



# WPF PUZZLE GP 2024 INSTRUCTION BOOKLET

**Host Country: Germany**

**Jürgen Blume-Nienhaus, Gabriele Penn-Karras**

**Special Notes:** None.

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| <b>Points:</b> |                                |           |               |                                |             |
|----------------|--------------------------------|-----------|---------------|--------------------------------|-------------|
| 1.             | <b>Nth Seen + Slitherlink</b>  | <b>15</b> | 16.           | <b>Skyscrapers + Dominoes</b>  | <b>18</b>   |
| 2.             | <b>Nth Seen + Slitherlink</b>  | <b>20</b> | 17.           | <b>Skyscrapers + Dominoes</b>  | <b>24</b>   |
| 3.             | <b>Nth Seen + Slitherlink</b>  | <b>52</b> | 18.           | <b>Skyscrapers + Dominoes</b>  | <b>42</b>   |
| 4.             | <b>Nth Seen + Slitherlink</b>  | <b>36</b> | 19.           | <b>Skyscrapers + Dominoes</b>  | <b>53</b>   |
| 5.             | <b>Nth Seen + Slitherlink</b>  | <b>79</b> | 20.           | <b>Skyscrapers + Dominoes</b>  | <b>64</b>   |
| 6.             | <b>Nth Seen + Tapa</b>         | <b>7</b>  | 21.           | <b>Japanese Sums + Snake</b>   | <b>28</b>   |
| 7.             | <b>Nth Seen + Tapa</b>         | <b>12</b> | 22.           | <b>Japanese Sums + Snake</b>   | <b>22</b>   |
| 8.             | <b>Nth Seen + Tapa</b>         | <b>33</b> | 23.           | <b>Japanese Sums + Snake</b>   | <b>27</b>   |
| 9.             | <b>Nth Seen + Tapa</b>         | <b>25</b> | 24.           | <b>Japanese Sums + Snake</b>   | <b>61</b>   |
| 10.            | <b>Nth Seen + Tapa</b>         | <b>56</b> | 25.           | <b>Japanese Sums + Snake</b>   | <b>55</b>   |
| 11.            | <b>Skyscrapers + Fillomino</b> | <b>7</b>  | 26.           | <b>Japanese Sums + Magnets</b> | <b>26</b>   |
| 12.            | <b>Skyscrapers + Fillomino</b> | <b>19</b> | 27.           | <b>Japanese Sums + Magnets</b> | <b>31</b>   |
| 13.            | <b>Skyscrapers + Fillomino</b> | <b>39</b> | 28.           | <b>Japanese Sums + Magnets</b> | <b>46</b>   |
| 14.            | <b>Skyscrapers + Fillomino</b> | <b>19</b> | 29.           | <b>Japanese Sums + Magnets</b> | <b>51</b>   |
| 15.            | <b>Skyscrapers + Fillomino</b> | <b>44</b> | 30.           | <b>Japanese Sums + Magnets</b> | <b>71</b>   |
|                |                                |           | <b>TOTAL:</b> |                                | <b>1082</b> |



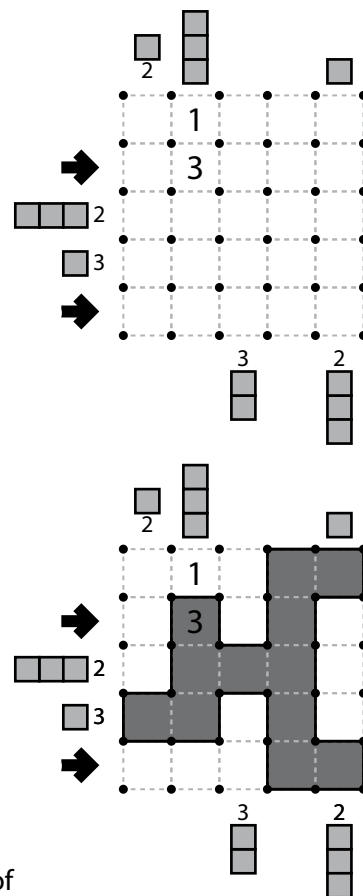
### 1-5. Nth Seen + Slitherlink [Gabriele Penn-Karras] (15, 20, 52, 36, 79 points)

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.

For each row and column, consider its cells to be divided into segments by the edge of the loop; that is, a segment is an uninterrupted group of touching cells that are either all inside the loop or all outside the loop, and every cell in that row or column is part of exactly one segment. (For example, a row that only has cells inside the loop has exactly one segment, equal to the length of the row.) A group of gray squares given outside the grid indicates that at least one segment of that size can be found along the corresponding row or column. A number given with the segment indicates the order in which that segment appears in that direction along that row or column (for example, a 3 means that the specified segment is the 3rd segment). It is possible for other segments of the same length as the clued segment to appear without being clued.

**Answer:** For each designated row, enter its contents from left to right. (Do not include any clues outside the grid.) 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:** XOXOX, XXXOO



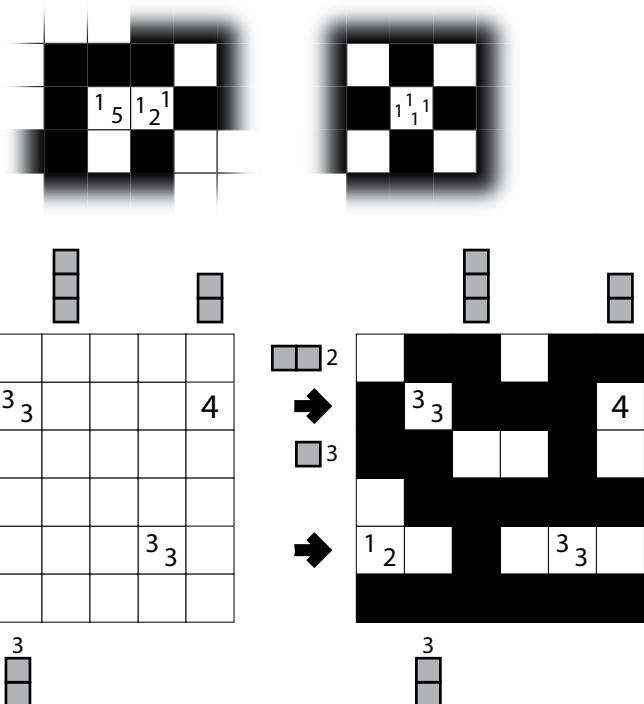
### 6-10. Nth Seen + Tapa [Jürgen Blume-Nienhaus] (7, 12, 33, 25, 56 points)

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.

For each row and column, consider its cells to be divided into segments by whether the cells are shaded; that is, a segment is an uninterrupted group of touching cells that are either all shaded or all unshaded, and every cell in that row or column is part of exactly one segment. (For example, a row that only has shaded cells has exactly one segment, equal to the length of the row.) A group of gray squares given outside the grid indicates that at least one segment of that size can be found along the corresponding row or column. A number given with the segment indicates the order in which that segment appears in that direction along that row or column (for example, a 3 means that the specified segment is the 3rd segment). It is possible for other segments of the same length as the clued segment to appear without being clued.

Tapa Clue Examples



**Answer:** For each designated row, enter its contents from left to right. (Do not include any clues outside the grid.) Use 'x' for an unshaded cell and 'o' for a shaded cell. You may use two other characters, as long as they are distinct.

**Example Answer:** OXOOOX, XXOXXX

**11-15. Skyscrapers + Fillomino [Jürgen Blume-Nienhaus] (7, 19, 39, 19, 44 points)**

Divide the grid along the dashed 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.)

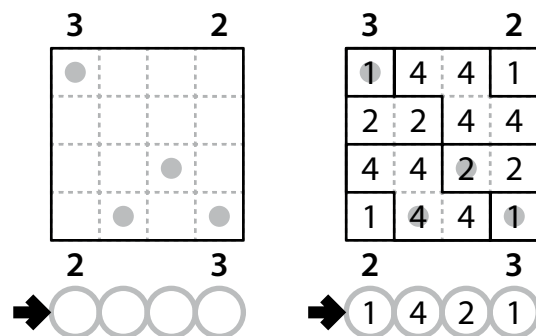
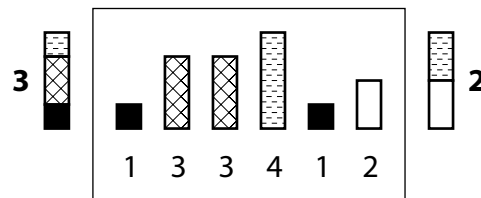
Each cell also contains a skyscraper of the same height as the area of that cell's polyomino. The numbers outside the grid indicate how many skyscrapers can be seen in the respective row or column from the respective direction; shorter and equal-size skyscrapers are hidden behind taller (and equal-size) ones.

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

**Answer:** Enter the area of the polyomino 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 polyomino of size 10.

**Example Answer:** 1421

Skyscraper Clue Example



**16-20. Skyscrapers + Dominoes [Jürgen Blume-Nienhaus] (18, 24, 42, 53, 64 points)**

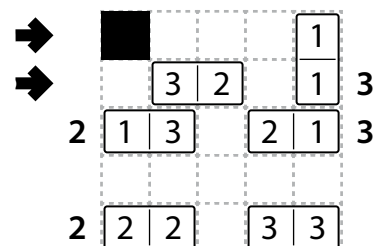
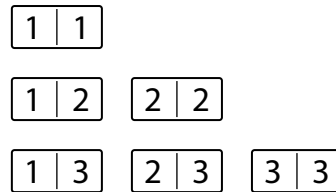
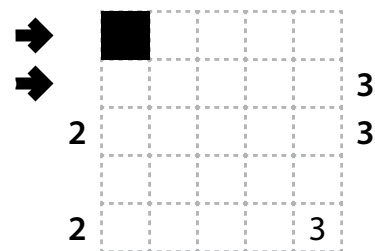
Put a full set of dominoes into the grid such that each domino occupies exactly two cells. (Cells may be left empty.) If two domino halves touch along an edge (and are not part of the same domino), then they must contain the same number. The orientation of the numbers does not matter. A full set of dominoes will be provided for your convenience; the smallest and largest numbers on the dominoes may change from puzzle to puzzle.

Each cell that is occupied by a domino half also contains a skyscraper of the same height as the number on that domino half. The numbers outside the grid indicate how many skyscrapers can be seen in the respective row or column from the respective direction; shorter and equal-size skyscrapers are hidden behind taller and equal-size ones.

Some numbers may be filled in for you; those are spaces that have to be occupied by a domino half with that number on it. Some cells may be shaded black, which indicates that they cannot be used by any domino.

**Answer:** For each designated row, enter the contents of that row, from left to right. (Ignore any clues outside the grid.) Use 'x' for a cell not occupied by any domino.

**Example Answer:** xxxx1, x32x1





### 21-25. Japanese Sums + Snake [Gabriele Penn-Karras] (28, 22, 27, 61, 55 points)

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.

Also, all cells with numbers form 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.)

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

**Example Answer:** 213x6, 6x412

|   |   |       |    |  |    |
|---|---|-------|----|--|----|
|   |   | {1-6} | 18 |  | 16 |
| → | 6 | 6     |    |  |    |
| 1 | 2 | 3     |    |  |    |
|   | 4 | 5     |    |  |    |
| → | 6 | 7     |    |  |    |
|   | 8 |       |    |  |    |

|   |   |       |    |   |    |
|---|---|-------|----|---|----|
|   |   | {1-6} | 18 |   | 16 |
| → | 6 | 6     | 2  | 1 | 3  |
| 1 | 2 | 3     | 1  |   | 2  |
|   | 4 | 5     | 4  |   |    |
| → | 6 | 7     | 6  |   | 4  |
|   | 8 |       | 5  | 2 | 1  |

### 26-30. Japanese Sums + Magnets [Gabriele Penn-Karras] (26, 31, 46, 51, 71 points)

Locate some magnets in the grid. Each magnet fills two square cells that touch along an edge; one cell must be marked with a "positive" (+) symbol and the other cell must be marked with a "negative" (-) symbol. Cells that share an edge cannot contain the same symbol. Magnets do not overlap each other, and some cells will be left empty (not filled by any magnet).

The grid is already divided into regions; each region has an area of 2 cells. (Note that region borders are drawn and cell borders are not.) Each region either fully contains a magnet or is left empty.

Also, place a digit from the specified list into each cell occupied by a magnet (to the right of the symbol) so that no digit appears more than once in each row or column. (Digits cannot repeat even if they represent different numbers; for example, -3 and +3 cannot both be in the same row or column.)

Numbers outside the grid (when given) indicate all sums of contiguous groups of *at least one number* (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 sum.

**Answer:** For each designated row, enter its digits from left to right. Do not enter any positive or negative symbols, but do use 'x' for an empty cell. Do not include any numbers outside the grid.

**Example Answer:** xxx523, 4532x1

|   |    |       |   |    |    |
|---|----|-------|---|----|----|
|   |    |       | 2 |    | -4 |
|   |    | {1-5} | 1 | -2 | -2 |
| → | -1 | 0     |   |    |    |
|   |    |       |   |    |    |
|   | 5  | 5     |   |    |    |
| → | 0  | -1    |   |    |    |
|   |    | 0     |   |    |    |

|   |    |       |    |    |    |
|---|----|-------|----|----|----|
|   |    |       | 2  |    | -4 |
|   |    | {1-5} | 1  | -2 | -2 |
| → | -1 | 0     | -3 | +2 | +1 |
|   |    |       |    |    | -5 |
|   | 5  | 5     | +2 | -1 | +4 |
| → | 0  | -1    | -4 | +5 | -3 |
|   |    | 0     | +5 | -3 | +2 |