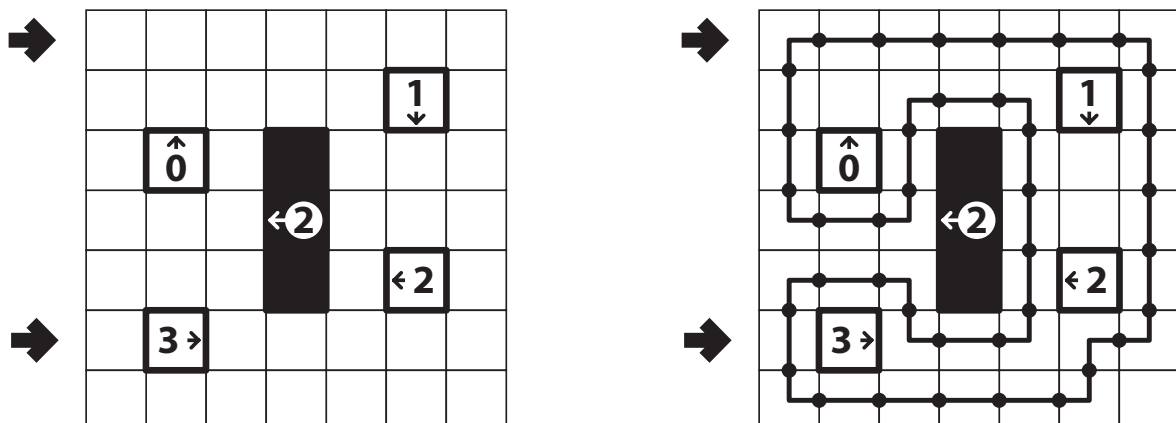
Example Answer: IPPPI, IUFUI

**31-36. Castle Wall (4, 12, 12, 40, 37, 38 points)**

Draw a single closed loop passing through some empty cells in the grid. The loop connects centers of adjacent cells, makes only right-angle turns or goes straight, and does not intersect or cross itself. The grid contains some bordered or black cells that cannot be part of the loop. Bordered cells must be inside the loop; black cells must be outside the loop. Numbers and arrows refer to the total sum of the lengths of straight loop segments along the given direction. (An equivalent way to understand these values is by putting a dot each place the loop crosses a cell border. Each numbered arrow then points to that number of dots.)

Answer: For each designated row, enter its contents, from left to right. Use 'I' for a cell where the loop goes straight, use 'L' for a cell where the loop makes a turn, and use 'X' for cells that are not part of the loop.

Example Answer: LIIIIIL, IXLILL





37. Find the Differences (1 point each for 10 points + 4 points bonus for finding at least nine differences + 13 points bonus for finding all differences = maximum 27 points)

Find the ten differences between the picture and its reflection. (The example has three differences, not ten. The competition puzzle will be in greyscale.)

You will receive bonus points if you find nine of the ten differences, with additional points if you find all ten.

The differences are clearly intentional, such as things that have disappeared, moved, changed size, shape, or orientation. Ignore the grid lines and subtle differences due to graphic anomalies or overall distortion. Each grid square will contain at most one difference, and each difference will stay within one grid square.

Answer: Enter the coordinates, row first (such as 'A1') for each difference found. You do not need to enter them in any particular order. (Do not put separating symbols, such as spaces or commas, between the coordinates.)

Example Answer: A1E3B2

