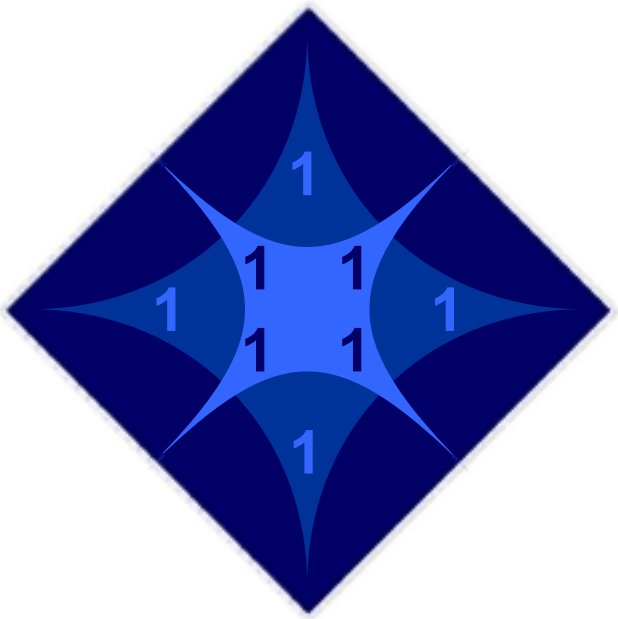
TAPA VARIATIONS CONTEST



Week 3
17th - 19th March 2012
75 minutes + 5 minutes extra time
Penalty points: 8 per minute
Time bonus: 10 per minute

Puzzles by: Serkan Yürekli

TVC XI

1. Previously on TVC Combined Tapa	154 points
2. Mad Max Tapa	13 + 136 points
3. Fractional Tapa	55 points
4. Dissected Tapa	63 points
5. Visionary Tapa	138 points
6. Full Tapa	146 points
7. Modern Tapa	43 points
8. Power of Tapa	192 points
9. Tapa Balance	47 points
10. Meiosis Tapa	64 points

Thanks to Ulrich Voigt and Gülce Özkütük Yürekli

TAPA RULE: Paint some cells black to create a continuous wall. Number/s in a cell indicate the length of black cell blocks on its neighbouring cells. If there is more than one number in a cell, there must be at least one white cell between the black cell blocks. Painted cells cannot form a 2x2 square or larger. There are no wall segments on cells containing numbers.

TVC X ANSWER FORMAT: Write the lengths of separate blackened cell blocks in the marked rows. The answer for the example would be: 12, 11

1. Previously on TVC (154 points)

In each box, there is a different rule to follow. Clues are also valid for the neighbouring cells of another box.

Tapa Place

Distribute the given clues to the shaded cells, one clue set per a cell, and solve the Tapa puzzle.

Peers Tapa

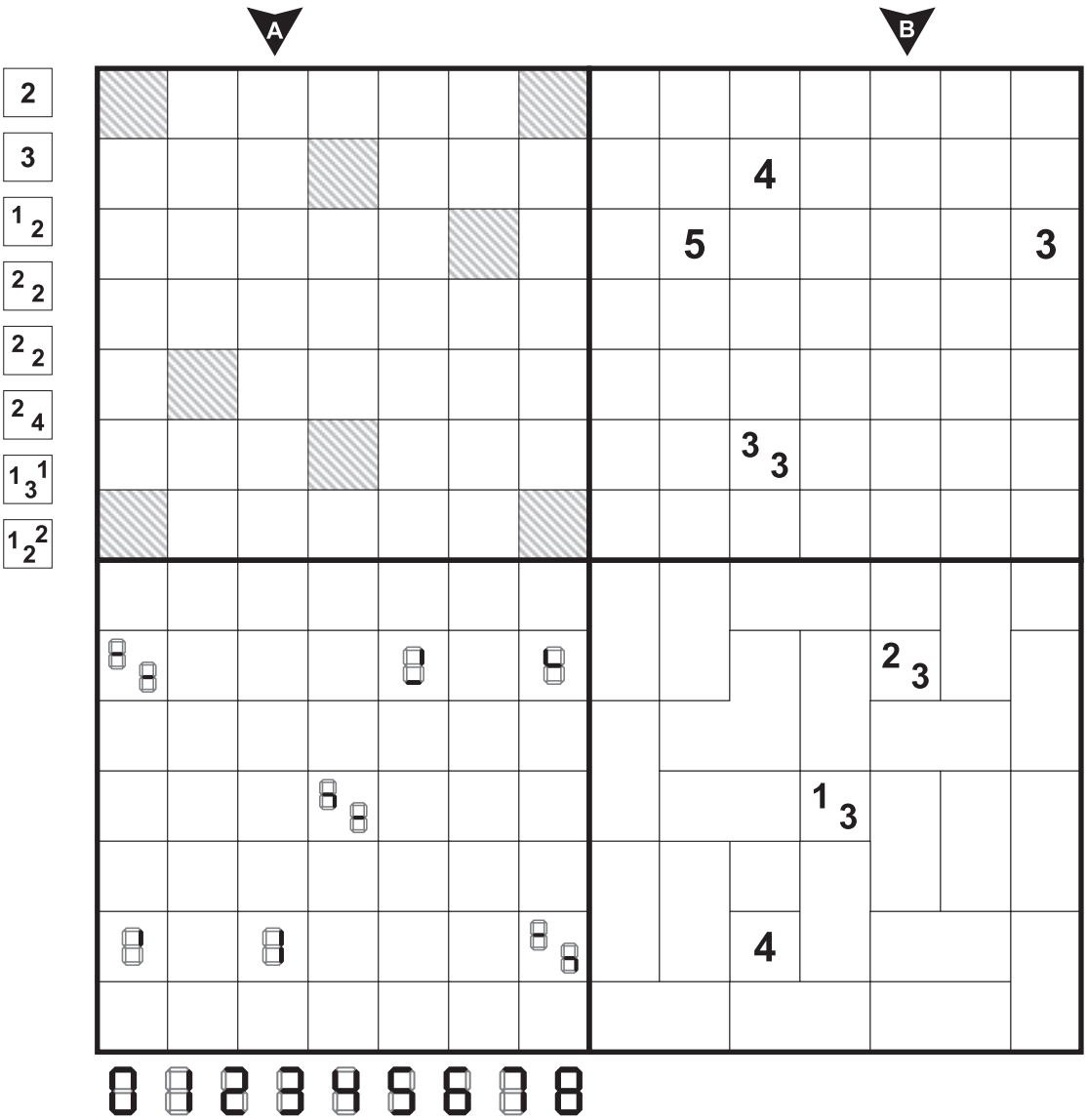
Each given clue cell has a peer, symmetrical to the center of the grid. The sums of digits should be equal for each pair, but two peers cannot be exactly the same. Find the missing peers and solve the puzzle.

Digital Tapa

Digits are in digital form; as shown below. However, some segments may be missing from the original numbers. Any digit has the possibility of being zero.

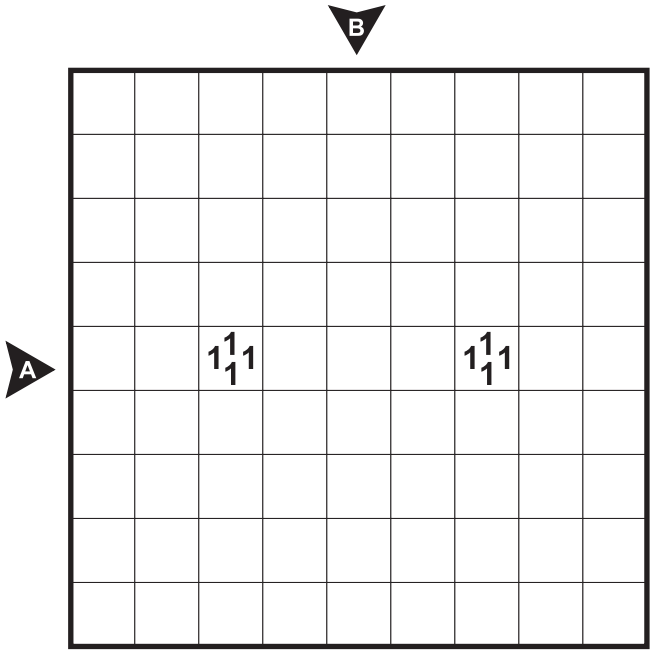
Ir-irregular Tapa

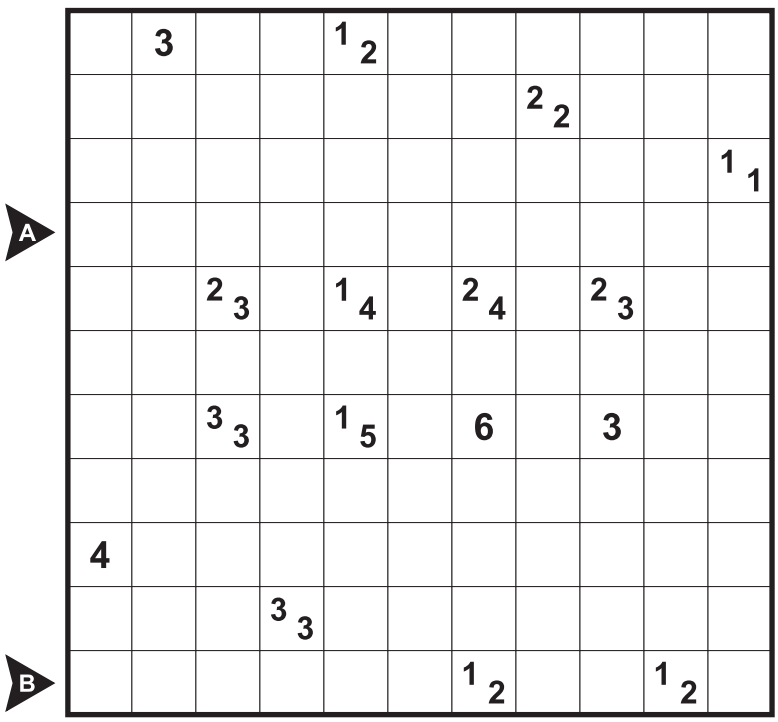
The grid is divided into irregular shapes. Each irregular shape counts as many cells as the unit squares it contains.



2. Mad Max Tapa (13 + 136 points)

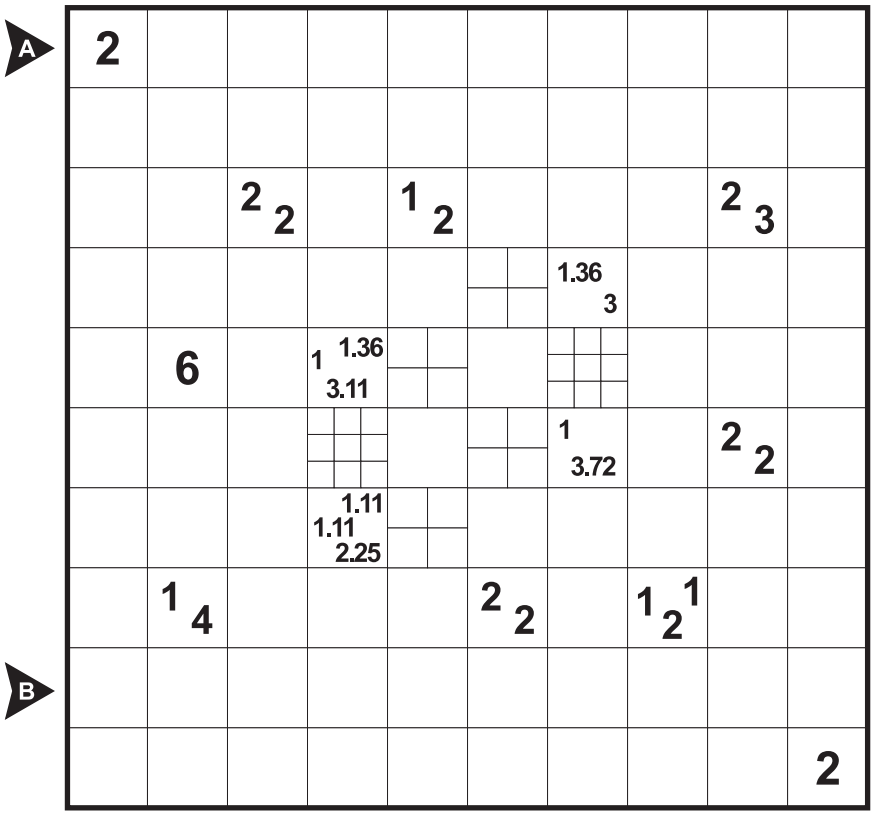
Paint the maximum number of cells black within the restrictions of Tapa rules.





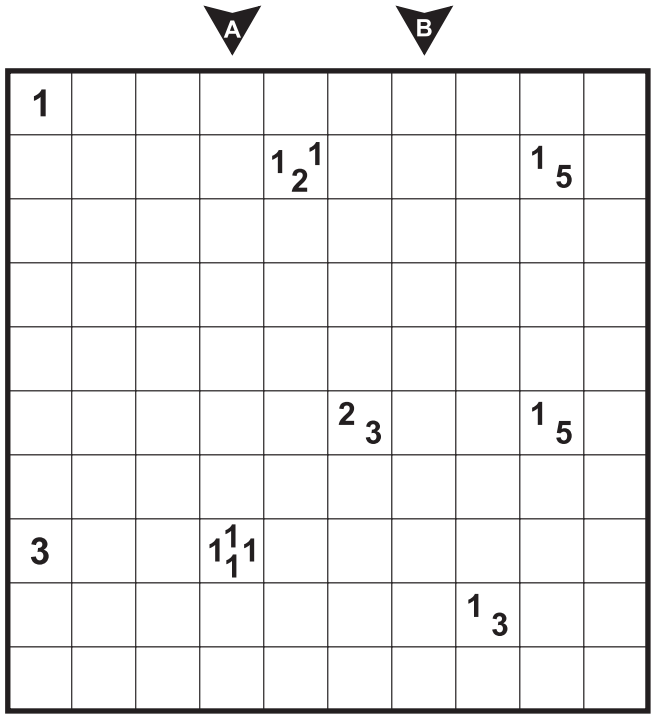
3. Fractional Tapa (55 points)

Some of the unit cells are divided into smaller squares. Number/s in a cell indicate/s the total area of each distinct group of painted squares on its neighbouring squares, rounded to two decimal places. Nowhere in the grid can a vertex (any corner of a square of any size) be fully surrounded by painted squares.



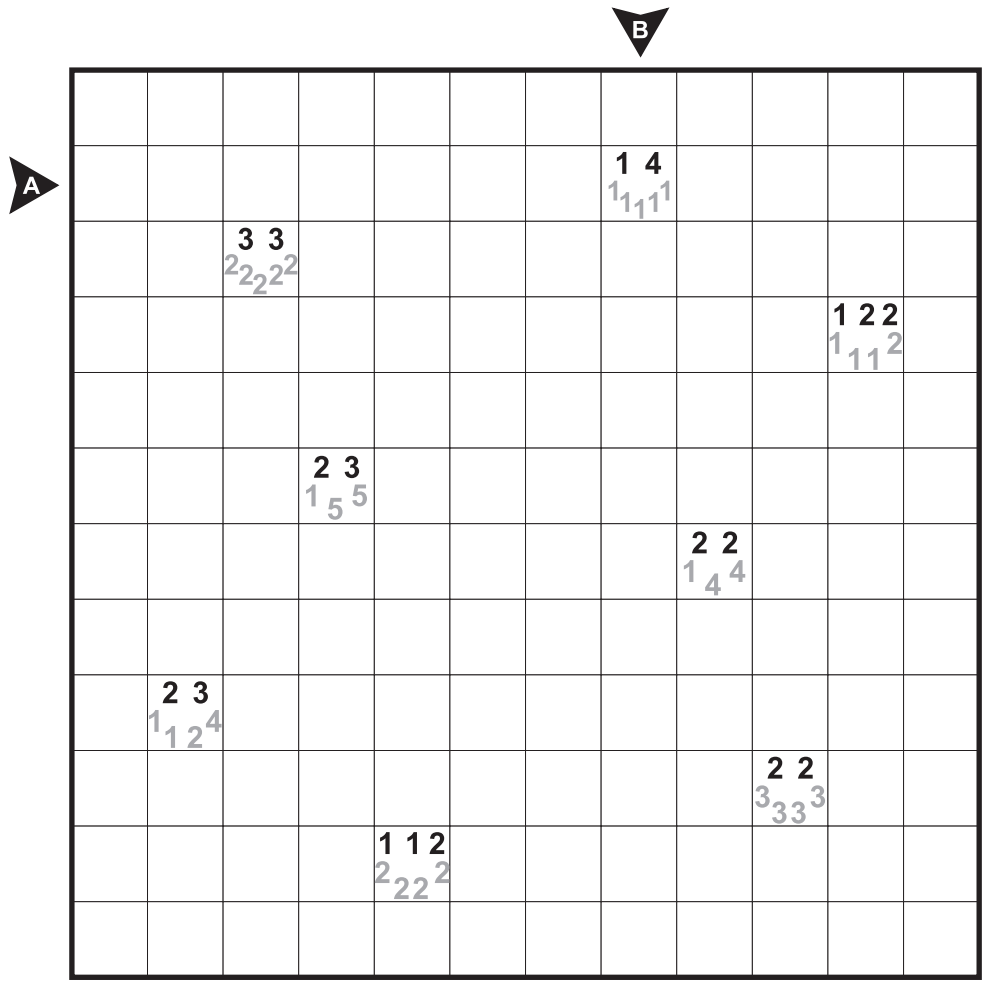
4. Dissected Tapa (63 points)

Form two congruent figures: Painted cells and the remaining area.
Two figures are congruent if they have the same size and shape, with some possible rotation and/or reflection.



5. Visionary Tapa (138 points)

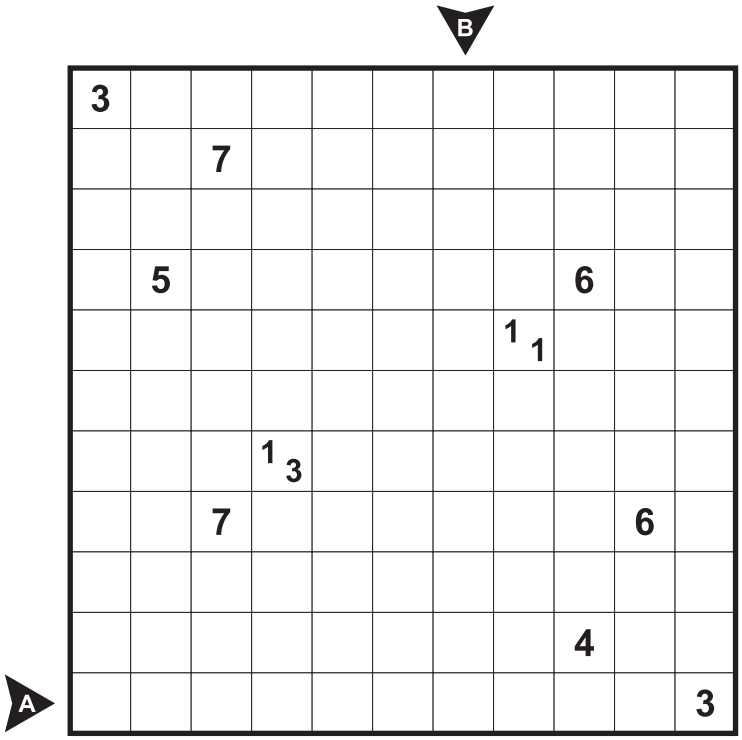
Clue cells contain two sets of numbers. Black ones are regular Tapa clues for the immediate neighbours, whereas the other ones supply clues for the secondary neighbours — those that are one-unit apart from the clue cell.



6. Full Tapa (146 points)

Enter the given words once each into the entirety of the empty cells. Words must be written either across or down, and all words formed by consecutive letters in the grid must appear in the word list.

Note: Actual puzzle will use some words from a famous song. Only the highlighted words in the lyrics will be used for the puzzle.



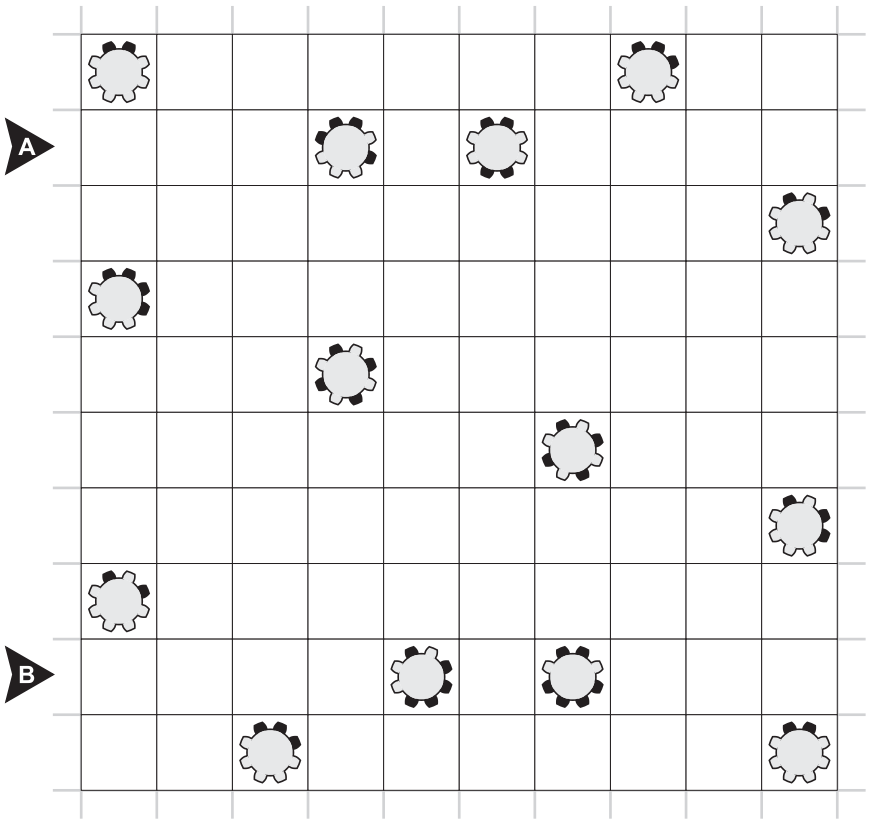
Semolina pilchard
CLIMBING up the Eiffel TOWER
ELEMENTARY penguin singing HARE Krishna
MAN, you should have seen them kicking
EDGAR Allan Poe

I am THE eggman
They ARE the eggmen
I am the WALRUS
GOO goo g' joob

(The Beatles - I Am The Walrus)

7. Modern Tapa (43 points)

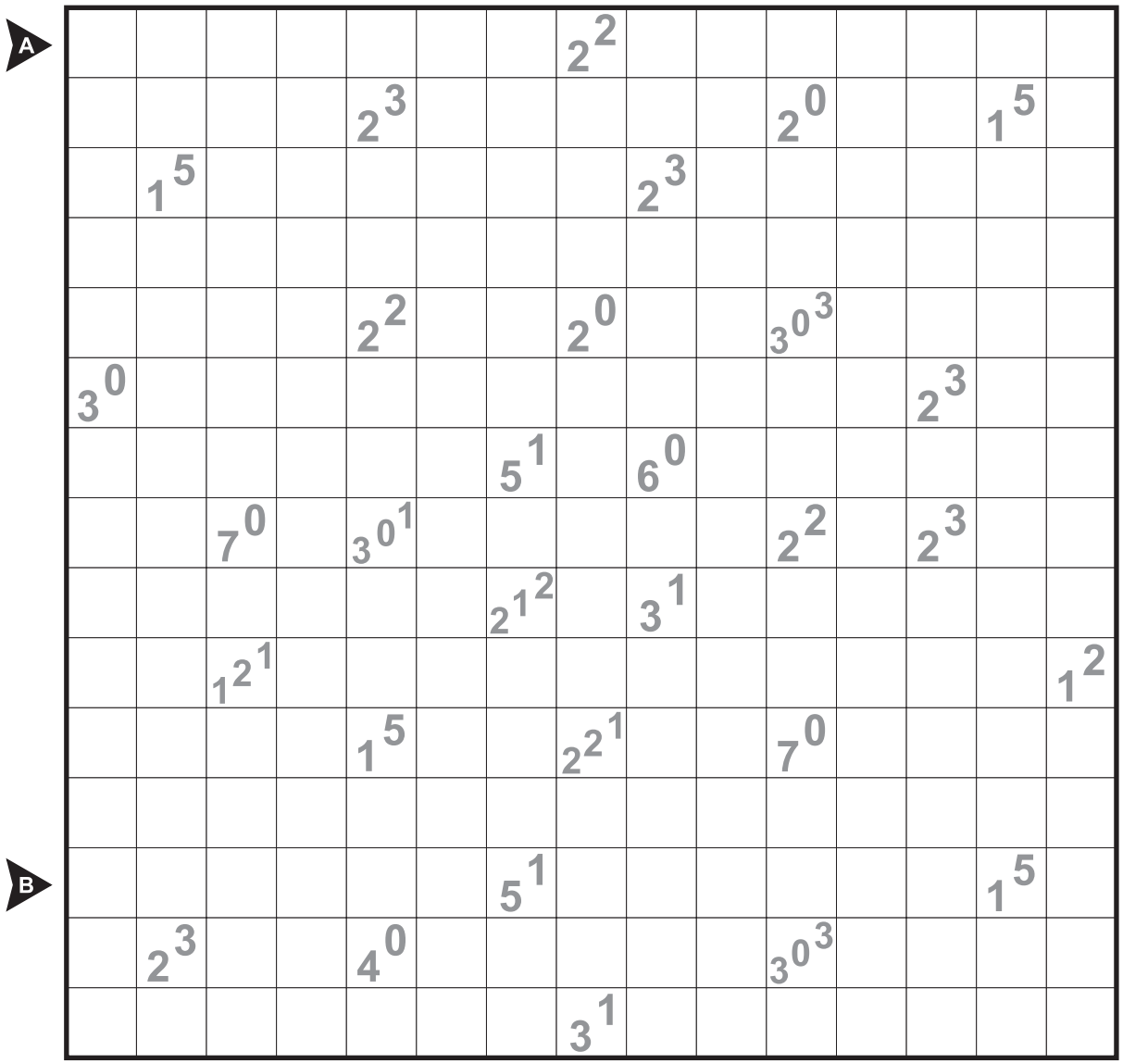
Each clue gives the length of each distinct group of painted cells on its neighbours, as well as each group of empty ones, in an exact circular order (without reflection), with the precondition that all imaginary cells outside of the grid are empty.



8. Power of Tapa (192 points)

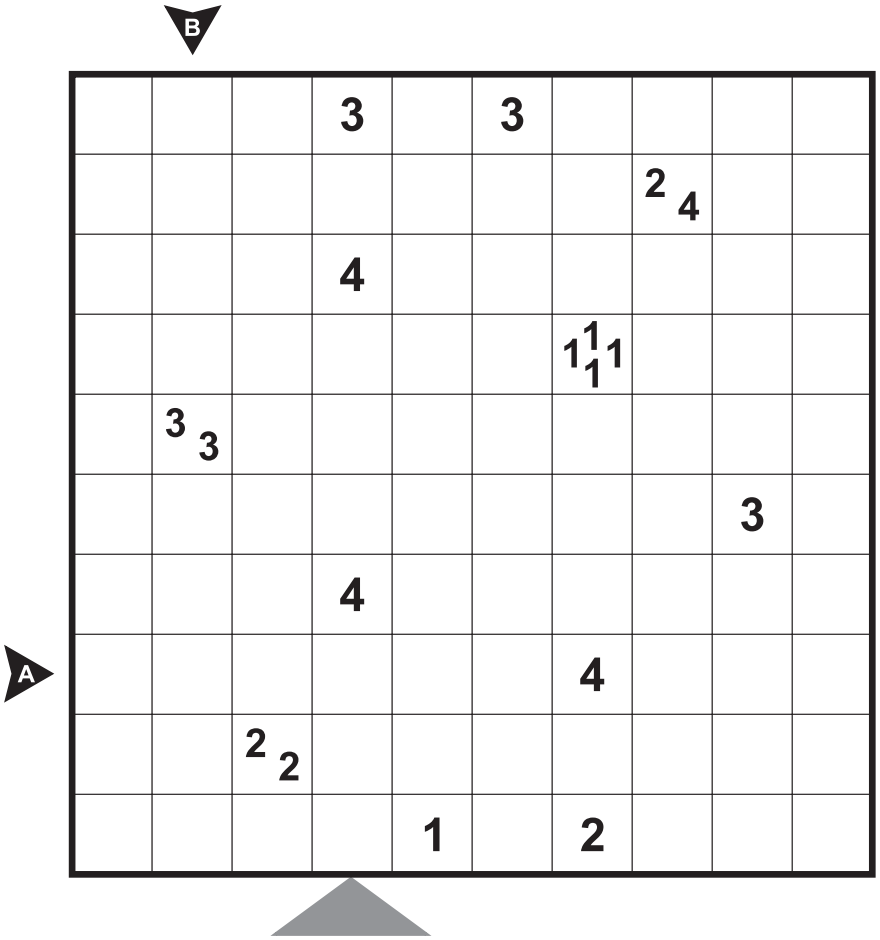
For each clue cell, take the set of numbers either as separately (hence giving a multi-number clue), or as input values to the exponentiation (hence giving a single-number clue).

Note: 0^0 is undefined and won't be used. Otherwise, $a^0=1$; $1^b=1$; $0^c=0$; $d^1=d$; $e^{f^g}=e^{(f^g)}$.



9. Tapa Balance (47 points)

The grid should be in balance, with regard to the number of blackened cells (ignore any momentum). Clues and white cells are considered weightless.



10. Meiosis Tapa (64 points)

Some of the given clue digits may be divided in half. This may happen in two different ways: Digit splits into two and creates two identical digits; or digit is only divided by two and results in a single number. Multi-digit clue cells may have divided and undivided digits together. If a digit divides in half and results in a decimal, each digit in the result counts as a new Tapa clue (e.g. if the original clue is 3, it becomes 1-5 after the division). Resulting digit of a division cannot be divided again.