

WPF PUZZLE GP 2024

INSTRUCTION BOOKLET

Host Country: Bulgaria

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Special Notes: The final version of the booklet was not ready at the time of competition start, resulting in competitors only having access to the non-final point values as seen in the original instruction booklet and competition booklet. The preliminary results on the website (and an updated Instruction booklet on the website) were based on the final point values in the unpublished competition booklet. After much discussion, we have decided to score the round with the non-final point values as printed in the booklets at the start of the competition. The organizers apologize for any dissatisfaction caused as a result of these changes.

Points:		18.	Eight Winds	36	
1.	Easy As (Diagonal Clues)	14	19.	Eight Winds	17
2.	Easy As (Diagonal Clues)	16	20.	Eight Winds	19
3.	Easy As (Diagonal Clues)	18	21.	Eight Winds	39
4.	Easy As (Diagonal Clues)	47	22.	Products (Short Diagonals)	35
5.	Skyscrapers (Diagonal Clues)	12	23.	Products (Short Diagonals)	38
6.	Skyscrapers (Diagonal Clues)	13	24.	Products (Short Diagonals)	17
7.	Skyscrapers (Diagonal Clues)	30	25.	Products (Short Diagonals)	88
8.	Skyscrapers (Diagonal Clues)	33	26.	Slitherlink (Diagonal)	36
9.	Arrows (Irregular)	13	27.	Slitherlink (Diagonal)	38
10.	Arrows (Irregular)	23	28.	Slitherlink (Diagonal)	43
11.	Arrows (Irregular)	30	29.	Slitherlink (Diagonal)	53
12.	Arrows (Irregular)	75	30.	Snake (Diagonal, Ends)	13
13.	Yajilin (Diagonal Clues)	9	31.	Snake (Diagonal, Ends)	20
14.	Yajilin (Diagonal Clues)	9	32.	Snake (Diagonal, Ends)	28
15.	Yajilin (Diagonal Clues)	14	33.	Snake (Diagonal, Ends)	35
16.	Yajilin (Diagonal Clues)	30	34.	Snake (Diagonal, Ends)	38
17.	Yajilin (Diagonal Clues)	52			
			TOTAL:		1041

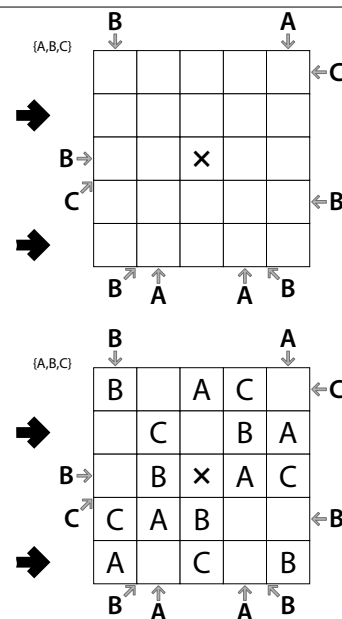
1-4. Easy As (Diagonal Clues) (14, 16, 18, 47 points)

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, column, or diagonal from the respective direction. Some letters may already be filled in for you. Some cells might be marked with a cross; do not put any letters into those cells.

(Note that letters may repeat on diagonals.)

Answer: For each designated row, enter its contents from left to right. Do not include any letters outside the grid. Use 'x' for an empty cell.

Example Answer: XCXBA, AXCXB



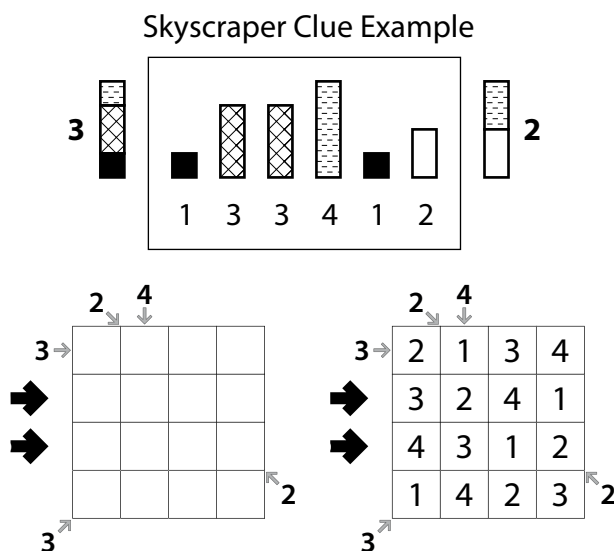
5-8. Skyscrapers (Diagonal Clues) (12, 13, 30, 33 points)

Place a number from 1 to X into each cell so that each number appears exactly once in each row and column. (X is the number of cells in each row.) Each number represents a skyscraper of its respective height. Some numbers may already be filled in for you.

The numbers outside the grid indicate how many skyscrapers can be seen in the respective row, column, or diagonal from the respective direction; smaller skyscrapers are hidden behind higher ones. Skyscrapers of the same height (as might be found on a diagonal) hide each other.

Answer: For each designated row, enter its contents from left to right. Do not include any numbers outside the grid.

Example Answer: 3241, 4312

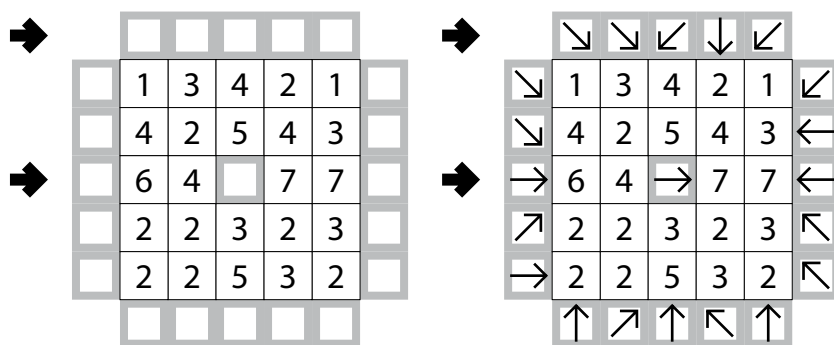


9-12. Arrows (Irregular) (13, 23, 30, 75 points)

Draw an arrow in each of the grey-bordered cells (shown by a thick outline). Each arrow must point in one of the eight standard directions, and must point to at least one numbered cell. Each numbered cell must be pointed at by exactly that number of arrows.

Answer: Enter the contents of the indicated rows, from left to right. Use 'Z' for an arrow pointing diagonally to the lower-left or upper-right, a 'I' for an arrow pointing orthogonally, and 'N' for an arrow pointing diagonally to the upper-left or lower-right. Alternatively, you may use any three characters instead of 'ZIN', as long as they are distinct. Ignore any cells without arrows.

Example Answer: NNZIZ, III



13-17. Yajilin (Diagonal Clues) (9, 9, 14, 30, 52 points)

Draw a single closed loop that passes orthogonally through centers of some empty cells in the grid. The loop connects centers of orthogonally adjacent cells, makes only right-angle turns or goes straight, and does not intersect or cross itself.

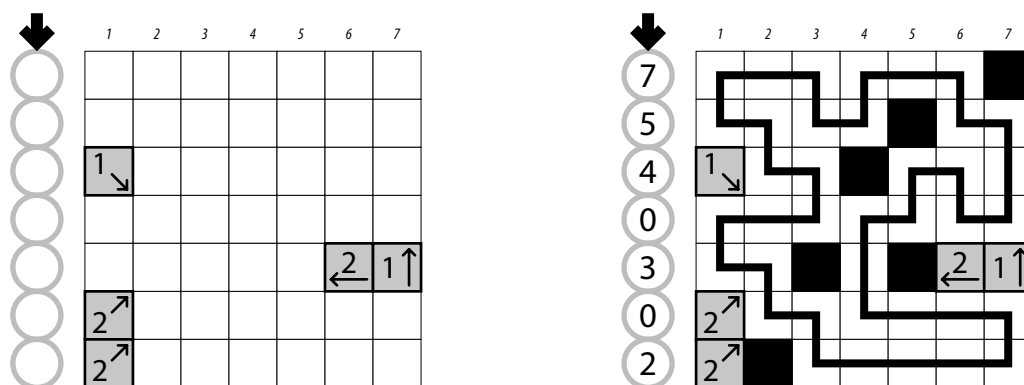
Some cells will remain empty; such cells are “unused” and cannot share an edge with each other.

The grid contains some outlined gray cells that cannot be part of the loop. Numbered arrows in such cells indicate the total number of unused cells along the direction of the arrow, between the arrowed cell and the edge of the grid. (Note that some arrows point diagonally, and that it is allowed for unused cells to share corners with each other.)

The numbers on top of the diagram are for Answer purposes only. It may be helpful to shade the unused cells, as per the example answer.

Answer: For each row from top to bottom, enter the column number of the left-most unused cell. (Outlined cells are *not* unused.) Use only the last digit for two-digit numbers; e.g., use ‘0’ for column 10. If none of the cells in a row are unused, enter ‘0’ for that row.

Example Answer: 7540302



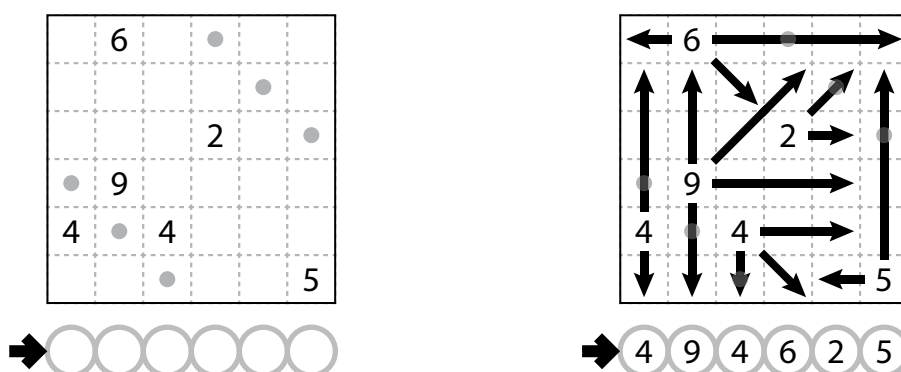
18-21. Eight Winds (36, 17, 19, 39 points)

Draw arrows in the empty cells in the grid. Arrows can only go in the *eight* standard directions and must begin at the edge or corner of a cell with a number. Each empty cell must be covered by exactly one arrow. Each number indicates the *total number of cells used* by all the arrows that begin at an edge or corner next to that number’s cell. Arrows cannot intersect each other.

The dots in cells 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 an arrow that begins at a 10.

Example Answer: 494625



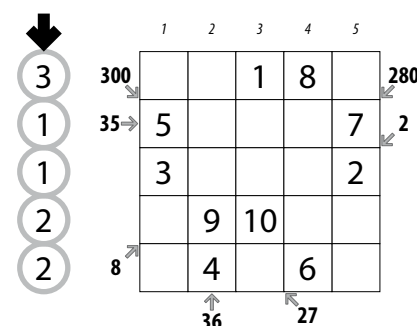
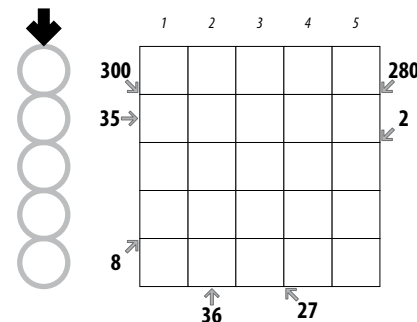
22-25. Products [Deyan Razsadov] (35, 38, 17, 88 points)

Fill in some cells with numbers, at most one number per cell. Each number from 1 to X must appear exactly once, where X is twice the number of rows in the grid. Each row must contain exactly two numbers. Each column must contain exactly two numbers. (There are no similar restrictions on the diagonals.) When given, the numbers to the left, right, and below the grid indicate the (multiplicative) product of all numbers in that row, column, or diagonal, respectively. (The product of one number is the number itself; the product of no numbers is 1.)

The numbers on top of the diagram are for Answer purposes only.

Answer: For each row from top to bottom, enter the number of the first column from the left where a number appears (the number on top of that column). Use only the last digit for two-digit numbers; e.g., use '0' if the first number appears in column 10.

Example Answer: 31122

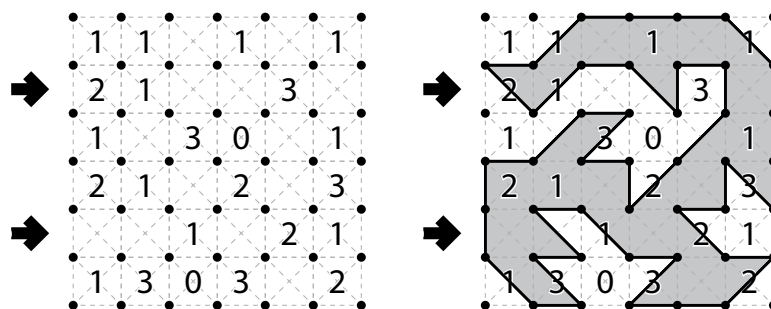


26-29. Slitherlink (Diagonal) (36, 38, 43, 53 points)

Draw a single, non-intersecting loop that only consists of line segments between the dots along the dashed lines, including diagonals inside cells. A number inside a cell indicates how many of the edges or diagonals of that cell are part of the loop. (Note that at most one diagonal may be used in each cell, as the loop is non-intersecting.)

Answer: For each designated row, enter its contents from left to right. Use 'o' for a cell that does not have a diagonal as part of the loop and 'x' for a cell that does have a diagonal as part of the loop. You may use two other characters, as long as they are distinct.

Example Answer: xxoxoo, oxxoxo



30-34. Snake (Diagonal, Ends) (13, 20, 28, 35, 38 points)

Locate a "snake" in the grid. The snake is a path that starts in a cell, goes through some number of cells orthogonally or diagonally, and ends in a cell. The snake cannot go through any cells marked with 'x'. Each cell is used at most once by the snake. The snake cannot loop around to 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 one or 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 from left to right. Use 'o' for a cell occupied by the snake and 'x' for a cell not occupied by the snake. Alternatively, you may use any two characters, as long as they are distinct.

Example Answer: oxxxxo, ooxxxx

