WPF SUDOKU/PUZZLE GRAND PRIX 2025

ROUND 3

# WPF PUZZLE GP 2025 COMPETITION BOOKLET

## Host Country: Türkiye

**Salih Alan, Murat Can Tonta**

**Special Notes**: None.

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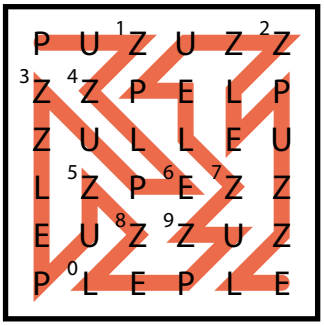
### 1-2. Password Path [Salih Alan] (26, 44 points)

Find a path that starts at the upper-left letter, ends at the lower-right letter, goes through each letter once, and repeats only the password (given below the grid). The path may only travel in the eight standard directions and cannot intersect itself.

*The small digits are only used for entering your answer.*

**Answer**: Enter the order in which the digits appear on the path.

**Example Answer**: 1463580972




PUZZLE

**1**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A | 1A | K | I | I | I | L | 2A |
| 3L | K | L | L | K | L | K | K |
| A | I | I | I | A | A | I | K |
| K | K | L | 4I | 5K | L | A | I |
| I | L | A | K | L | A | L | A |
| A | 6I | A | A | I | 7A | L | K |
| K | L | K | K | L | L | K | 8I |
| 9I | L | A | A | K | I | I | L |

AKIL

**2**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| O | 1O | Y | U | N | O | 2U | N | U | 3N |
| U | Y | N | U | O | N | Y | O | Y | O |
| N | Y | U | O | Y | U | Y | N | U | Y |
| O | Y | O | N | 4Y | O | Y | O | O | N |
| Y | U | 5N | U | N | U | 6N | Y | U | O |
| U | O | U | N | U | O | N | Y | U | Y |
| O | N | N | Y | O | Y | Y | U | O | N |
| 7O | Y | U | N | O | N | 8U | N | Y | 9O |
| Y | N | Y | N | U | O | N | O | U | U |
| U | N | O | U | O | Y | Y | U | Y | N |

OYUN

**3-4. Kakuro [Salih Alan] (21, 37 points)**

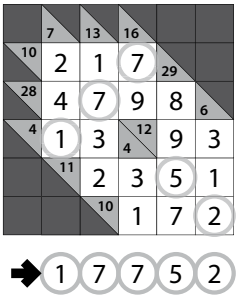
Place a digit from 1 to 9 into each white cell. The numbers in gray triangles indicate the sum of digits in the adjacent "word" across or down. (Across "words" are to the right of their sums; Down "words" are below their sums.) Digits cannot repeat within a "word."

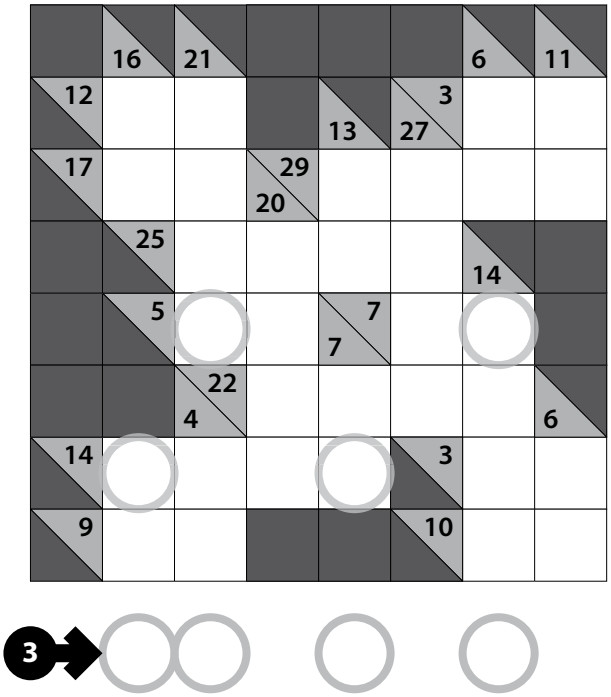
It is possible for some "words" to not have a provided sum.

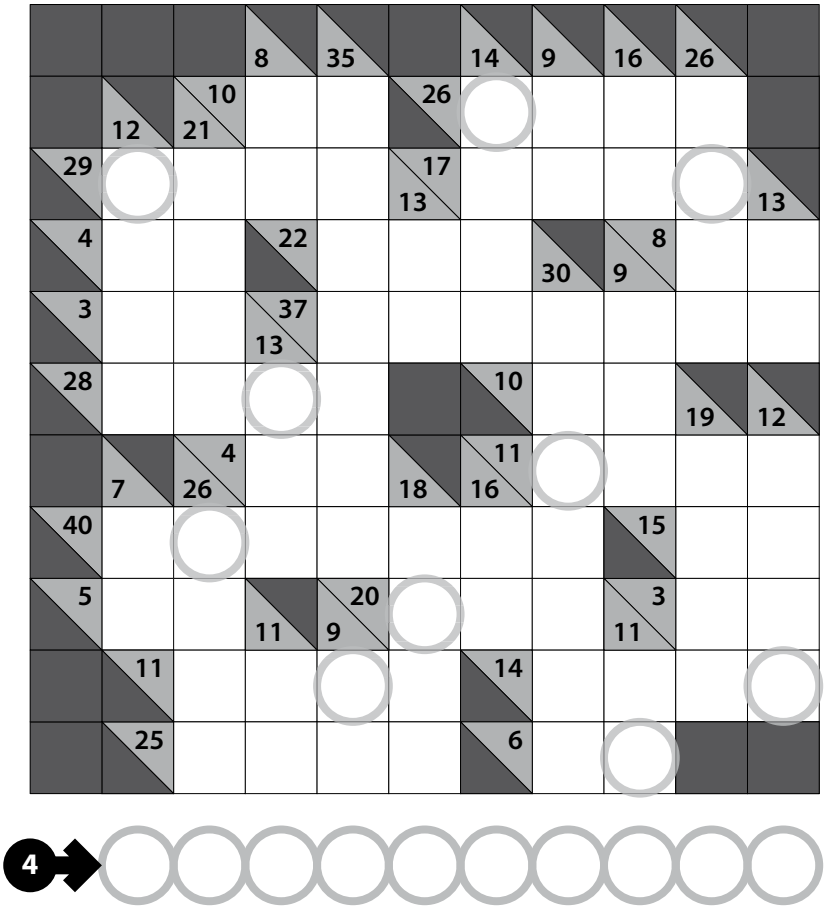
*The circles in cells are only used for entering your answers.*

**Answer**: Enter the contents of each circled cell, reading the cells from left to right. (Ignore which row the circles are in.)

**Example Answer**: 17752



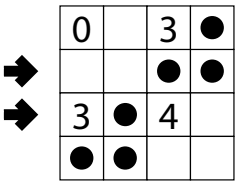
**5-6. Minesweeper [Salih Alan] (15, 29 points)**

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).

*The number of mines you must locate is NOT provided.*

**Answer**: For each designated row, enter its contents from left to right. Use 'O' for a cell containing a mine and 'X' for a cell that does not contain a mine (but may contain a number). You may use two other characters, as long as they are distinct.

**Example Answer**: XXOO, XOXX




5a

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 2 | | | | | | | | | |
| | | | 3 | 5 | | 6 | | 5 | |
| | 5 | | 3 | | | 4 | | | 3 |
| 3 | 6 | | | | | | 5 | | |
| | | | | | 4 | 3 | | 5 | |
| | 5 | | | 5 | | | | 5 | |
| 3 | | | 3 | 4 | | | | | 3 |
| 4 | | | | | 5 | | | | 3 |
| | | 5 | 4 | 3 | | | 5 | 6 | |
| | 3 | | | | | 3 | | | |

5b

6a

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4 | | | 4 | | | | 4 | | 5 | | 3 | 1 |
| | 3 | | | 6 | | | 6 | | | | | | 5 | |
| | | | 4 | | | 4 | | | 5 | | | 6 | | |
| | | 3 | 4 | 5 | | | 2 | | | | 4 | | | |
| | 6 | | | | | | | | 6 | | | | 6 | |
| 4 | | | 6 | | | | | 4 | | | | 4 | | |
| | | 4 | | | 6 | | | | | | | | | |
| 4 | | | | 4 | | | | 3 | | 6 | | | 6 | |
| | | | | | | | 6 | | 4 | | | 4 | | |
| | | 5 | | 6 | | 4 | | | | 4 | | | 2 | |
| | 6 | | 4 | | | | | | 6 | | | | 2 | |
| 4 | | | | | | | | 4 | | | | | | 2 |
| | | | 4 | | 6 | | | | | | 6 | | | |
| | | 6 | | 4 | | | | 6 | | 4 | | | | 2 |

6b

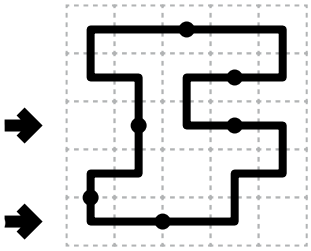
**7-8. Mid-loop [Murat Can Tonta] (23, 29 points)**

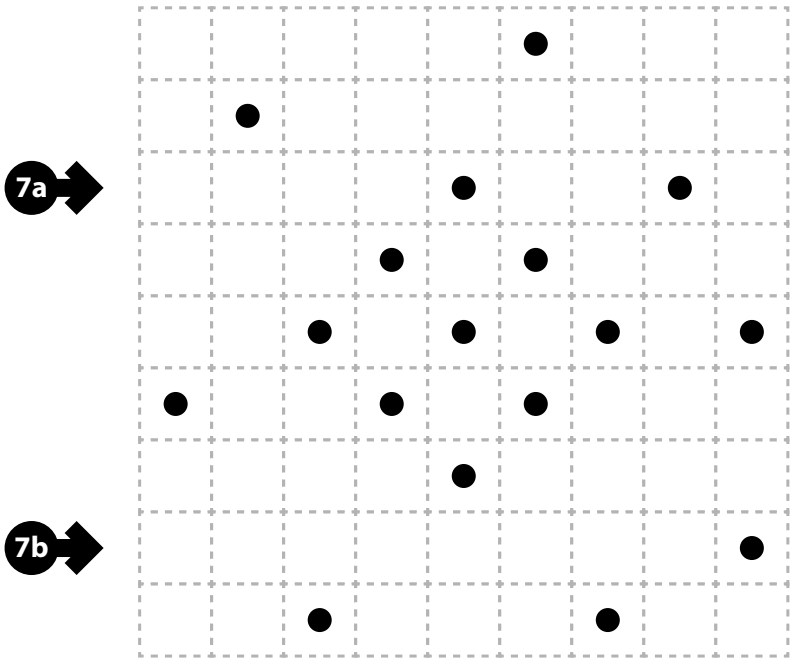
Draw a single loop that passes orthogonally through centers of cells. The loop cannot intersect itself or enter the same cell more than once.

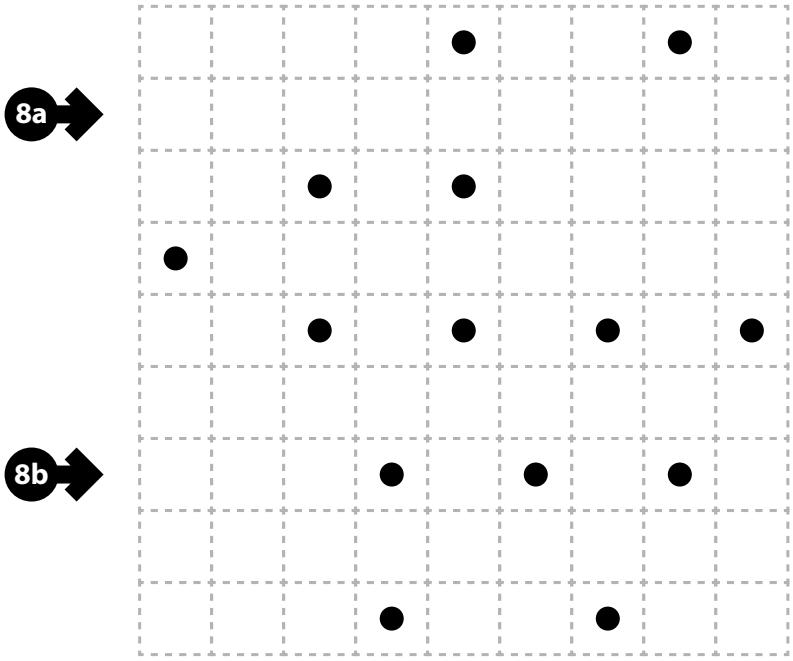
The loop must go straight through all black dots. Each black dot must be the same distance from the previous and next turn of the loop (that is, it must be at the midpoint of the straight line segment that goes through it).

**Answer**: For each designated row, enter the letter for each cell, from left to right. The letter for a cell is '`I`' if the loop goes straight through the cell, '`L`' if the loop turns in the cell, and '`X`' if the loop does not go through the cell. You may use other characters, as long as they are distinct.

**Example Answer**: `XILIL,LIILX`





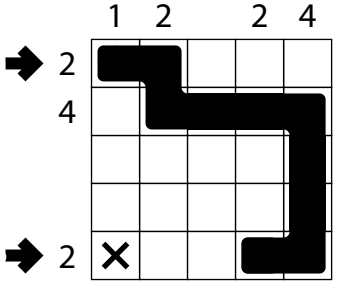
**9-10. Snake [Salih Alan] (21, 24 points)**

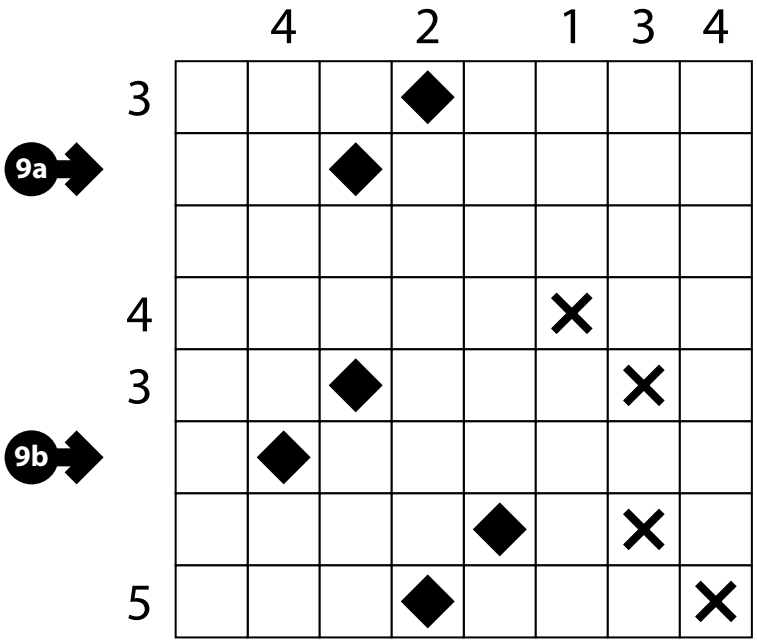
Locate a "snake" in the grid. The snake is a path that starts in a cell, goes through some number of cells orthogonally, and ends in a cell. Each cell is used at most once by the snake. The snake cannot loop around to touch itself, not even diagonally. (In other words, if two cells in the snake touch 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.

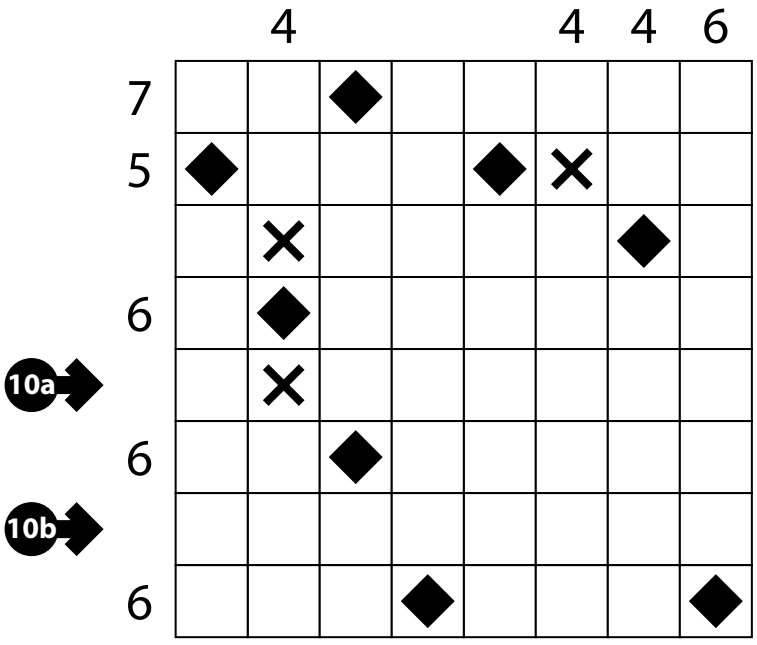
A cross in a cell (when provided) indicates that the snake cannot go through the cell. A diamond in a cell (when provided) indicates that the snake must go through (or end in) that cell. A rounded square in a cell (when provided) indicates that that cell must be an end of a snake.

**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. You may use other characters, as long as they are distinct.

**Example Answer**: OOXXX, XXXOO



**11-12. Kuromasu [Murat Can Tonta] (24, 33 points)**

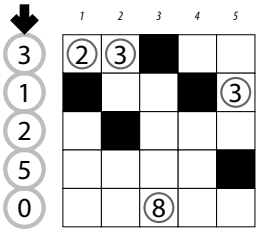
Shade some cells so that all remaining cells are connected orthogonally and no two shaded cells share an edge. Each numbered cell indicates the total count of unshaded cells connected in line vertically and horizontally to the numbered cell *including the cell itself*.

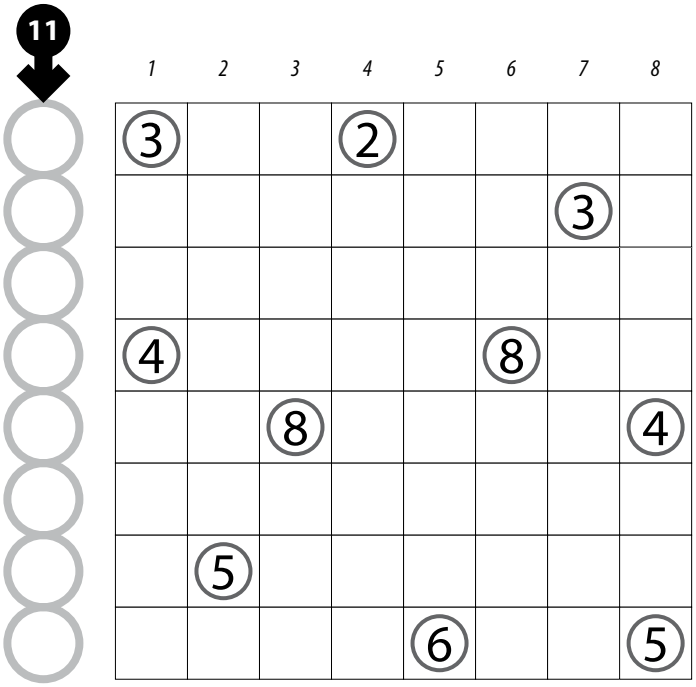
Cells with circles must not be shaded.

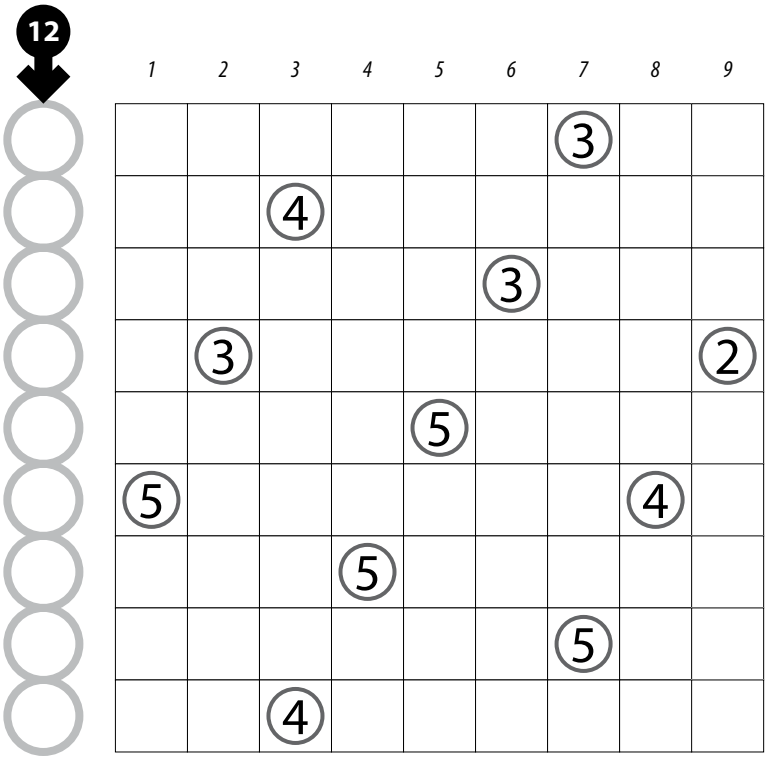
*The numbers on top of the diagram are for Answer purposes only.*

**Answer**: For each row from top to bottom, enter the number of the first column from the left where a shaded square appears. Use only the last digit for two-digit numbers; e.g., use '0' if the first shaded square appears in column 10. If the row has no shaded cells, enter '0'.

**Example Answer**: 31250



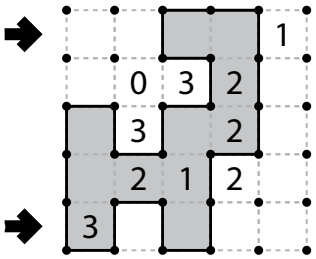



**13-14. Slitherlink [Murat Can Tonta] (29, 36 points)**

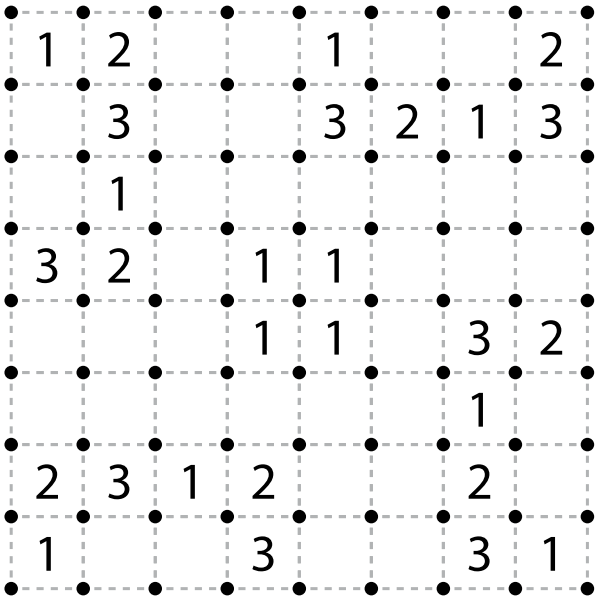
Draw a single, non-intersecting loop that only consists of line segments between the dots along the dashed lines. A number inside a cell indicates how many of the edges of that cell are part of the loop.

**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.

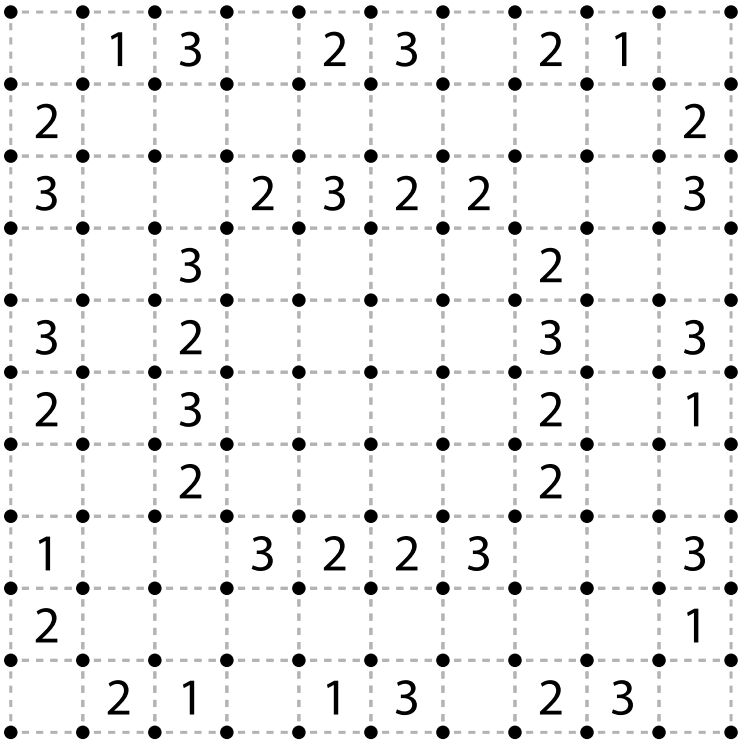
**Example Answer**: xxoox, oxoxx




13a
13b




14a
14b

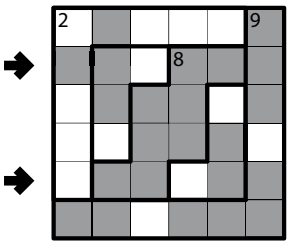


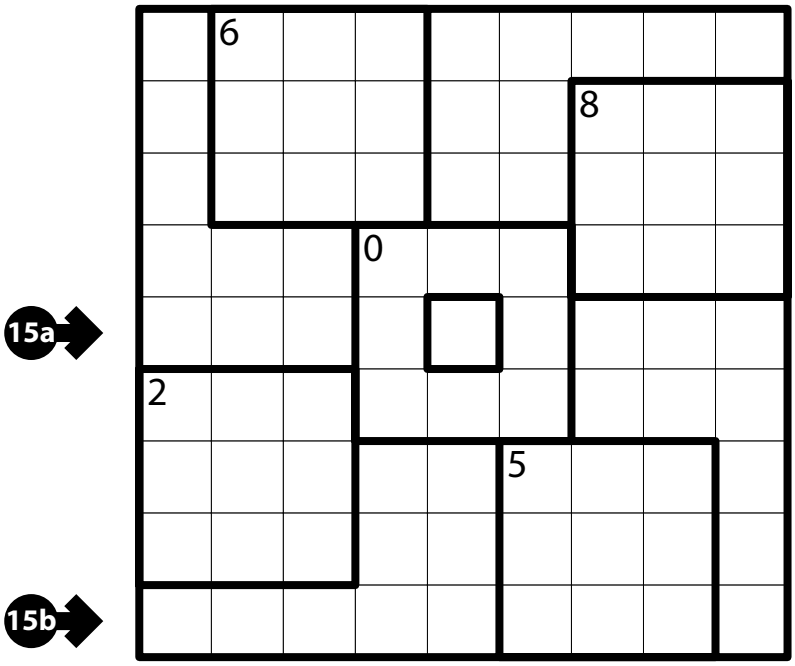
**15-16. Aqre [Murat Can Tonta] (20, 48 points)**

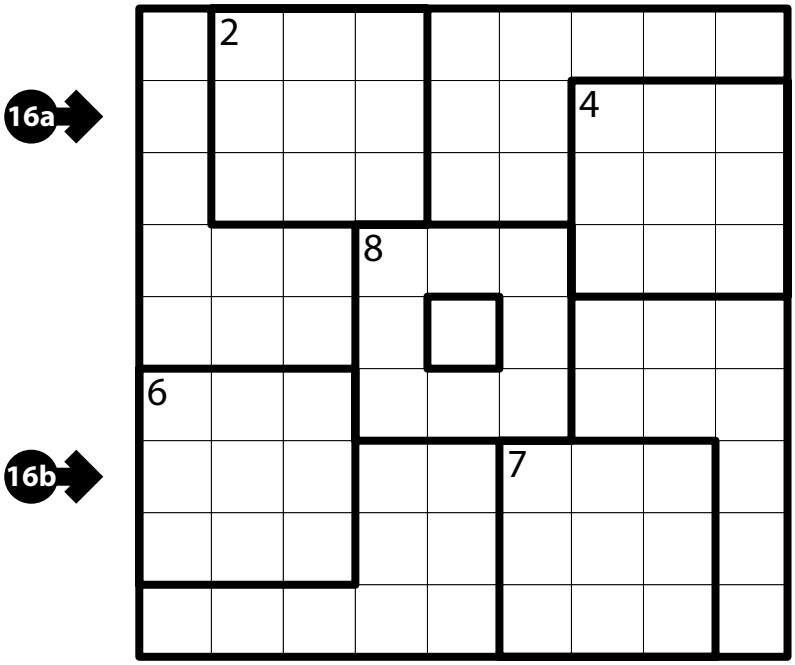
Shade some cells so that all shaded cells connect along edges to create a single connected region. (It is permissible for the region to touch itself at a corner, but touching at a corner is not a connection.) No 1×4 or 4×1 group of squares can be completely shaded. No 1×4 or 4×1 group of squares can 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



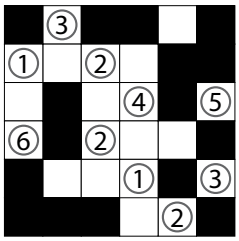



**17-18. Kurotto [Salih Alan] (38, 78 points)**

Shade some empty (non-circled) 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. For each given number, the total size of all black regions orthogonally adjacent to that number must match the number.

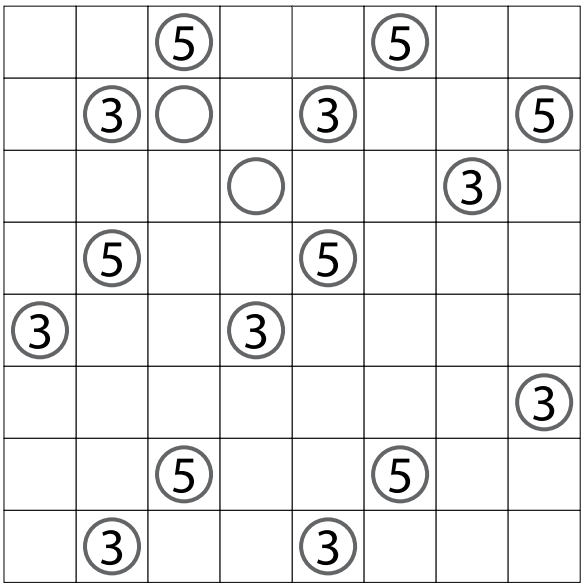
**Answer**: For each designated row, enter its contents from left to right. Use 'X' for an white cell and 'O' for a black cell. You may use two other letters or numbers, as long as they are distinct.



**Example Answer**:
XXXXOO, OXXXOX

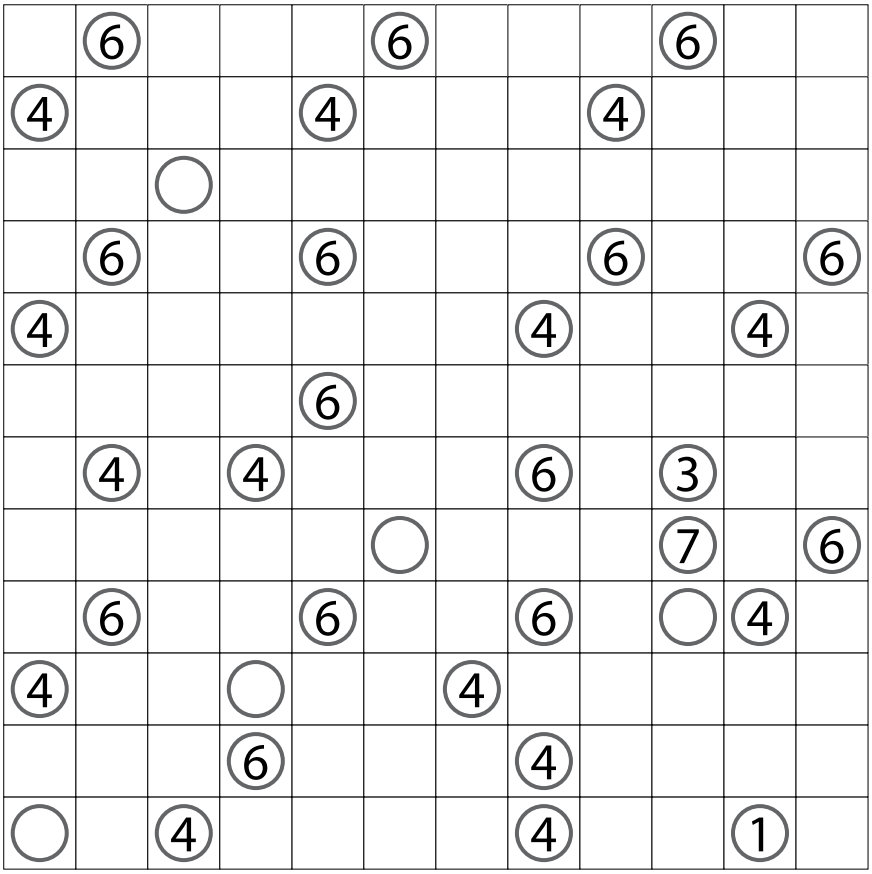
17a

17b



18a

18b

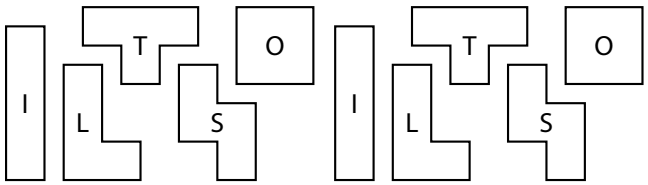


**19-20. Statue Park [Murat Can Tonta] (35, 59 points)**

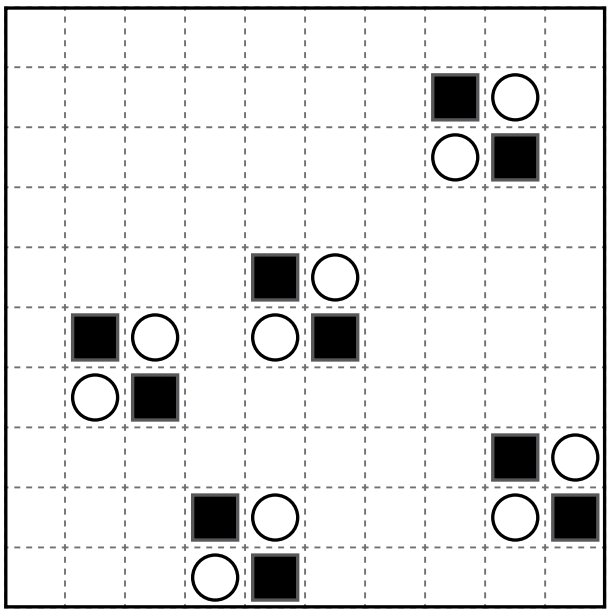
Shade some cells black (leaving the other cells white) so that the grid is divided into non-overlapping regions; cells of the same color are considered in the same region if they are adjacent along edges. The black regions must form the set of given shapes; each shape may be rotated and/or reflected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

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

*The letters on the given shapes are only for entering your answer.*

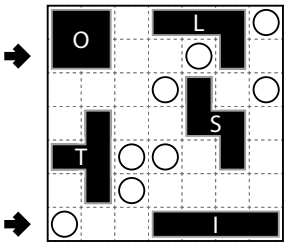



19a

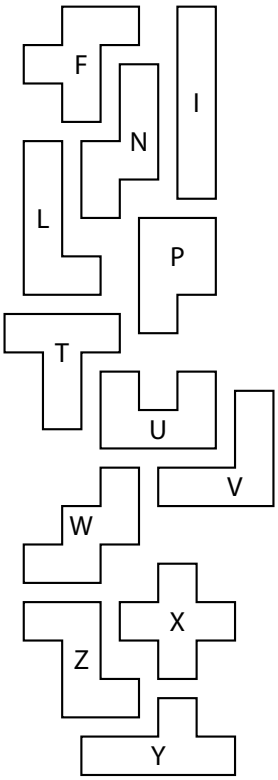


19b

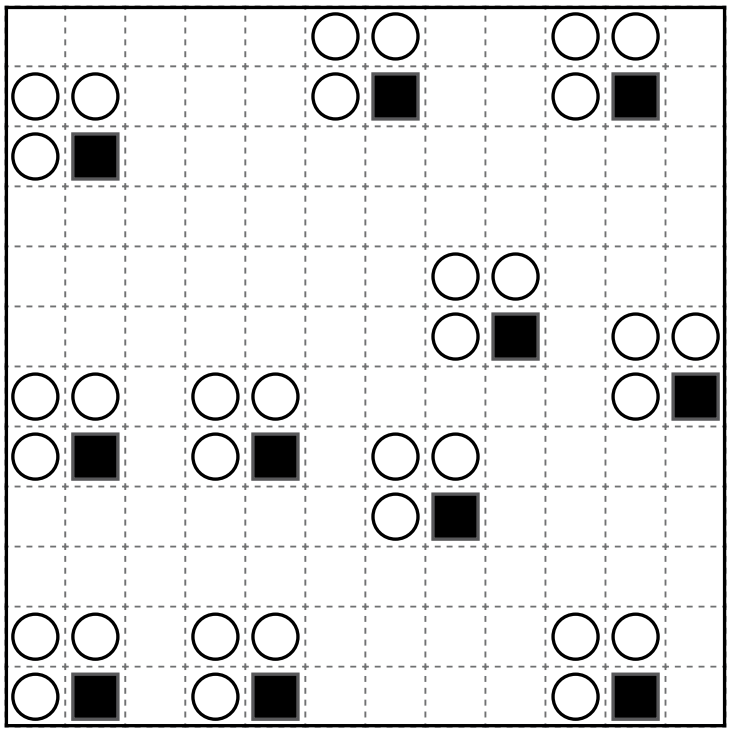
**Answer**: For each designated row, enter the contents of each cell, from left to right. For each cell, its contents are the letter of the shape occupying that cell, or the letter 'A' if the cell is not shaded.




**Example Answer**:
OOAAALA,AAAIIII




20a



20b

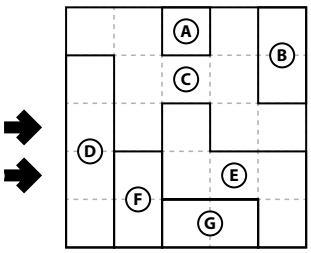
**21-22. Spiral Galaxies [Salih Alan] (11, 93 points)**

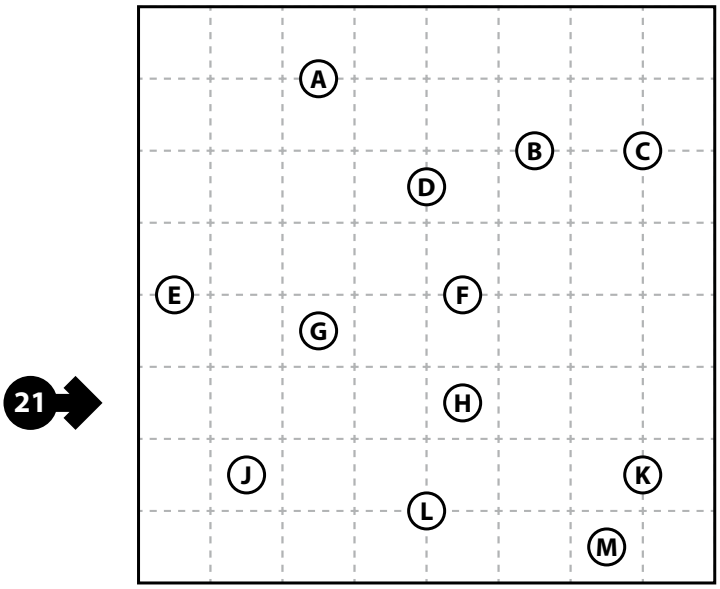
Divide the grid along the indicated dashed lines into regions. Each region must be rotationally symmetric and contain exactly one circle, which must be at its center (the point of symmetry).

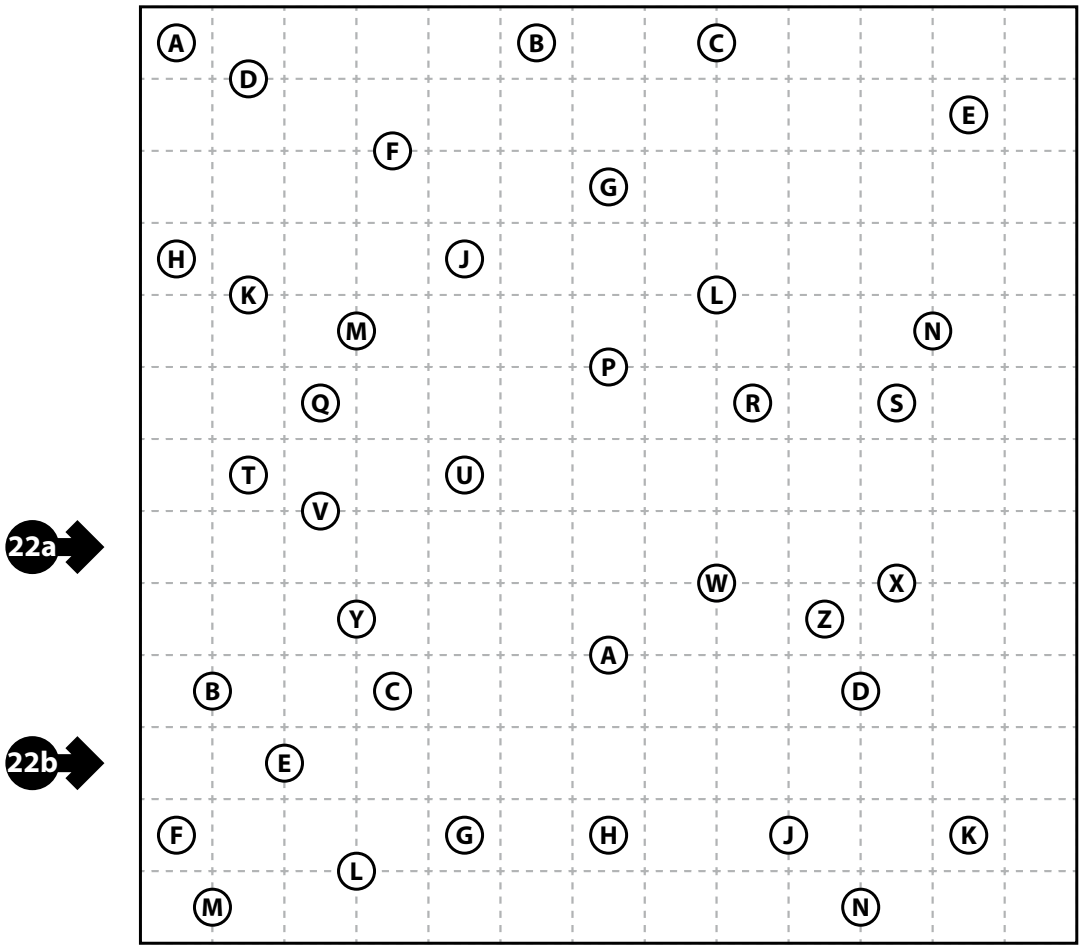
*The letters inside the circles are for Answer purposes only.*

**Answer**: For each designated row, enter the letter for each cell, from left to right. The letter of a cell is the letter inside the circle inside the region that contains that cell.

**Example Answer**: DCECC, DFEEE



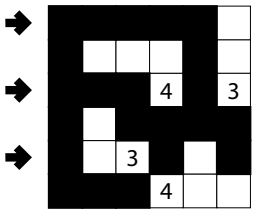



**23-24. Nurikabe [Salih Alan] (16, 27 points)**

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 2×2 group of cells can be entirely shaded black.

**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**:
ooooox, oooxox, oxxoxo




23a

23b

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | 5 | | | | 5 | | |
| | | | | 3 | | | | 3 | |
| | | | | | | | | | |
| | | 5 | | | | | | | |
| | | | 3 | | | | | | |
| | | | | | | | | 5 | |
| | | | | | | | | | 3 |
| | | | | | | | | | |
| | 5 | | | | | | | | |
| | | 3 | | | | | | 3 | |

24a

24b

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 6 | | | | | | 6 | | | |
| | 4 | | | | | | 4 | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | 6 | | | | | | 6 | | | | |
| 4 | | | | | | 4 | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | 6 | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| | | | | | | 6 | | 5 | | | |
| | | | | | 4 | | | | | | |

## 25-26. Japanese Sums [Murat Can Tonta] (54, 89 points)

Place a number from the specified list into some cells so that in each row or column no number appears more than once. 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 (×); do not put any numbers into those cells (and consider them to be empty for purposes of separating groups).

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

**Example Answer**: `7X1X4,127X5`

| | | | {1–7} | 3 11 | | 6 | |
|---|---|---|---|---|---|---|---|
| | | | 13 | 2 | 19 | 1 | 24 |
| | 7 | 8 | 3 | 4 | | 2 | 6 |
| | | 18 | | 7 | 5 | 4 | 2 |
| → | 7 1 4 | | 7 | | 1 | × | 4 |
| → | 10 5 | | 1 | 2 | 7 | | 5 |
| | 5 14 | | 5 | | 6 | 1 | 7 |

{1–6}

| | | 3 | 4 | 5 | | 13 | 11 | 4 |
|---|---|---|---|---|---|---|---|---|
| | | 6 | 7 | 8 | | 4 | 6 | 10 |
| | 3 4 | | | | | | | |
| | 5 6 | | | | | | | |
| | 7 8 | | | | | | | |
| 25a → | | | | | | | | |
| | 4 5 | | | | | | | |
| 25b → | 3 4 | | | | | | | |
| | 5 6 | | | | | | | |

{1–9}

| | | | 3 | 4 | 12 | 11 | | 11 | | | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 5 | 6 | 3 | 10 | 2 | 10 | | | 5 |
| | | | 7 | 8 | 4 | 9 | 34 | 9 | | 43 | 7 |
| | | 4 6 8 | | | | | | | | | |
| | | 4 7 10 | | | | | | | | | |
| | | 5 9 13 | | | | | | | | | |
| | | 32 | | | | | | | | | |
| 26a → | | 21 | | | | | | | | | |
| | | 3 21 | | | | | | | | | |
| | | 35 7 | | | | | | | | | |
| 26b → | | 1 23 | | | | | | | | | |
| | | 23 4 5 | | | | | | | | | |