Tapa Variations Contest

Mar 2012

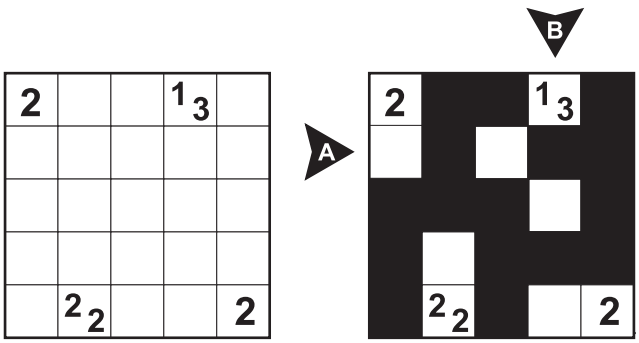
week 3

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 2012 SCORING SYSTEM:

i) The best 3 results out of 4 will be considered in the final ratings.
ii) Time bonus will be applied.
iii) The difficulty of the tests may vary, but the scores will be normalized such as the best player gets 1000 points, and the other players' scores are calculated accordingly.

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



All puzzle points will be announced in Friday.

Puzzle booklet will not contain examples.

1: Previously On TVC - Combined Tapa

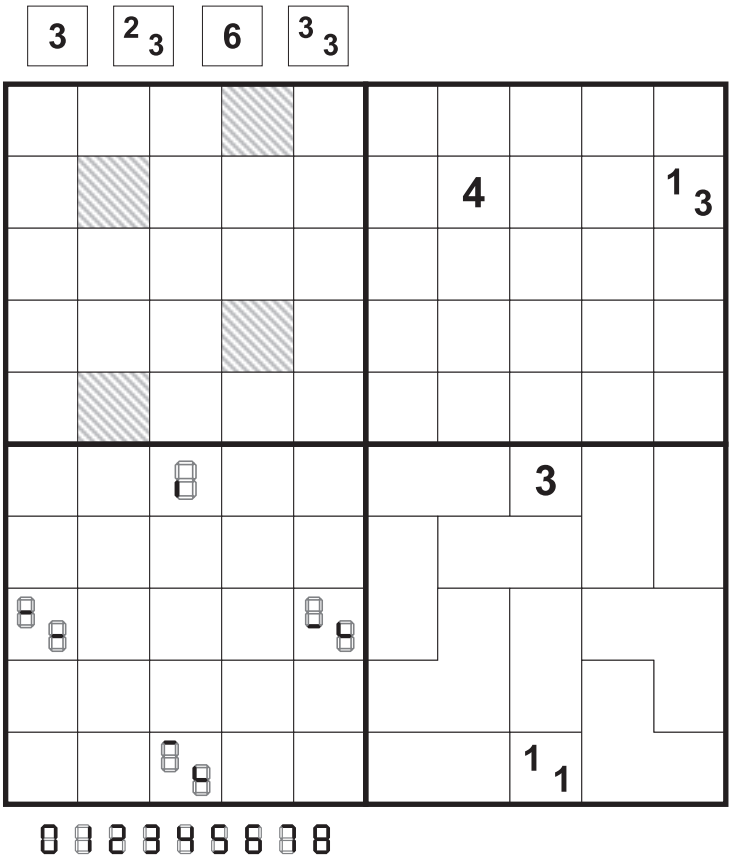
In each box, there is a different rule to follow. Clues are also valid for the neighbouring cells of another box.

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

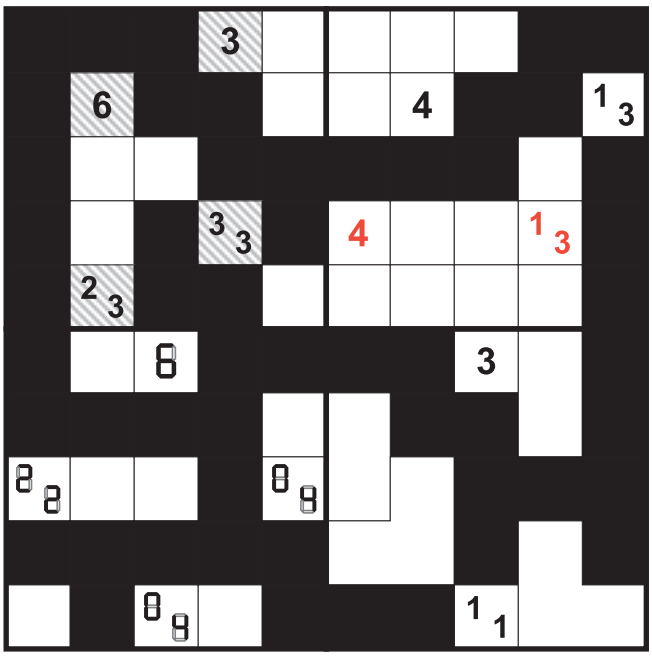
Peers Tapa
Each given clue cell has a peer, symmetrical to the center of the grid. The sums of digits should be equal for each pair, but two peers cannot be exactly the same. Find the missing peers and solve the puzzle.

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.



Tapa Place	Peers Tapa
Digital Tapa	Ir-irregular Tapa



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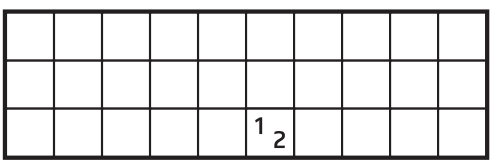
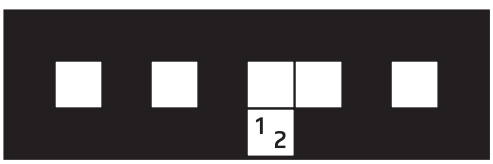
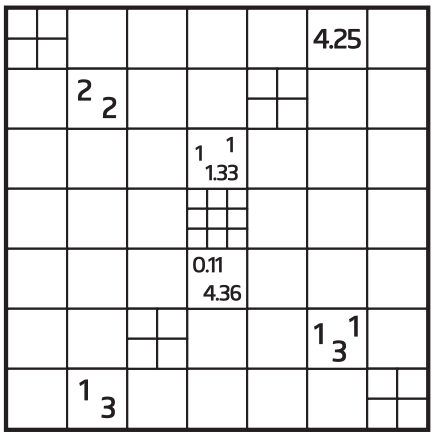
2. Mad Max Tapa
Paint the maximum number of cells black within the restrictions of Tapa rules.

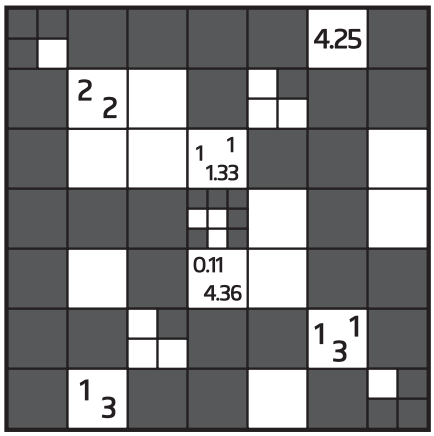




3. Fractional Tapa

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.





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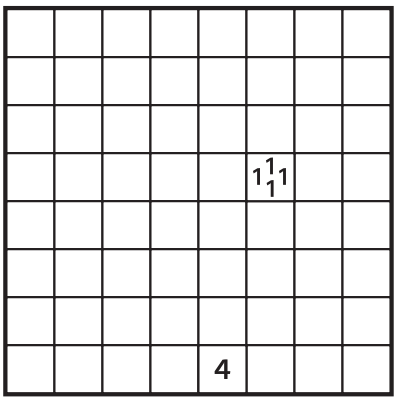
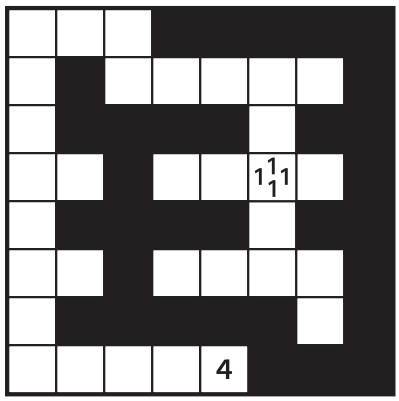
4. Dissected Tapa

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.





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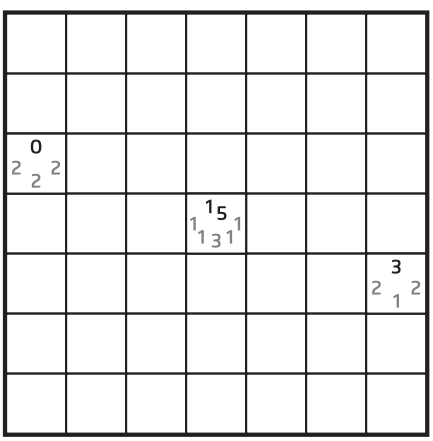
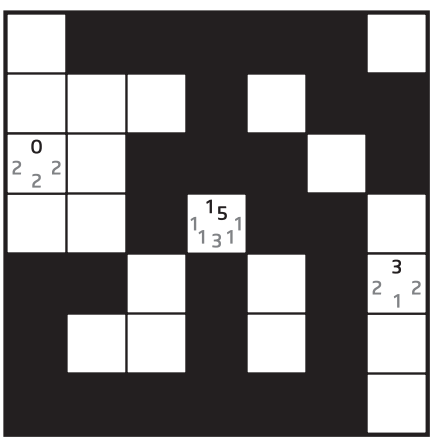
5. Visionary Tapa

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.

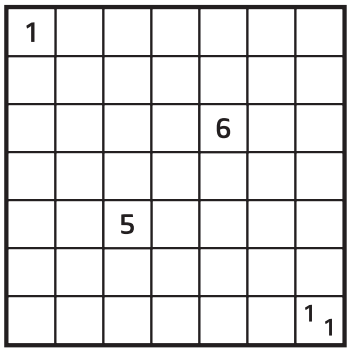




6. Full Tapa

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.



ZERO
ONE
TWO
THREE
FOUR
SIX

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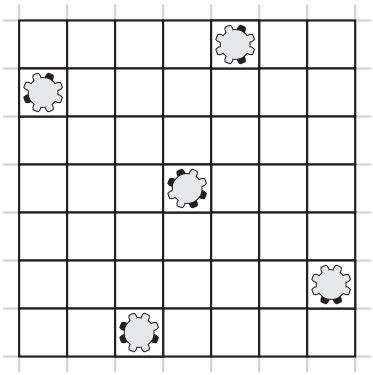
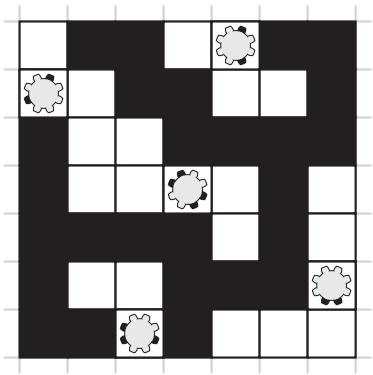
7. Modern Tapa

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.





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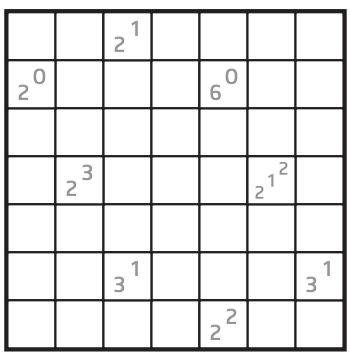
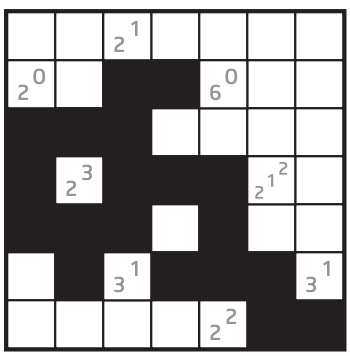
8. Power of Tapa

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).

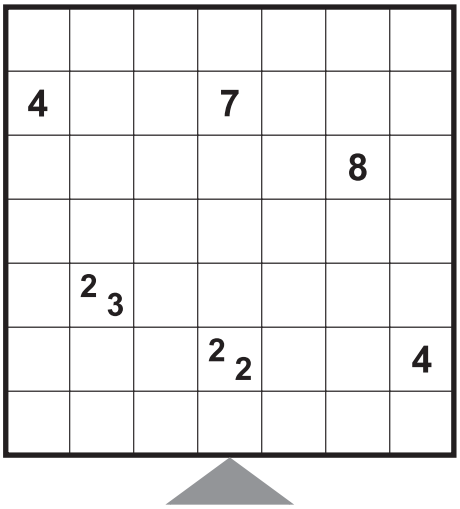
Note: 0^0 is undefined and won't be used. Otherwise, $a^0=1$; $1^b=1$; $0^c=0$; $d^1=d$; $e^{f^g}=e^{(f^g)}$.

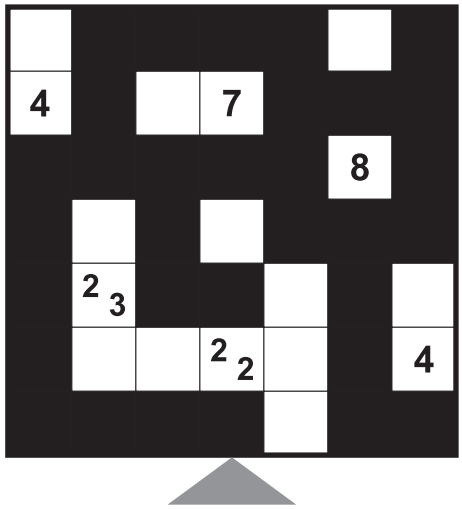




9. Tapa Balance

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





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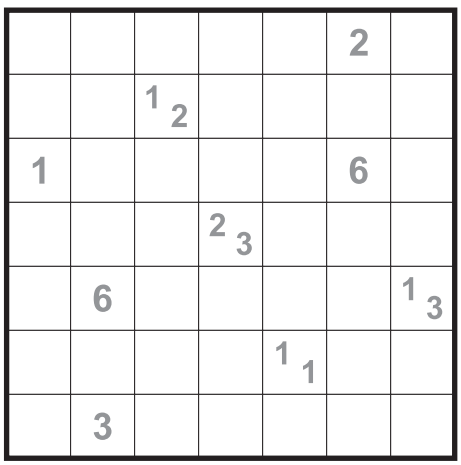
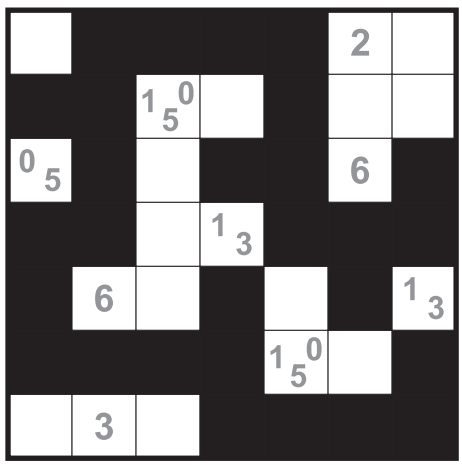
10. Meiosis Tapa

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.





Some puzzle ideas are obtained as follows:

Combined Tapa format, Digital Tapa, Mad Max Tapa, Fractional Tapa, Dissected Tapa, Visionary Tapa, Full Tapa, Modern Tapa and Power of Tapa from Cihan Altay.

Tapa Place, Peers Tapa, Irregular Tapa, Tapa Balance and Meiosis Tapa from Serkan Yürekli.