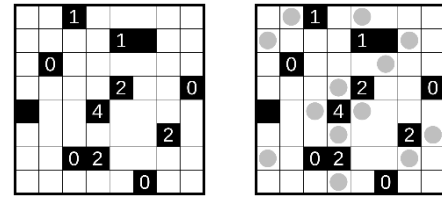


24HPC Classic Puzzles Instructions

Akari

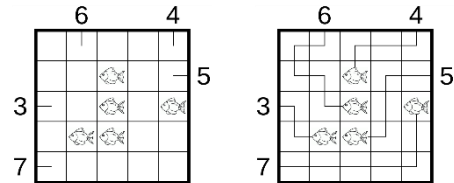
Locate some "light bulbs" in the grid such that every white cell is "lit up". Each bulb occupies a single white cell, and lights up its own cell, as well as white cells in the four orthogonal directions until the light beam encounters a black square or the edge of the grid. A bulb may not illuminate 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.



From WPF Puzzle GP

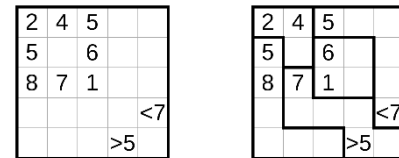
Anglers

Each number outside the grid represents an angler, each of whom has caught a different fish on their line. Their line is represented by a path that moves orthogonally from the angler to their fish, and the number represents the length of that line (or, the number of cells that line encounters, including the fish's cell but not the angler). Angler's lines may not overlap or cross each other.



Araf

Divide the grid along the dotted lines into regions (called polyominoes). Inside some cells are numbers; each polyomino must contain exactly two numbers, and the area of the polyomino (in cells) must be strictly between those two numbers. Some numbers may be prefixed with "<" or ">"; the polyomino containing those numbers must have an area less than or greater than that number, respectively.

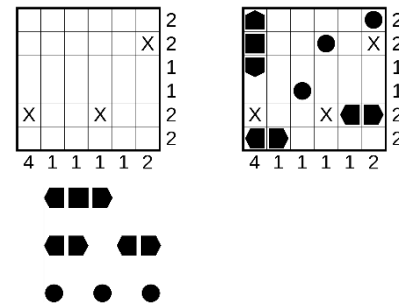


From WPF Puzzle GP

Battleships

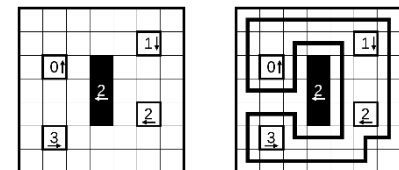
Locate the indicated fleet of ships in the grid. Ships may be rotated before being placed in the grid. Each piece of a ship occupies a single cell. A cell that does not contain a ship piece is considered "sea". Ships do not touch each other, not even diagonally (that is, if two ship pieces are in cells that share an edge or a corner, they must be part of the same ship). The contents of some cells are given for you (wavy lines or X indicate "sea").

Each number next to the grid reveals the number of ship pieces that must be located in that row or column (including any that might be given for you).



Castle Wall

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 outlined white and black cells that cannot be part of the loop. Outlined white 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.)



From WPF Puzzle GP

24HPC Classic Puzzles Instructions

Cave

Shade some cells to leave behind a single orthogonally-connected group — the cave — with no shaded cells enclosed within the cave. In other words, all shaded cells must be connected edge-wise by other shaded cells to an edge of the grid. All numbered cells must be a part of the cave (and therefore not shaded). Each number indicates the total count of cells connected in line vertically and horizontally to the numbered cell including the cell itself.

			8	
2	3		6	
	2		6	3
	5			

			8	
2	3		6	
	2		6	3
	5			

From WPF Puzzle GP

Domino

Divide the grid into a full set of dominoes. Each domino should be used exactly once. The orientation of the numbers does not matter. Empty cells are not part of a domino. A checklist of the full set is provided for your convenience.

2	1	0	2	2
1	3	3	3	1
1	0	0	0	0
1	2	2	3	3

2	1	0	2	2
1	3	3	3	1
1	0	0	0	0
1	2	2	3	3

0	0
0	1
0	2
0	3

Doppelblock (Double Black)

Place either a block or a number from 1 to X-2 (integers only) into each cell. (X is the number of cells in each row.) Each row and each column should have exactly two cells with blocks in them. Numbers may not repeat within a row or column. The numbers outside the grid indicate the sum of the numbers between the two blocks in that row or column. Some cells may already be filled in for you.

2				0
4				
6				
5				
			2	

2				0
4				
6				
5				
			2	

From WPF Puzzle GP

Easy as

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. 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.

[A-C]

From WPF Puzzle GP

Fillomino

Divide the grid along the dotted lines into regions (called polyominoes) so that no two polyominoes with the same area share an edge. Inside some cells are numbers; each number must equal the area of the polyomino it belongs to. A polyomino may contain zero, one, or more of the given numbers. (It is possible to have a "hidden" polyomino: a polyomino without any of the given numbers. "Hidden" polyominoes may have any area, including a value not present in the starting grid, such as a 6 in a puzzle with only clues numbered 1-5.)

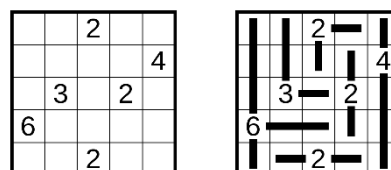
	3		3
		3	
	3		
2			1

	3		3
		3	
	3		
2			1

24HPC Classic Puzzles Instructions

Four Winds

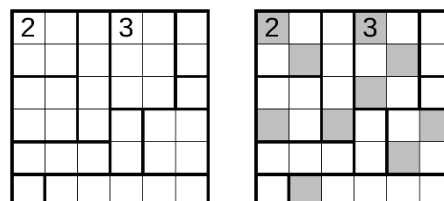
Draw arrows in the empty cells in the grid. Arrows can only go in the four standard directions and must begin at the edge of a cell with a number. Each empty cell must be covered by exactly one arrow. Each number indicates the total length of all the arrows that begin at an edge next to that number's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



From WPF Puzzle GP

Heyawake

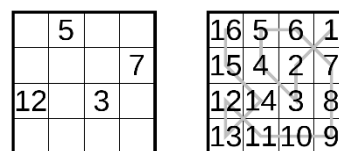
Shade some cells black so that all remaining cells are connected orthogonally and no two black cells share an edge. The grid is divided into regions by thick borders; a number in a region indicates exactly how many cells in that region must be shaded black. (Cells with numbers may or may not be shaded black.) Every "word" in the grid (a group of unblackened cells connected to each other either only horizontally or only vertically) may not cross more than one thick border.



From WPF Puzzle GP

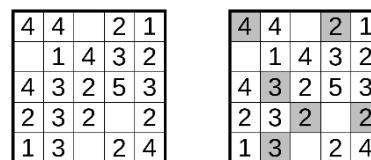
Hidato

Find a path which starts at one cell and encounters all other cells in the grid exactly once. Numbers provided in the cells indicate the order that cell is encountered along the path, where "1" is the starting cell, "2" is the next cell along the path, and so on. The path may only travel between cells that are orthogonal or diagonal neighbours.



Hitori

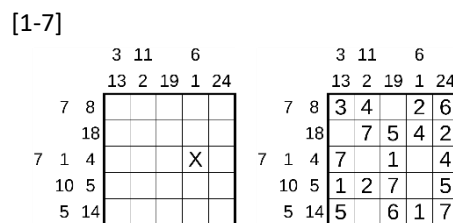
Remove some cells from the grid so that all remaining cells are connected orthogonally and no two removed cells are adjacent orthogonally. Additionally, for each row and each column, the numbers in the unremoved cells must be all different.



From WPF Puzzle GP

Japanese Sums

Place a number from the specified list into some cells so that no number appears more than once in each row or column. Cells may remain empty. Numbers outside the grid (when given) indicate all sums of contiguous groups of numbers (including "sums" of a single number) along that row or column, in positional order. These groups are separated by empty cells. A question mark (?) indicates an unspecified, but non-zero, sum. Some cells might be marked with a cross (x); do not put any numbers into those cells.

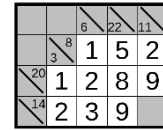
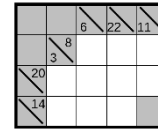


From WPF Puzzle GP

24HPC Classic Puzzles Instructions

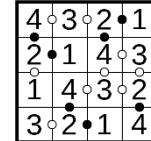
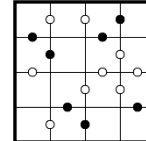
Kakuro

Place a digit from 1 to 9 into each white cell. The numbers in grey cells indicate the sum of digits in the adjacent "word" across or down. (Across "words" are to the right of their sums, Down "words" are below their sums.) Digits may not repeat within a "word." It is possible for some "words" to not have a provided sum.



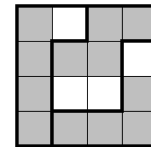
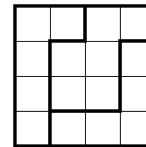
Kropki

Place a number from 1 to X into each cell so that each number appears at most once in each row and column. (X is the number of cells in each row.) A white dot on the edge between two cells indicates that those two cells must contain consecutive numbers; a black dot on the edge between two cells indicates that a number in one of those cells is double the value of the number in the other cell. If 1 and 2 are in adjacent cells, then the dot between them could be either color. If there is no dot on the edge between two cells, it means neither a black nor a white dot could go there.



LITS

Shade exactly four connected cells in each outlined region (with at least four cells) to form a tetromino, so that the following conditions are true: (1) All tetrominoes are connected into one large shape along their edges; (2) No 2x2 group of cells can be entirely shaded; (3) When two tetrominoes share an edge, they must not be of the same shape, regardless of rotations or reflections. (Not all four possible shapes have to be present in the grid; for example, it is possible for your solution to not have any "I" shapes.)

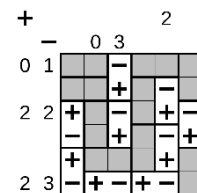
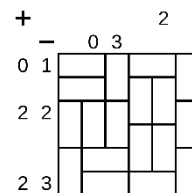


Magnets

Locate some magnets in the grid. A magnet is two square cells that touch along an edge; one cell must be marked with only a "positive" (+) symbol and the other cell must be marked with only a "negative" (-) symbol. Cells that share an edge cannot contain the same symbol.

The grid is divided into regions; each region has an area of 2 cells. Each region either fully contains a magnet or is left empty.

The numbers above and to the left of the grid indicate the exact number of symbols of the specified type that must be placed in each column or row, respectively. If a number is not given, there might be any number of symbols of the specified type.

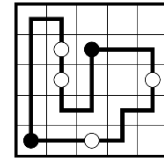
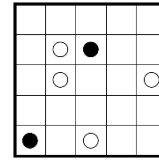


From WPF Puzzle GP

24HPC Classic Puzzles Instructions

Masyu

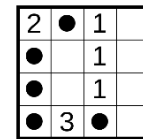
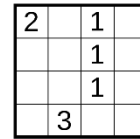
Draw a single loop that passes orthogonally through centers of cells. The loop must go through all circled cells. The loop cannot intersect itself or enter the same cell more than once. The loop must go straight through the cells with white circles, with a turn in at least one of the cells immediately before or after each white circle. The loop must make a turn in all the black circles, but must go straight in both cells immediately before and after each black circle.



From WPF Puzzle GP

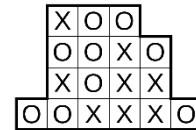
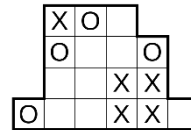
Minesweepers

Place mines into the un-numbered cells in the grid, at most one mine per cell, so that each number in a cell represents the number of mines adjacent to that cell (including diagonally adjacent cells). In some puzzles the number of mines is provided.



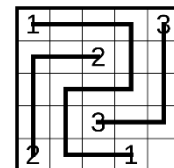
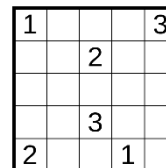
No Four In a Row

Place a circle or a cross into each empty cell, one symbol per empty cell, such that no row, column, or diagonal has four consecutive cells with the same symbol. Some cells have already been filled for you.



Numberlink

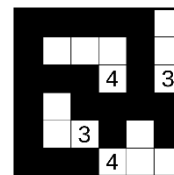
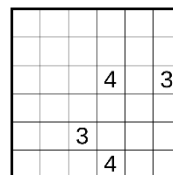
Some cells in the grid are marked with numbers; each number appears exactly twice and no cell contains more than one number. For each pair of identical numbers, draw a path that connects those two numbers. The paths must go through orthogonally adjacent cells. Each cell may be visited by at most one path, and may not be visited more than once by that path. (It is permissible for a cell to not be visited by any path.)



From WPF Puzzle GP

Nurikabe

Shade some empty (non-numbered) cells black (leaving the other cells white) so that the grid is divided into non-overlapping regions; cells of the same color are considered in the same region if they are adjacent along edges. Each given number must be in a white region that has the same area in cells as that number. Each white region must have exactly one given number. All black cells must be in the same region. No 2x2 group of cells can be entirely shaded black.



From WPF Puzzle GP

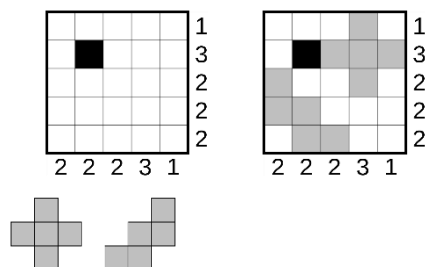
24HPC Classic Puzzles Instructions

Pentomino

Shade some cells black so that the black cells form the shapes of twelve different pentominoes. Each pentomino shape is used exactly once, but can be rotated or reflected. Pentominoes cannot touch along edges or corners.

The contents of some cells are given for you. A cross in a cell indicates that no pentomino uses that cell.

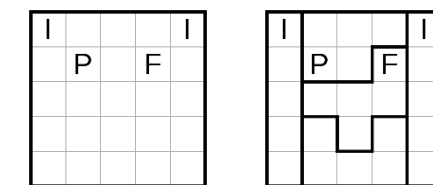
Each number next to the grid reveals the number of cells in that row or column that are used by a pentomino (including any that might be given for you).



Pentominous

Divide the grid into pentominoes (contiguous regions of five cells) 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.) The letter-to-shape correspondence for pentominoes has been supplied for you.

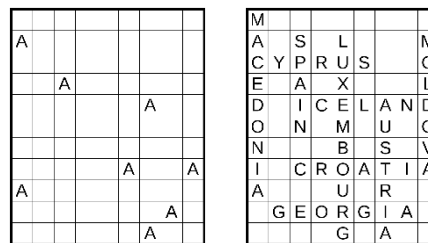
In the competition puzzle, there may be black areas that are not part of the grid.



From WPF Puzzle GP

Scrabble

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 of two or more letters may appear in the grid (that is, if two cells are filled and are adjacent orthogonally, 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.

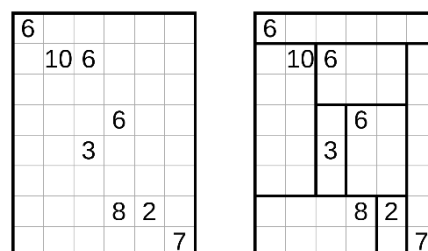


AUSTRIA
CROATIA
CYPRUS
GEORGIA
ICELAND
LUXEMBOURG
MACEDONIA
MOLDOVA
SPAIN

From WPF Puzzle GP

Shikaku

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).

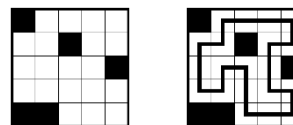


From WPF Puzzle GP

24HPC Classic Puzzles Instructions

Simple Loop

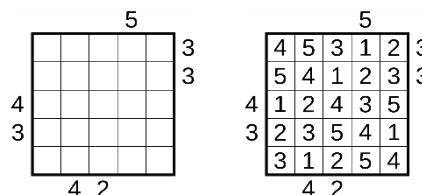
Draw a single non-intersecting loop through the centers of all white cells. Loop paths must be orthogonal.



From WPF Puzzle GP

Skyscrapers

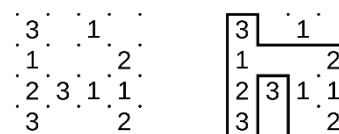
Place a number from 1 to N into each cell so that each number appears exactly once in each row and column. (N is the number of cells in each row.) Each number represents a skyscraper of its respective height. The numbers outside the grid indicate how many skyscrapers can be seen in the respective row or column from the respective direction; shorter skyscrapers are hidden behind taller ones. Some numbers may already be filled in for you.



From WPF Puzzle GP

Slitherlink

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

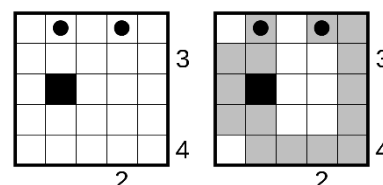


Snake

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 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 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.

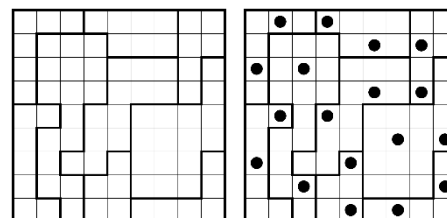
Circles mark the snake head and tail (when provided), a cross or black cell in a cell (when provided) indicates that the snake cannot go through the cell.

Numbers inside the grid means it is the Nth cell on the snake.



Star Battle

Place stars into some cells in the grid, no more than one star per cell. Each row, each column, and each outlined region must contain exactly the given number of stars. Cells with stars cannot touch each other along an edge or a corner.



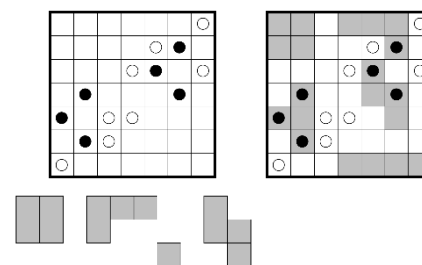
From WPF Puzzle GP

24HPC Classic Puzzles Instructions

Statue Park

Shade some cells black (leaving the other cells white) so that the grid is divided into non-overlapping regions; cells of the same color are considered in the same region if they are adjacent along edges. The black regions must form the set of given shapes; each shape may be rotated and/or reflected in the final answer. Shapes cannot touch along an edge, but can touch at corners. All white cells must be in the same region.

A cell with a black circle must be shaded and a cell with a white circle must not be shaded.



From WPF Puzzle GP

Sudoku

Place a digit from 1-N (N is the number of cells in each row.) in each empty cell in the grid such that each row, column and marked regions contains each digit exactly once.

		6			
	1		2		
3		2		1	
	4		3		6
		3		5	
			1		

2	3	6	5	4	1
4	1	5	2	6	3
3	6	2	4	1	5
5	4	1	3	2	6
1	2	3	6	5	4
6	5	4	1	3	2

Suguru

Place a number into each cell so that each bold region contains the numbers from 1 to N, where N is the number of cells in the region. Cells containing the same number must not touch along an edge or a corner. Some numbers may be already filled in the grid.

			4	
				2
3				

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

Tapa

Shade some empty cells; cells with numbers cannot be shaded. All shaded 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 cells can be entirely shaded. Numbers in a cell indicate the lengths of contiguous shaded cell groups along the "ring" of 8 cells touching that cell (fewer for cells along the outside edge). If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the shaded 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 can be shaded.

2			1	3
	2			2

2			1	3
	2			2

Thermo Sudoku

Apply standard Sudoku rules.

Additionally there are some thermometer shapes in the grid. Numbers must be strictly increasing from the round bub to the flat end.

				4
5				

3	5	6	2	1	4
2	1	4	5	3	6
1	3	2	4	6	5
6	4	5	3	2	1
4	6	3	1	5	2
5	2	1	6	4	3

24HPC Classic Puzzles Instructions

Yajilin

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, starting in the arrowed cell and going along a row or column to the edge of the grid.

