WPF PUZZLE GP 2023 INSTRUCTION BOOKLET

Host Country: Slovakia

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Special Notes: Point values are tentative and not finalized yet.
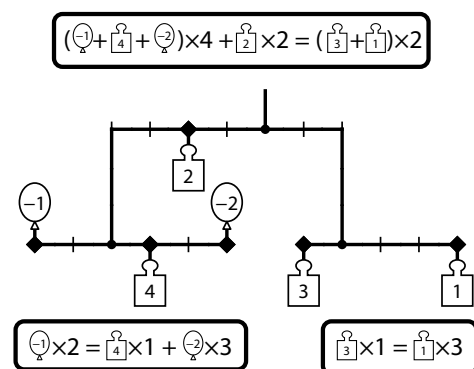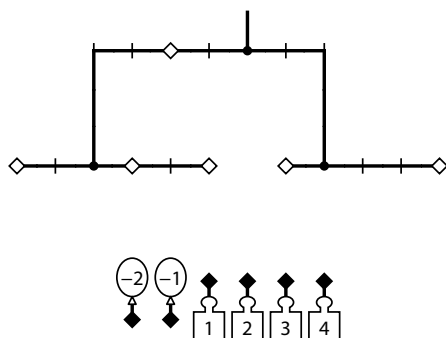
Points:						
1.	Balance	25	10.	Aqre	11
2.	Balance	19	11.	Aqre	32
3.	Balance	51	12.	Aqre	62
4.	Slitherlink	20	13.	Snake Pit	28
5.	Slitherlink	23	14.	Snake Pit	17
6.	Slitherlink	32	15.	Snake Pit	69
7.	Doppelblock	20	16.	Kissing Polyominoes	13
8.	Doppelblock	43	17.	Kissing Polyominoes	62
9.	Doppelblock	78	18.	Kissing Polyominoes	28
			TOTAL:		633

1-3. Balance (25, 19, 51 points)

Attach the given weights (and balloons with negative weight, if given) to the mobile at the diamond-shaped attachment points, one at each point, such that the entire mobile balances — that is, at each fulcrum (round black dot), the total torque (weight multiplied by distance from the fulcrum) on both sides of the balance must be the same. Ignore the weight of the rods. Weights (or balloons) may already be attached for you.

Answer: Enter the weight of each attached item (including any that were attached for you), from left to right. Ignore the vertical position of each item. Use only the last digit for two-digit or negative numbers; e.g., use '0' for a weight of 10 and use '3' for a weight of –3.

Example Answer: 142231

WPF **PUZZLE** GP

ROUND 6

WPF
SUDOKU/PUZZLE
GRAND PRIX
2023

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4-6. Slitherlink (20, 23, 32 points)

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

Answer: For each designated row, enter its contents from left to right. Use 'O' for a cell inside the loop and 'X' for a cell outside the loop. You may use two other characters, as long as they are distinct.

Example Answer: XXOOX, OXOXX
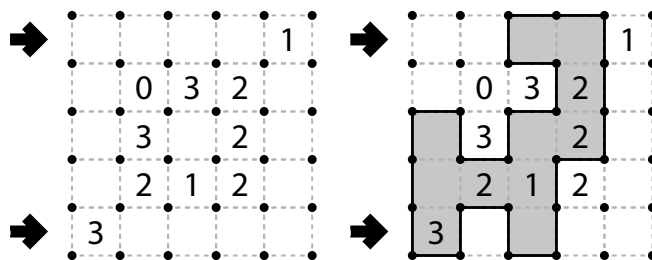
7-9. Doppelblock (20, 43, 78 points)

Place either a block or a number from 1 to X into each cell so that each number appears exactly once in each row and each column. (X is two fewer than the number of cells in each row.) Each row and each column will therefore have exactly two cells with blocks in them. 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.

Answer: For each designated row, enter its contents from left to right. Use 'X' to denote a block. Use only the last digit for two-digit numbers; e.g., use '0' for the number 10. Do *not* include any given numbers outside the grid.

Example Answer: 21XX3, 1X23X
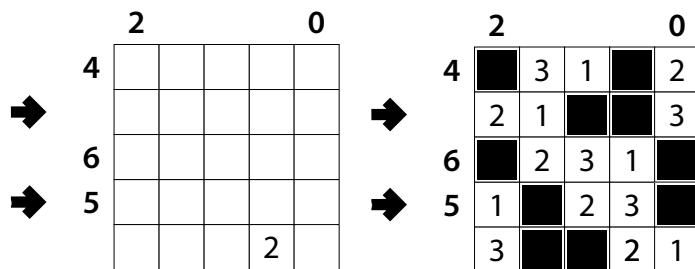
10-12. Aqre (11, 32, 62 points)

Shade some cells so that 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 is not a connection.) No 1×4 or 4×1 group of squares can be completely shaded. No 1×4 or 4×1 group of squares can be entirely unshaded. 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. (The location of the number in the region has no significance.)

Answer: For each designated row, enter its contents from left to right. Use 'O' for a shaded cell and 'X' for an unshaded cell. You may use other letters or numbers, as long as they are distinct.

Example Answer: OOXOOO, XOOXOO
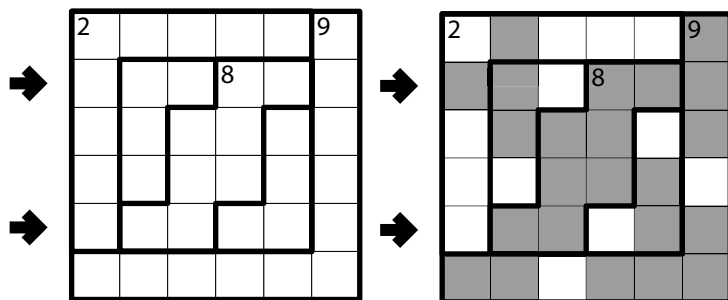
13-15. Snake Pit (28, 17, 69 points)

Divide the grid along the dotted lines into snakes so that no two snakes with the same area share an edge. A snake is a series of at least two cells that touch orthogonally in sequence (without branching). A snake may not 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.)

Some cells may contain numbers; each number must equal the area of the snake it belongs to. A snake may contain zero, one, or more of the given numbers. (It is possible to have a "hidden" snake: a snake without any of the given numbers. "Hidden" snakes may have any area, including a value not present in the starting grid, such as a 6 in a puzzle with only clues numbered 2-5.)

Some cells might be marked with large circles; a circled cell must be either the head or the tail of a snake. A snake may contain zero, one, or two circles. Some cells might be marked with crosses; a crossed cell cannot be the head nor the tail of any snake.

The dots (small gray circles) in cells are only used for entering your answers.

Answer: Enter the area of the snake 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 snake of size 10.

Example Answer: 286242
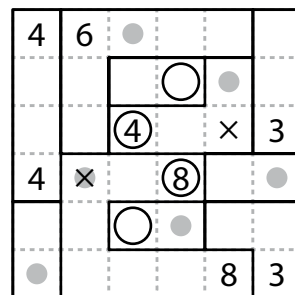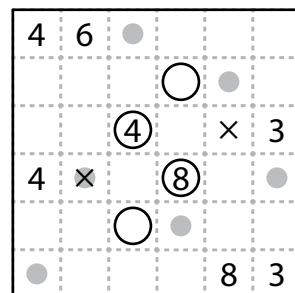
16-18. Kissing Polyominoes (13, 62, 28 points)

Shade some cells so that the shaded cells form the set of given shapes. Shapes can be rotated or reflected. If an edge is marked with a bar, then two shapes touch along that edge. If an edge is not marked with a bar, then two shapes do not touch along that edge (but both adjacent cells could be occupied by the same shape).

If a shape appears multiple times in the given set, then the same number of copies of that shape must appear in the grid.

Cells marked with a cross must not be shaded.

The letters for the shapes (as provided in the diagram) are only used for entering your answer.

Answer: For each designated row, enter the letter for the shape that each cell belongs to, from left to right. If a cell is unshaded, use 'X' for its letter.

Example Answer: XXXTTT, LLXXXS