

## Puzzle Booklet <br> Author: Tawan Sunathvanichkul <br> Date: 19-20th November 2011

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Fill in the grid with numbers 1-8 (1-5 in the example) so that each number appears once in each row and column. A white dot is given when the two neighbouring cells contain consecutive digits. A black dot separates two numbers where one is twice the other. 1 and 2 may be separated by any coloured dot. All dots are given.
Answer Format: Enter the marked digits in alphabetical order. (Eg. 5414)


## Kakuro

## 20

Fill in the grid with numbers 1-9 so that each number adds up to the given sum for that row or column. No number may repeat within a single entry.
Answer Format: Enter the marked digits in alphabetical order.


Kropkuro
Standard Kakuro rules apply, additionally all Kropki dots are given.
Answer Format: Enter the marked digits in alphabetical order. (Eg. 3797)


## 10

Each number outside the grid represents the length of a fisherman's rod. Draw vertical and horizontal lines going into grid so that each fisherman gets his own fish and rods cannot be entangled. All cells are used once. Answer Format: Enter the content of the marked cells, using the given notation table, in alphabetical order. (Eg. 4325)



## Battleships



Locate the ships in the grid. Numbers under and to the right of the grid indicate how many ship segments are in that row or column. Ships may not touch each other, not even diagonally. Ship segments cannot occupy cells with waves.
Answer Format: Enter the positions of the 1-unit submarines from left-right and top-bottom.


## $2 C$ <br> 

Fishermen at War
Standard Anglers rule apply. Numbers outside the grid that are not used becomes Battleship clues. Ship segments occupy all unused cells in the grid. Ships may not touch other, not even diagonally.
Answer Format: Enter the positions of the 1-unit submarines from left-right and top-bottom. (Eg. D2,G4,E6)


10
Place some light bulbs into the grid so that every square is lighted up. A bulb lights all squares in the same row and column until it is blocked by a black square or the edge. Bulbs cannot light another bulb. Numbered squares indicate the number of bulbs that are orthogonally adjacent to that square. Answer Format: Enter the number of light bulbs in the marked rows from top to bottom. (Eg. 301)


## Nansuke

Fill the grid with the listed numbers. All listed entries are used exactly once.
Answer Format: Enter the content of the lettered cells in alphabetical order.

| 111 | 77858 | 668688 |
| ---: | ---: | ---: |
| 122 | 77876 | 678688 |
| 211 | 77879 | 679876 |
| 212 | 95655 | 686869 |
|  | 95657 | 777777 |
| 55755 | 96679 | 857586 |
| 55775 | 96777 | 858799 |
| 56656 | 97698 | 866967 |
| 56755 | 98677 | 887992 |
| 56765 |  | 888755 |
| 56775 | 156789 | 957957 |
| 56785 | 256789 | 969897 |
| 56787 | 556677 | 976668 |
| 56789 | 586757 | 977572 |
| 75855 | 656585 |  |
| 77856 | 667768 |  |

Fill in the grid of shaded cells with the listed numbers. Afterwards, the numbers become Akari clues, which are used to solve Akari in the usual manner.
40
Answer Format: Enter the content of the lettered cells in alphabetical order. (Eg. 00110)


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  | A |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | B |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | C |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | D |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | E |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Find the listed word in the grid going in any straight direction. One word cannot be found. Answer Format: Enter the unhidden word.
(Eg. ARGON)


ARGON
HELIUM-
KRYPTON
$\begin{array}{r}\text { NEON- } \\ \hline \text { RADON- }\end{array}$
XENON


## Sudoku

ADAM AND EVE
ADANAC
BELMAC
BRAMLEY
BRITA AS IDUNA
CIDER
CORE

SEEDS
SNOWWHITE
STEVE JOBS WILLIAM TELL


Fill in the grid with numbers $1-9$ so that each number appears once in each row, column and bolded region. Answer Format: Enter the marked digits in alphabetical order. (Eg. 9793)

| 1 | 9 | 6 | 4 | 3 | 7 | 5 | 8 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | 3 | 7 | 1 | 8 | 2 | 6 | 9 | 4 |
| 4 | 8 | 2 | 6 | 9 | 5 | 3 | 7 | 1 |
| 3 | 6 | 4 | 5 | 2 | 8 | 7 | 1 | 9 |
| 2 | 7 | 5 | 9 | 4 | 1 | 8 | 6 | 3 |
| 9 | 1 | 8 | 3 | 7 | 6 | 2 | 4 | 5 |
| 7 | 4 | 9 | 2 | 6 | 3 | 1 | 5 | 8 |
| 8 | 2 | 1 | 7 | 5 | 9 | 4 | 3 | 6 |
| 6 | 5 | 3 | 8 | 1 | 4 | 9 | 2 | 7 |


| A |  |  | 2 |  |  | 4 |  | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 |  | 5 |  | 1 |  |  | 9 |  |
|  | 7 |  |  |  | 8 |  |  |  |
|  |  |  |  |  |  | 8 |  | 6 |
|  |  | B | 1 |  | С |  | 7 |  |
| 2 |  | 9 |  | 5 |  |  |  |  |
|  | 3 |  |  |  | 6 |  |  |  |
| $D$ |  |  | 3 |  |  | 9 |  | 2 |
|  |  | 8 |  | 4 |  |  | 5 |  |

Find the listed word in the grid going in any straight direction. Some words may be found in, or going through, the blank inner grid. After several letters are filled in, the empty inner grid becomes a Sudoku puzzle using different letters.
Answer Format: Enter the shaded letters from top-bottom and left-right. (Eg. IEPO)


BADMINTON
BANANA
BLAST OFF BOEING CHEAT DEATH CHUZZLED COPYCAT CROSSED DIGITAL EMPEROR GINGER GONE BAD GRAFFITI GREEN TEA HARMONICA HYDROGEN INERTIA JUPITER MILKY WAY MOUNTAIN-RANGE POMELO PROTEIN SCORPION STEADIEST TEAMMATE TIME OUT VIDEOED


Make Room for Tapa
20
Shade in some cells to create a continuous wall of black squares. Numbers indicate the length of the black cell blocks surrounding that cell. When there are more than one number in a cell, there must be at least one white square separating the two or more lengths of black cells. Numbered cells cannot be shaded and there cannot be any $2 \times 2$ shaded cells. Additionally, each outlined region contains the same number of black cells.
Answer Format: Enter the content of the marked row followed by the marked column; using $B$ for black cells and -- ' for white cells. (Eg. BB-B-BB-, -BBBBBB-)


## 58 <br> Minesweepers



Locate the given number of mines in the grid. Each numbered cell indicates the number of mines surrounding that square. Mines cannot occupy a numbered cell.
Answer Format: Enter the content of the marked row followed by the marked column; using M for mines and '-' for numbered or blank cells.

[24 mines]

|  |  |  | 1 |  | 1 |  |  |  | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 4 |  |  |  |  |  |  | 2 |  |
|  | 1 |  |  | 1 |  | 3 |  | 1 |  |
| 1 |  |  |  | 2 |  |  | 2 |  |  |
|  | 1 |  |  | 2 |  | 1 |  | 2 |  |
|  | 3 |  | 3 |  | 2 |  |  | 3 |  |
|  |  | 1 |  |  | 2 |  |  |  | 1 |
|  | 2 |  | 1 |  | 1 |  |  | 3 |  |
|  | 1 |  |  |  |  |  |  | 1 |  |
| 0 |  |  |  | 3 |  | 2 |  |  |  |

Minesweepers rules apply. Additionally, each outlined region contains the same number of mines.

## Regional Minesweepers

Answer Format: Enter the content of the marked row followed by the marked column; using M for mines and ' - ' for numbered or blank cells.
(Eg. MM- -M-, - - -MM-)


|  |  | 1 |  |  |  |  |  |  |  | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 4 |  |  | 2 | 3 |  |  |  |  |  |
|  |  |  |  | 1 |  |  |  |  |  |  |
|  | 5 |  |  |  |  | 4 |  | 2 |  | 4 |
|  |  |  |  | 5 |  |  |  |  |  |  |
|  | 4 |  |  |  |  |  |  |  | 4 |  |
|  |  |  |  |  |  | 4 |  |  |  |  |
| 3 |  | 7 |  | 4 |  |  |  |  | 2 |  |
|  |  |  |  |  |  | 4 |  |  |  |  |
|  |  |  |  |  | 5 | 3 |  |  | 1 |  |
| 0 |  |  |  |  |  |  |  | 2 |  |  |

Blacken some cells so that there is either one of $\mathrm{L}, \mathrm{I}, \mathrm{T}$ or S tetromino piece in each bolded region. Identical pieces may not be adjacent to each other. There cannot be any $2 \times 2$ cells that are all shaded, in the end, all shaded squares must interconnect. Answer Format: Enter the content of the lettered cells in alphabetical order, using L,I,T and S for the appropriate tetromino pieces and use $X$ for white cells. (Eg. XXST)


Blacken some cells so that there is either one of L,I,T or S tetromino piece in each bolded region. Identical pieces may not be adjacent to each other. There cannot be any $2 x 2$ cells that are all shaded, in the end, all shaded squares must interconnect. Answer Format: Enter the content of the lettered cells in alphabetical order, using $L, I, T$ and $S$ for the appropriate tetromino pieces and use $X$ for white cells. (Eg. XXST)


In this variant, each bolded region contains two tetromino pieces. The two pieces in the same bolded region may not be adjacent to each other. Otherwise, standard LITS rules apply.
Answer Format: Enter the content of the lettered cells in alphabetical order, using L,I,T and S for the appropriate tetromino pieces and use $X$ for white cells. (Eg. LSIS)


|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 10

Draw a single closed loop passing through all circles in the grid. The loop must make a turn at all black circles and go straight for at least two cells in both directions before turning again. The loop must go straight through all white circles and turn immediately before and/or after in the next cell.
Answer Format: Starting with the earliest letter of the alphabet and going clockwise, write the letters the loop passes through in order. (Eg. BEFD)


## Yajilin



Draw a single closed loop passing through all cells in the grid. In addition to the numbered cells, there will be some blackened cells that the loop will not visit. The numbered cells indicate the number of black squares in that direction. Black squares cannot be adjacent to each other.
Answer Format: Starting with the earliest letter of the alphabet and going clockwise, write the letters the loop passes through in order. (Eg. ABCEFD)


Yajilin rules apply. In addition, the loop must obey Masyu rules when passing a circle. Some circles may be blackened by the Yajilin clues and black cells cannot be adjacent to each other. Numbered cells may not be blackened.
Answer Format: Starting with the earliest letter of the alphabet and going clockwise, write the letters the loop passes through in order. (Eg. AFEBD)


|  |  |  | 3 |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Fillomino

## 15

Fill in numbers into the grid so that the connected cells with the same number forms a boundary of that size. Same-sized boundaries cannot be adjacent to each other.
Answer Format: Enter the marked digits in alphabetical order, for two digit numbers use the unit number. (Eg. 5433)

| 5 | 5 | 3 | 3 | 3 |
| :--- | :--- | :--- | :--- | :--- |
| 5 | 2 | 2 | 4 | 4 |
| 5 | 1 | 4 | 4 | 2 |
| 5 | 3 | 2 | 3 | 2 |
| 3 | 3 | 2 | 3 | 3 |


|  |  |  |  |  |  | 6 | 3 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 |  |  | 1 |  |  | 4 |  |
| 8 |  |  | 3 |  | 3 |  |  | 8 |  |
| 7 |  |  | 4 |  |  | 8 | 8 |  |  |
|  | 6 | 5 |  | $A$ | $B$ |  |  | $C$ |  |
|  |  |  |  |  | $D$ |  | 1 | 2 |  |
|  |  | 6 | 1 |  |  | 8 |  |  | 3 |
|  | 6 |  |  | 2 |  | 7 |  |  | 4 |
|  | 4 |  |  | 6 |  |  | 6 | 5 |  |
|  |  | 7 | 6 |  |  |  |  |  |  |

## Futoshiki

Fill in the grid with numbers from 1-7 (1-4 in the example), so that no number repeats in any row or column. All comparison signs must be obeyed.
Answer Format: Enter the marked digits in alphabetical order. (Eg. 2342)


| 2 | 3 | 4 | 1 |
| :--- | :--- | :--- | :--- |

Fill in numbers into the grid so that the connected cells with the same number forms a boundary of that size. Same-sized boundaries cannot be adjacent to each other. Additionally, all comparison signs must be obeyed.
Answer Format: Enter the marked digits in alphabetical order, for two digit numbers use the unit number. (Eg. 6345)
\(\left.\begin{array}{|c|c|c|c|}\hline \& < \& \& A <br>
\hline B \& 1 \& 2 \& V <br>
\hline \& 3 \& 4 \& <br>
\hline \& > \& < <br>
\hline \& D \& \& <br>

\hline\end{array}\right]\)| 2 | 2 | 6 | 6 | 6 |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 1 | 2 | 2 | 6 |
| 3 | 3 | 4 | 1 | 6 |
| 5 | 5 | 4 | 4 | 6 |
| 5 | 5 | 5 | 4 | $V$ |



