NAME:	COUNTRY:	POINTS:

13TH 24 HOURS PUZZLE CHAMPIONSHIP

9-11, NOVEMBER, 2012
HOTEL AMADEUS
BUDAPEST

PUZZLES BY:

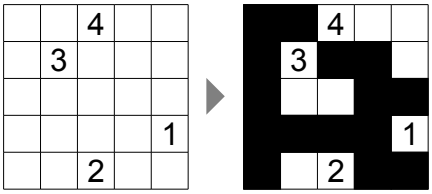
PALMER MEBANE, THOMAS SNYDER, WEI-HWA HUANG

NURIKABE	20 POINTS
TAPA	30 POINTS
FIRST-SEEN CORAL	30 POINTS
MASYU	10 POINTS
YAJILIN	30 POINTS
WALL MAZE	30 POINTS
ABC CONNECTION	10 POINTS
SNAKE	30 POINTS
PIPES	60 POINTS
BATTLESHIPS	20 POINTS
STAR BATTLE	20 POINTS
BLACK 24	50 POINTS
PENTOMINO MARKERS	10 POINTS
FILLOMINO	30 POINTS
LITS(O) DISSECTION	70 POINTS
SUDOKU	20 POINTS
SKYSCRAPERS	40 POINTS
MAGIC ORDER	50 POINTS
KAKURO	40 POINTS
UNORDERED JAPANESE SUMS	150 POINTS
FIVE SQUARES	50 POINTS
CRISS-CROSS	50 POINTS
SCRABBLE	70 POINTS
JUMPING CROSSWORD	80 POINTS
TOTAL	**1000 POINTS**

1A: Nurikabe

20 points

Shade in some squares so that they form a connected group and no two by two area is completely shaded. Two squares that touch at a point are not considered connected. Each connected group of unshaded cells must contain exactly one number which gives the size of that group of cells.

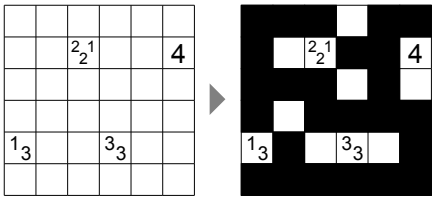


								4	
								2	
					2				
2									
		4					4		
					2				
2									24

1B: Tapa

30 points

Shade in some squares so that they form a connected group and no two by two area is completely shaded. Two squares that touch at a point are not considered connected. Numbers in the grid give the lengths of each consecutive block of shaded squares in the eight surrounding cells. Distinct blocks must have at least one unshaded square between them.

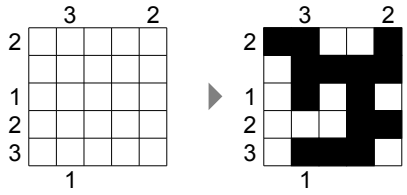


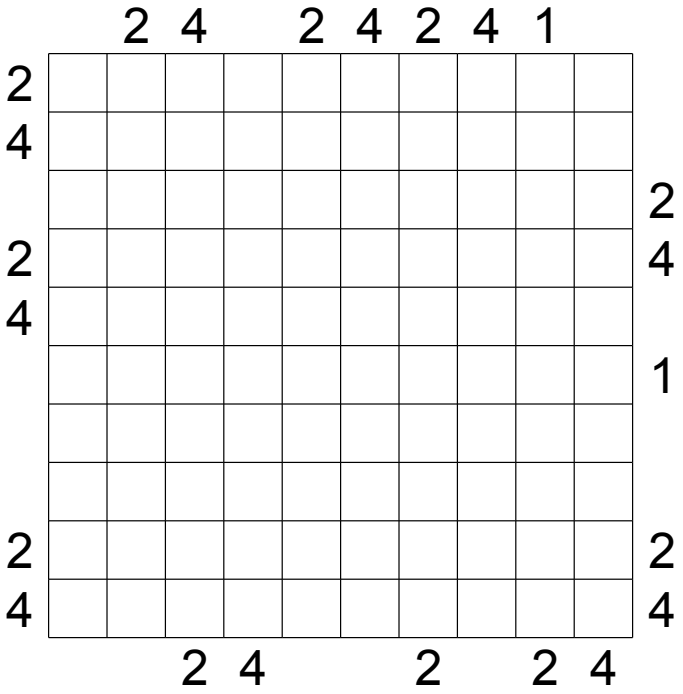
	2 4		2 4			2 4		2 4	
				2 4					
	2 4				2 4		2 4		
		2 4			2 4				
2								2 4	
					2 4				
			4						

1C: First-seen Coral

30 points

Shade in some squares so that they form a connected region and no two by two area is completely shaded. The shaded area must not touch itself at a point and may not completely surround any unshaded cells. A number outside the grid indicates the length of the first consecutive block of shaded squares from that direction.

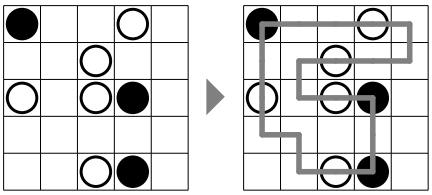


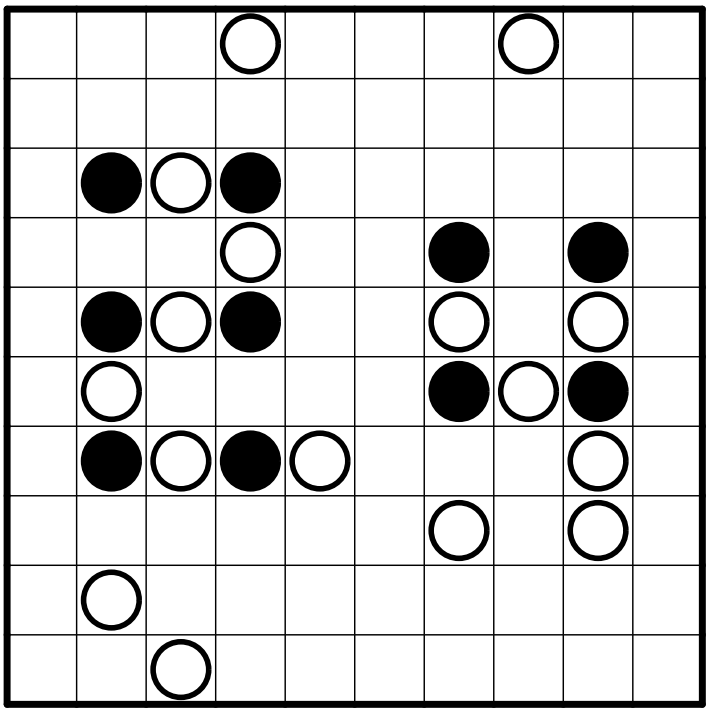


2A: Masyu

10 points

Draw a single closed loop of horizontal and vertical line segments in the grid which does not intersect itself or use any grid square more than once. All cells with white and black circles must be contained in the loop. The loop must turn in a cell with a black circle and go straight at both ends. The loop must go straight in a cell with a white circle and turn in at least one end.

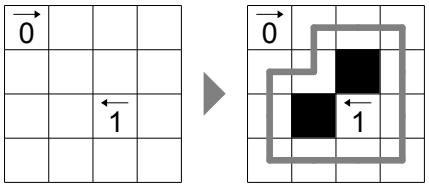


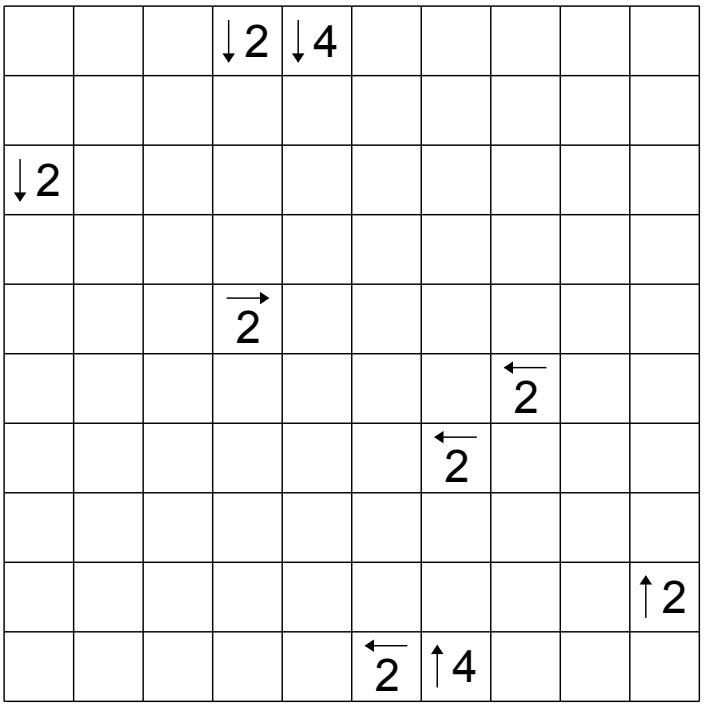


2B: Yajilin

30 points

Shade in some grid squares so that no two shaded squares share a side. Then draw a single closed loop of horizontal and vertical line segments passing through each empty (unshaded, no number) cell exactly once. A cell with a number and arrow gives the number of shaded squares in the direction of that arrow; the arrow can point past other clues.

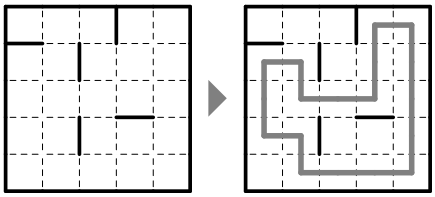


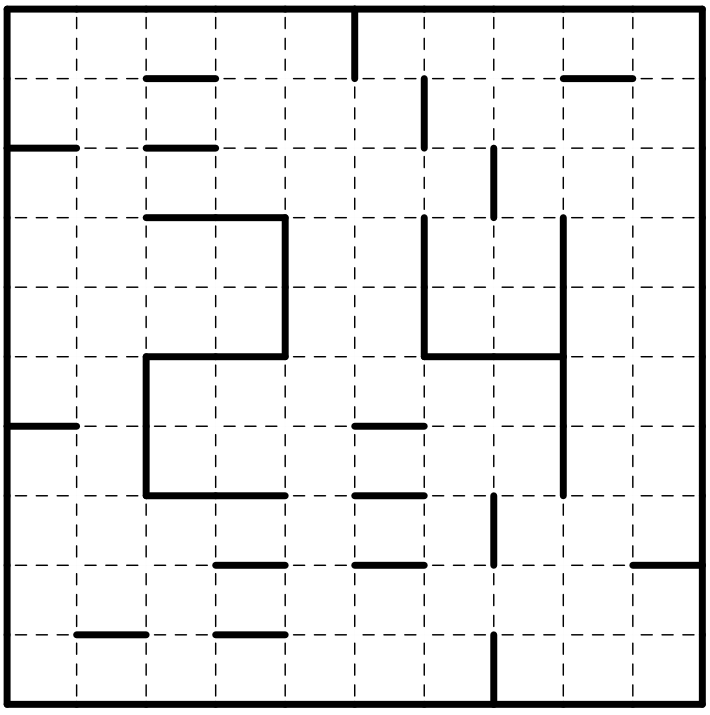


2C: Wall Maze

30 points

Draw a single closed loop of horizontal and vertical segments that uses each grid square at most once. A thick border between a pair of cells means exactly one of those two cells is used by the loop.

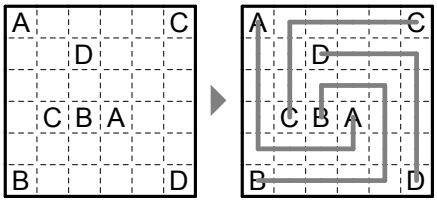


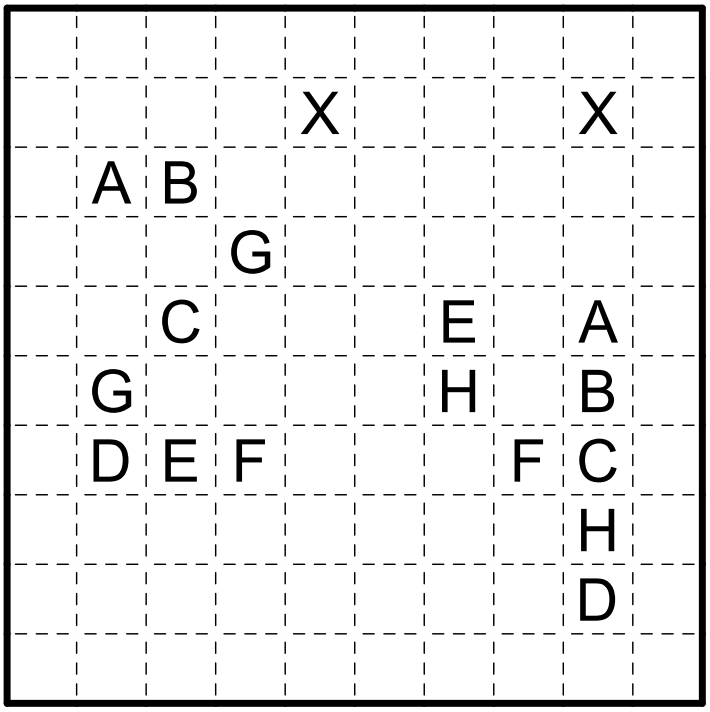


3A: ABC Connection

10 points

Connect pairs of identical letters with a path of horizontal and vertical line segments. No square may be used more than once, including squares with letters, and no paths can intersect.

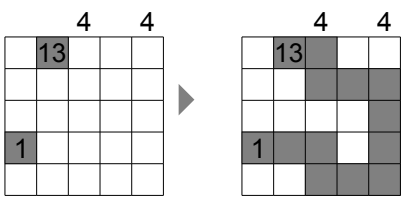


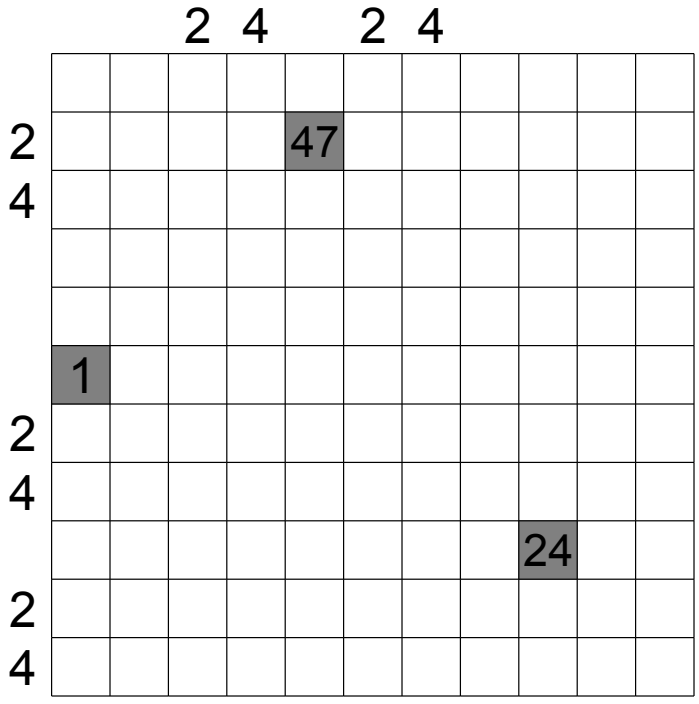


3B: Snake

30 points

Draw a snake of length 47 (13 in the example) whose head, midpoint, and tail are given, labeled by the numbers 1, 24, and 47 respectively (the midpoint is not labelled in the example). The snake may not touch itself, even at a point. Numbers outside the grid indicate the number of snake segments in that row or column.

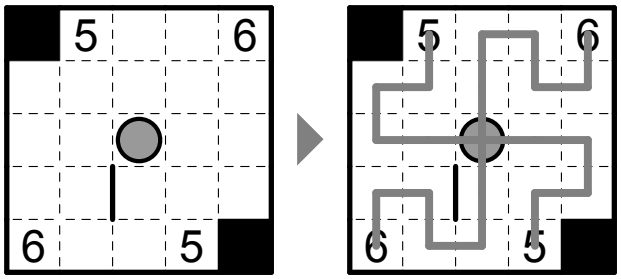


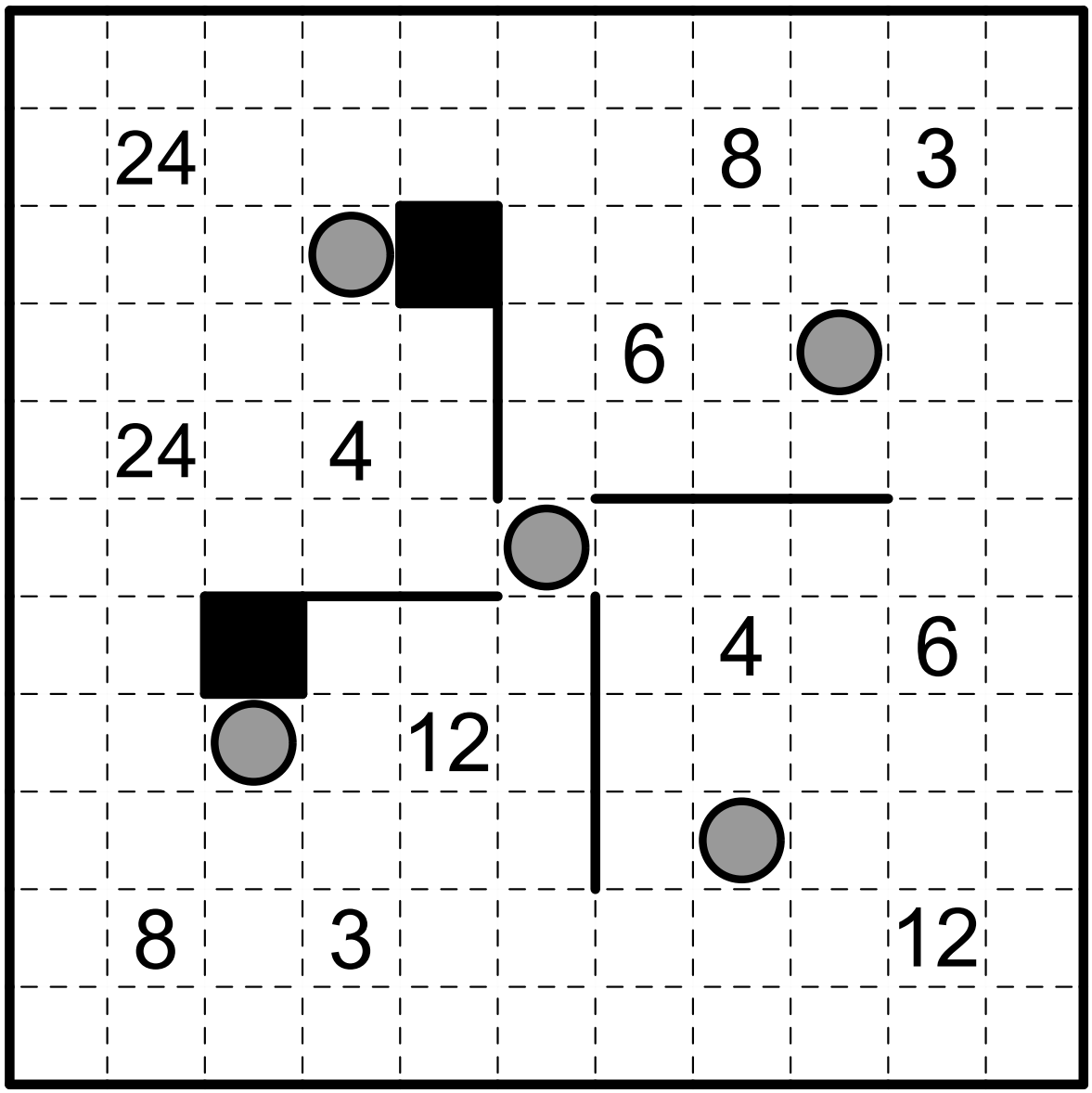


3C: Pipes

60 points

Draw a path of horizontal and vertical segments from each number to a gray circle which has total length equal to the number. Each cell be used by exactly one path, and a path may not use a cell twice. Black cells are not a part of any path. A thick border may not be crossed by a path.

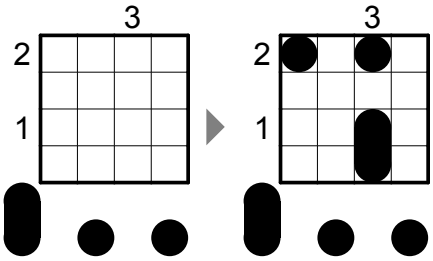


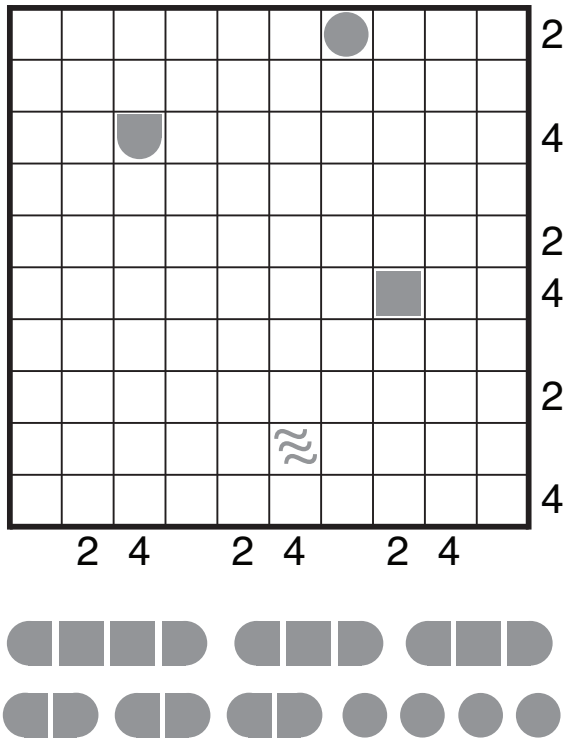


4A: Battleships

20 points

Place the given fleet of ships in the grid. Some segments of ships are given. No two ships may touch, even at a point. Numbers outside the grid indicate the number of grid squares with ship segments in that row or column.

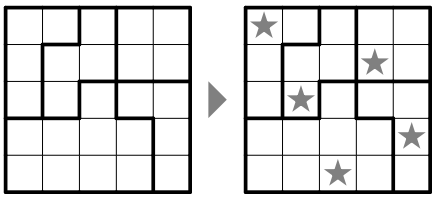


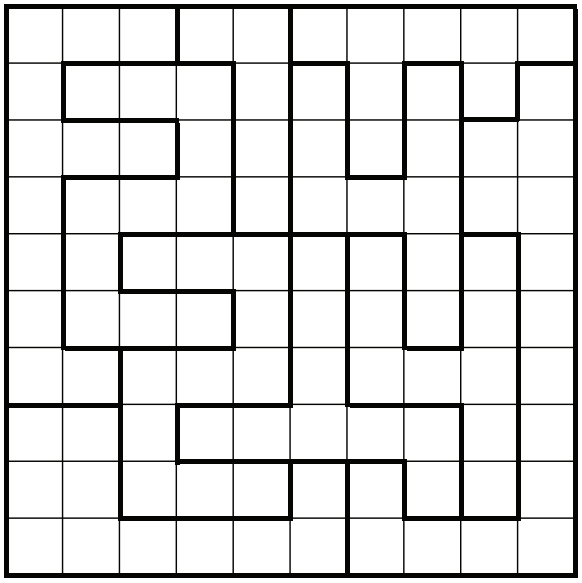


4B: Star Battle

20 points

Place exactly two stars in each row, column, and region. Two stars may not touch, even at a point.



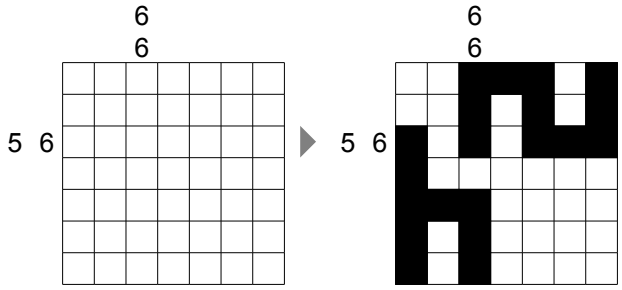


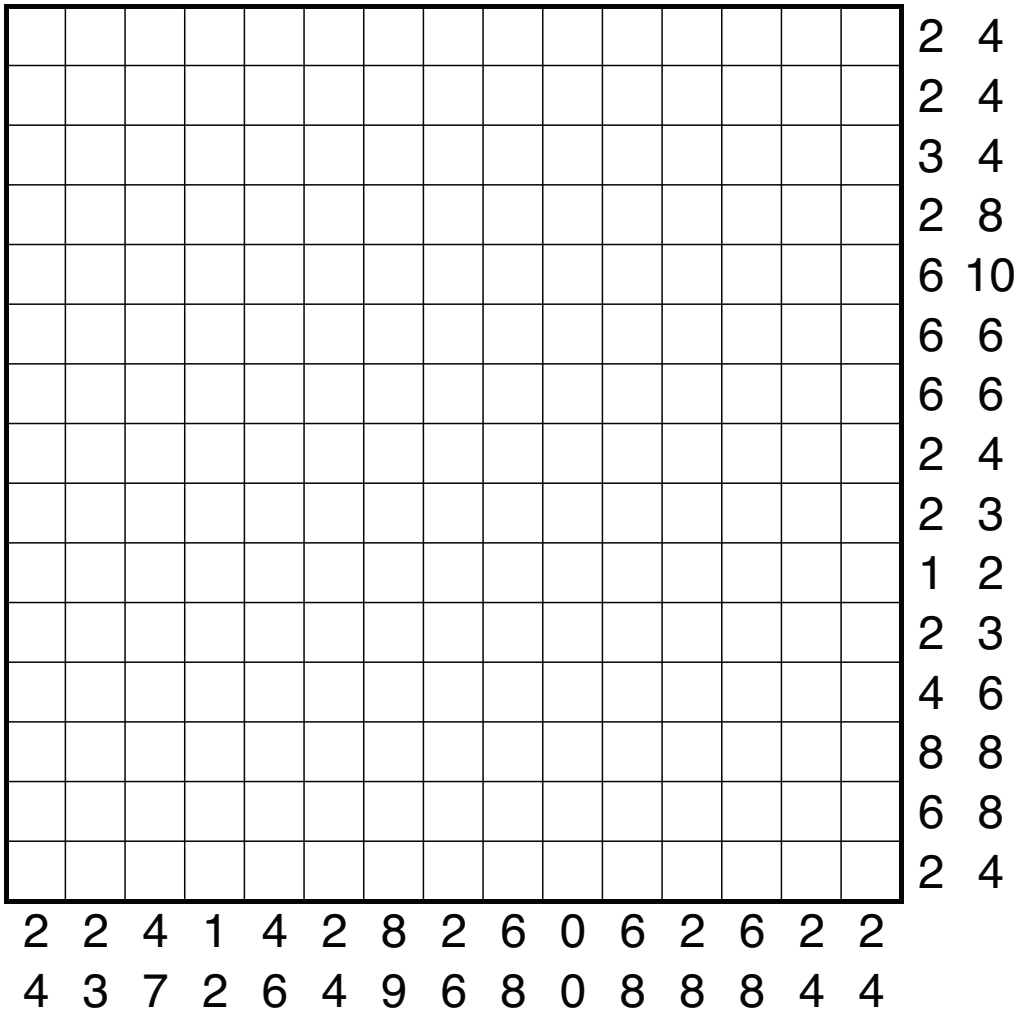
2★ per row, column, region

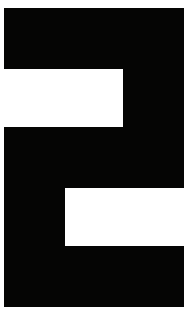
4C: Black 24

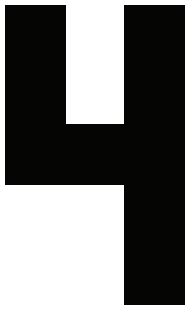
50 points

Given are the shapes of a 2 and 4. Place three copies of each (one of each in the example), with rotations allowed but not reflection, so that the outside clues indicate the number of shaded cells in the row/column, and the sum of the digits in the row/column, in some order. Placed shapes may not touch each other, even at a point.





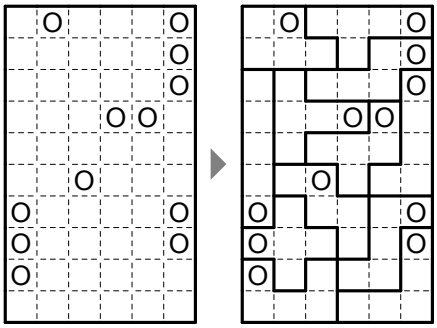
3x 

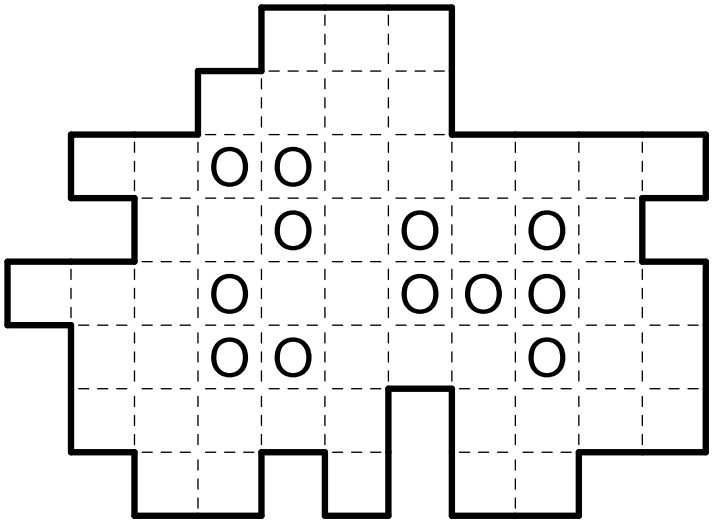
3x 

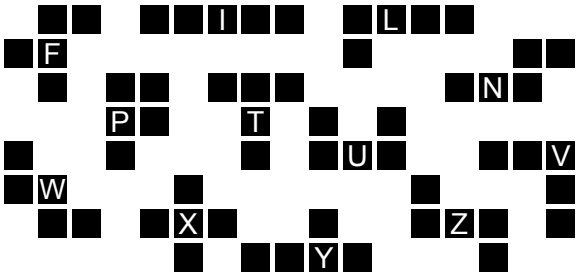
5A: Pentomino Markers

10 points

Partition the grid squares into the twelve different pentominoes so each contains exactly one circle.



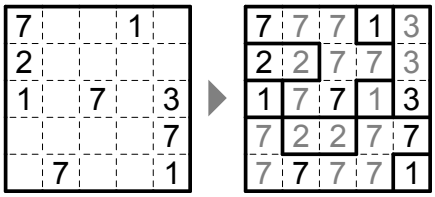




5B: Fillomino

30 points

Divide the grid squares into polyominoes. Every number in the grid must be contained in a polyomino containing that quantity of squares. No two polyominoes containing the same quantity of squares may share an edge. A polyomino may contain one, more than one, or none of the numbers originally given.

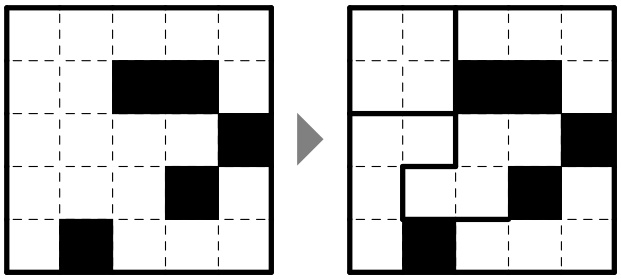


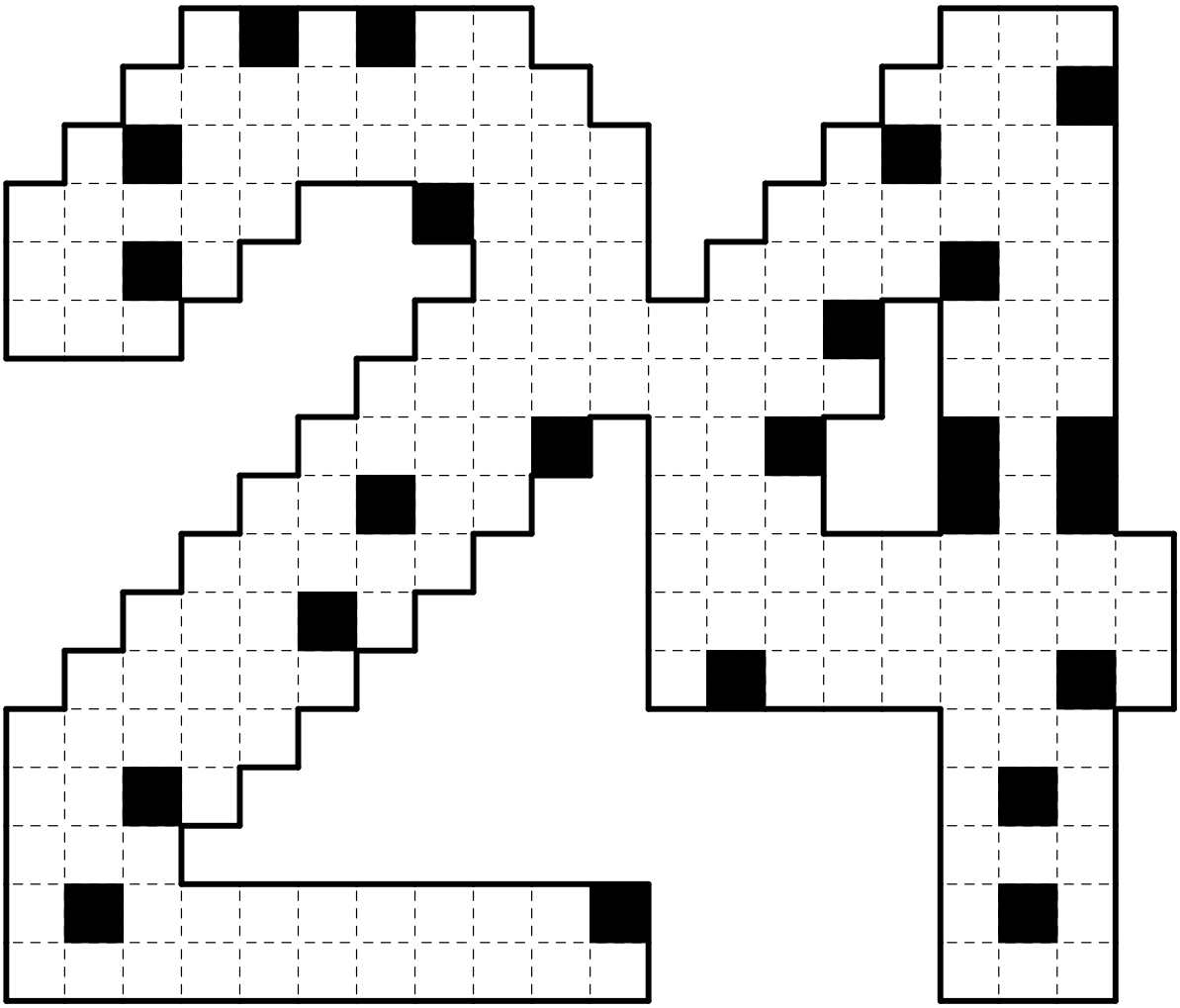
	5	6	2	2	6	6	2	4	
	2							4	
	5				24			2	
	2			3	24	24		1	
	4		24	24	3			2	
	1			24				2	
	3							6	
	5	3	5	2	3	1	3	5	

5C: LITS(O) Dissection

70 points

Partition the grid squares into tetrominoes. Two tetrominoes which touch orthogonally may not be of the same shape, meaning they also cannot be a rotation or reflection of each other. Black squares are not part of any tetromino.

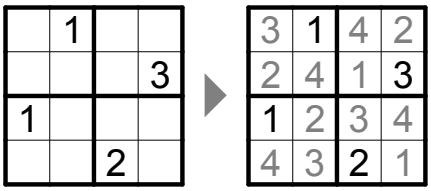




6A: Sudoku

20 points

Place the digits 1–9 (1–4 in the example) in the grid squares so that each row, column, and three by three box (two by two in the example) contains each number once.

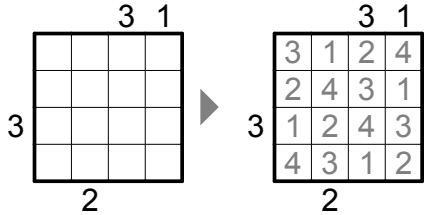


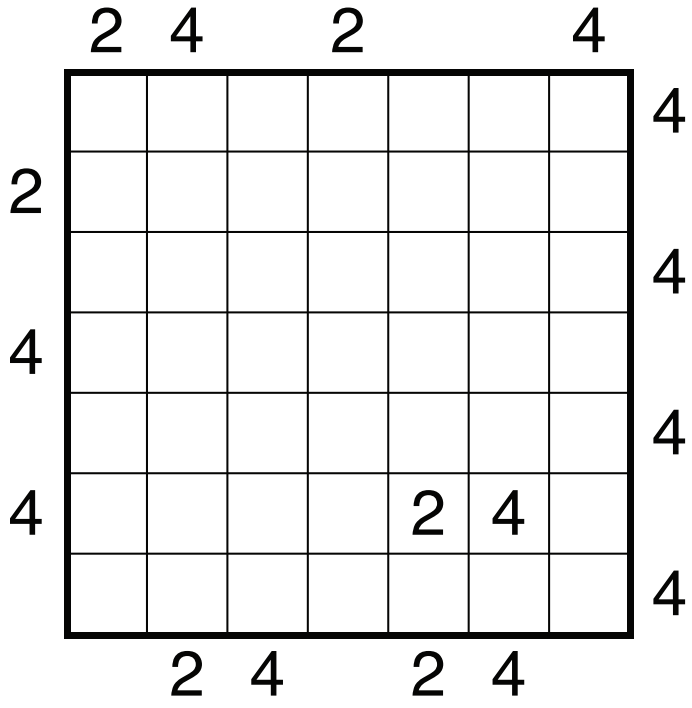
							2	4
	1	3	5		6		8	
			7		5		9	
	3	1	9		8	5	6	
	8						1	
	7	6	3				5	
2	4							

6B: Skyscrapers

40 points

Place the digits 1–7 (1–4 in the example) in the grid squares so that each row and column contains each number once. If the numbers in the grid are treated as building heights, then a number outside the grid gives the number of buildings that are visible in the corresponding row or column. A building obscures all buildings of a smaller height which are behind it.

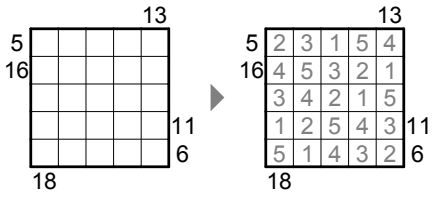


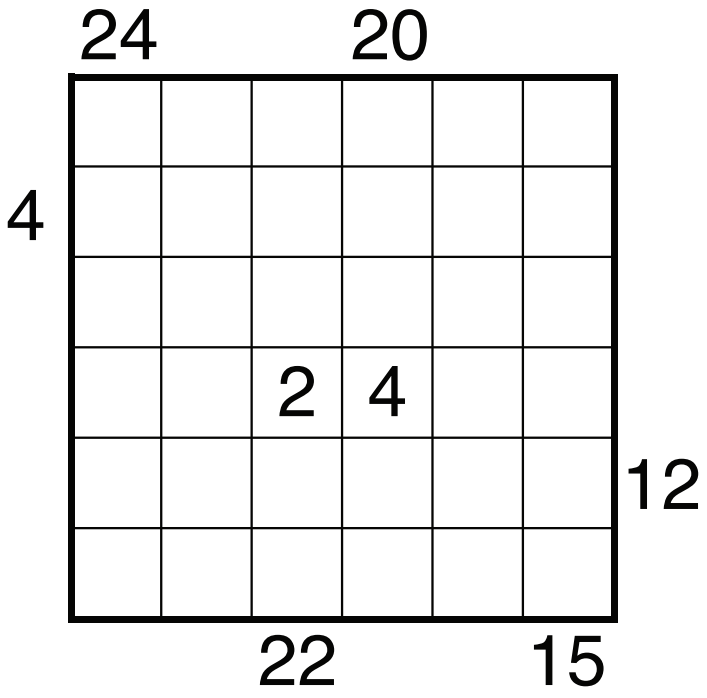


6C: Magic Order

50 points

Place the digits 1–6 (1–5 in the example) in the grid squares so that each row and column contains each number once. The twenty-four 6-digit numbers obtained by reading each row and column in each of two directions must all be distinct. A number outside the grid gives the position of the 6-digit reading from that direction when all 24 numbers are ordered lexicographically.

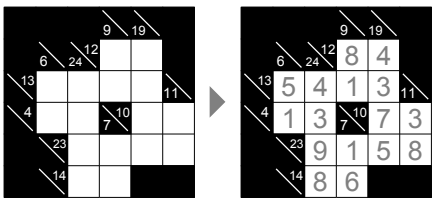


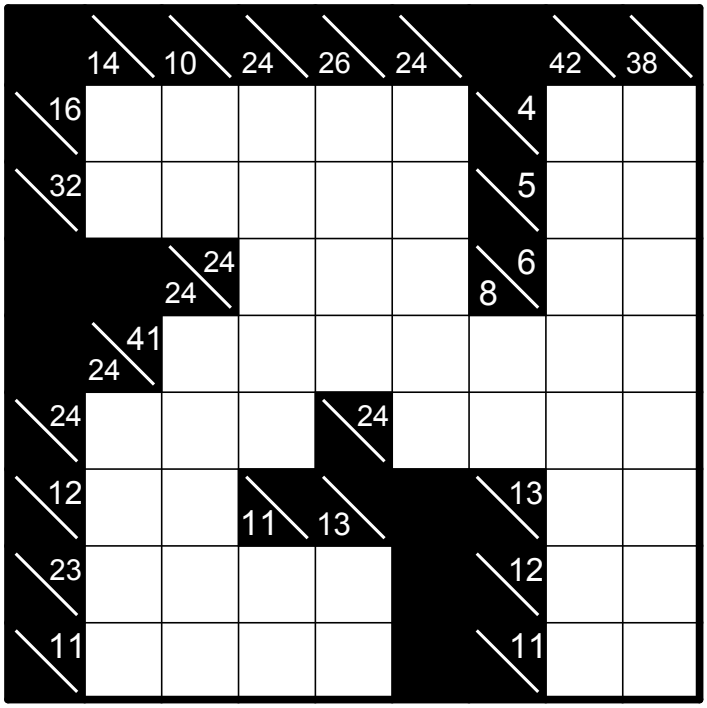


7A: Kakuro

40 points

Place a digit from 1 to 9 in each cell. A consecutive horizontal or vertical block of white cells cannot contain any repeated digits, and the sum of its digits must match the total given above (for vertical) or to the left (for horizontal) of the block.

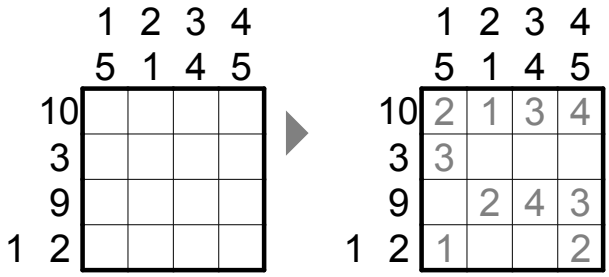


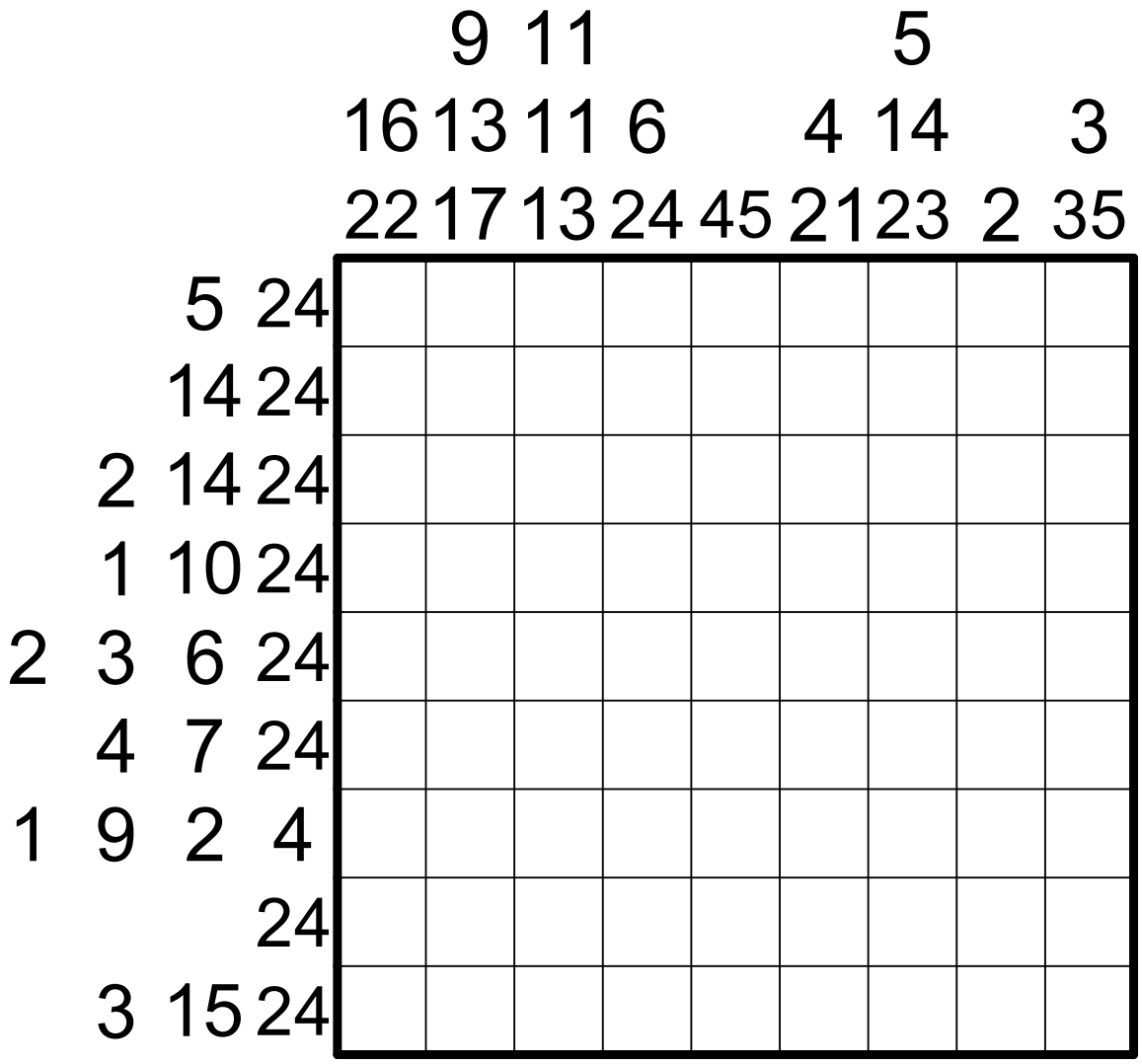


7B: Unordered Japanese Sums

150 points

Place a digit from 1 to 9 in some of the cells. In each row and column, digits cannot repeat, and consecutive blocks of numbers with no blank squares in between must add up to the sums given outside the grid. Each given sum corresponds to exactly one consecutive block, and blocks are separated by at least one blank cell. The sums are not necessarily given in order.

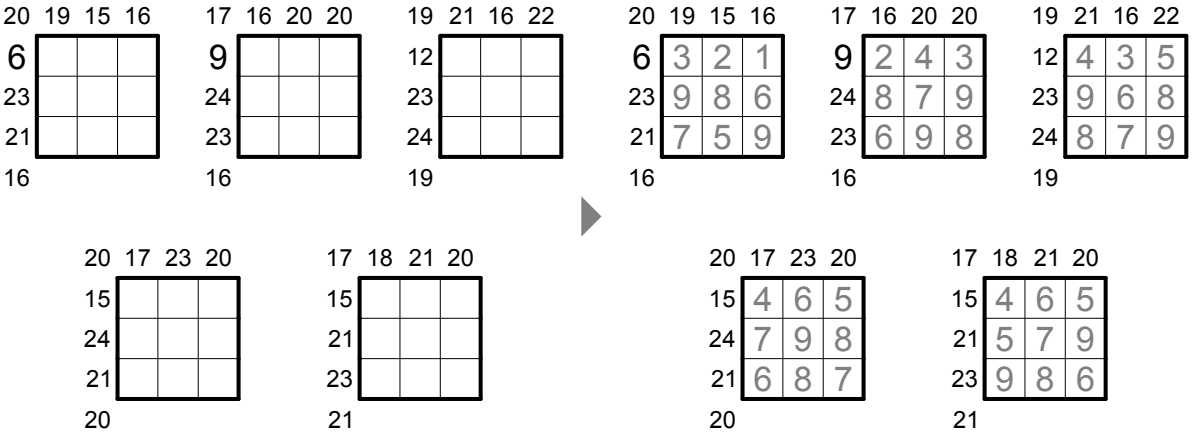


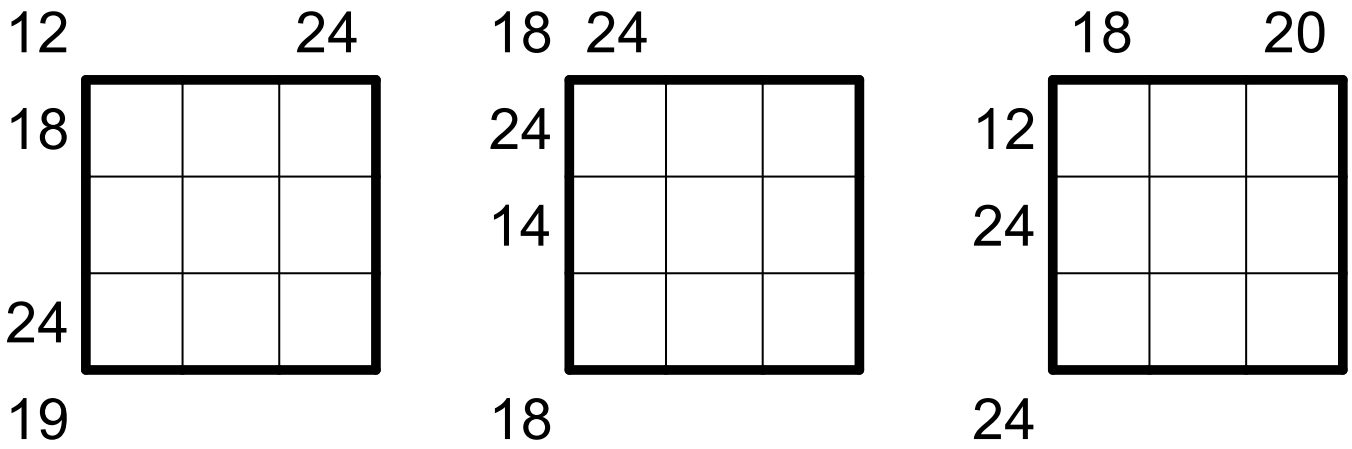


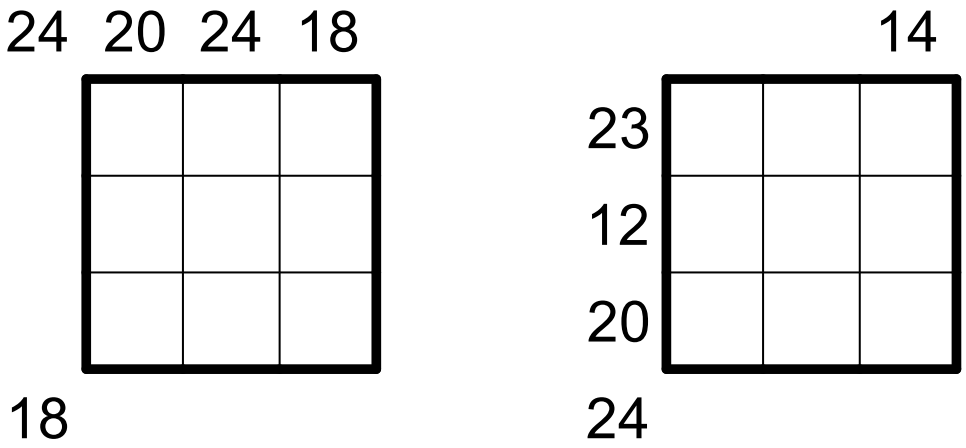
7C: Five Squares

50 points

In the five 3 by 3 squares, fill in each empty grid cell with a digit from 1 to 9 so that each digit N appears exactly N times. Digits cannot repeat in a row, column, or main diagonal. Numbers outside the squares give the sum of the numbers in the corresponding row, column, or diagonal.



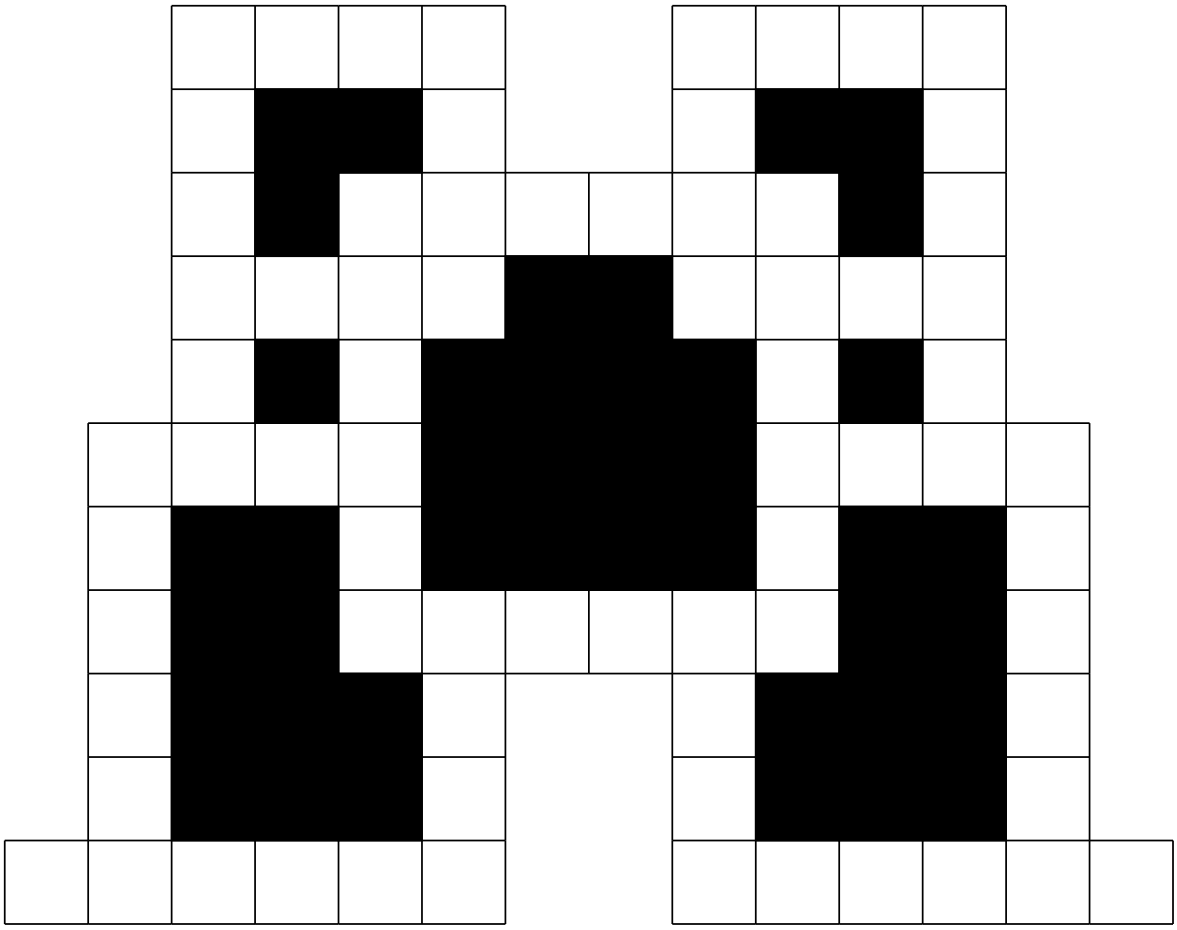




8A: Criss-cross

50 points

Place one letter in each empty white cell so that every word in the bank can be read forwards, either across or down.



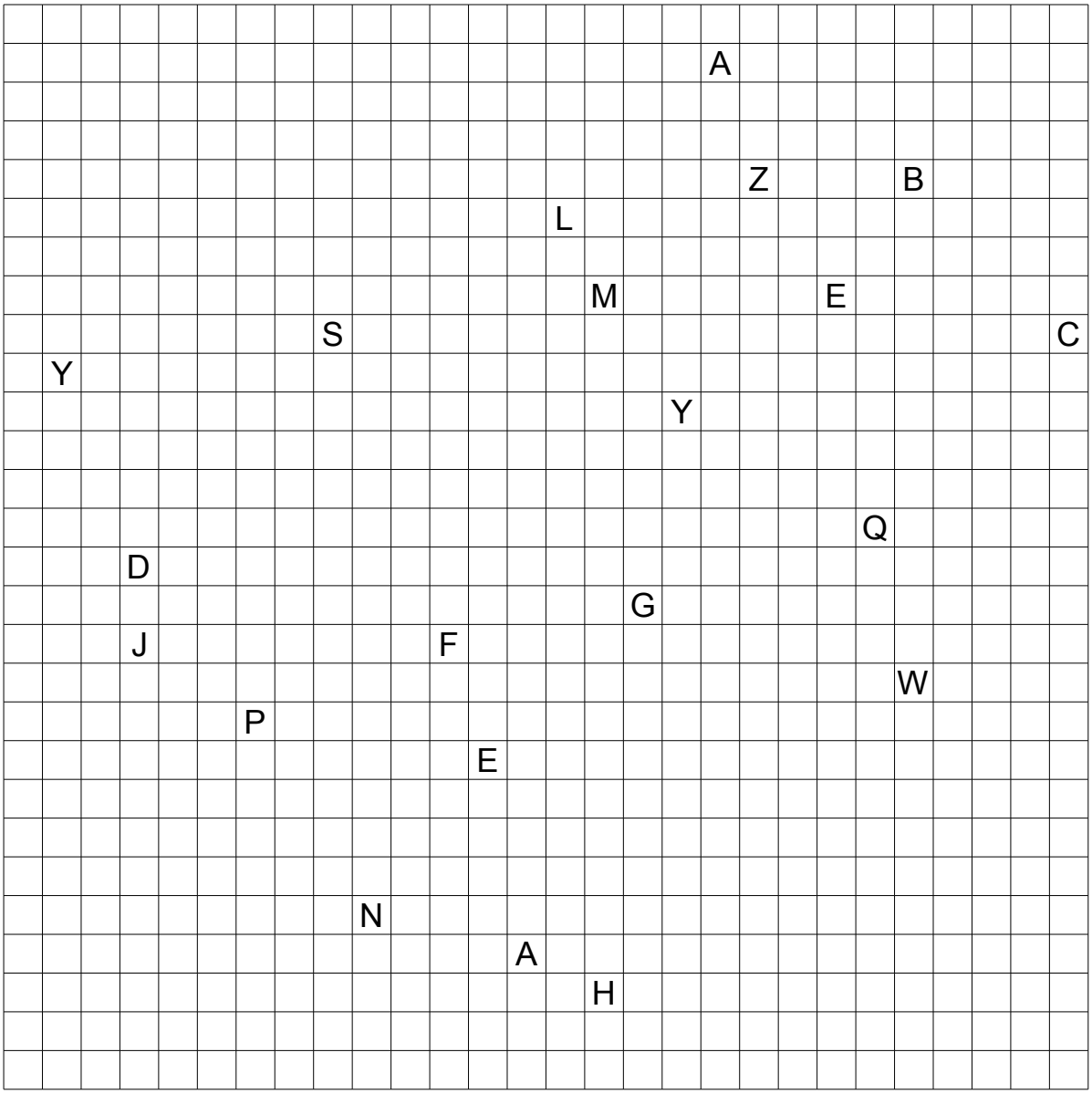
EERY
FEET
FORE
FOUR
FRET
FURY
REEF
ROUE
TROY
TUTU

EFFETE
FURROW
REFUTE
RENTER
TERROR
TOFFEE
TOTTER
TRYOUT
TWENTY
UNWORN

8B: Scrabble

70 points

Place at most one letter per cell so that every word in the bank can be read forwards, either across or down. No word of at least two letters that is not in the bank should be formed. Exactly one letter of each word has been given.



ERSHISI
CHAUBEES
NIJUUSHI
TJUGOFYRA
YIRMIDORT
HUSZONNEGY
TWENTYFOUR

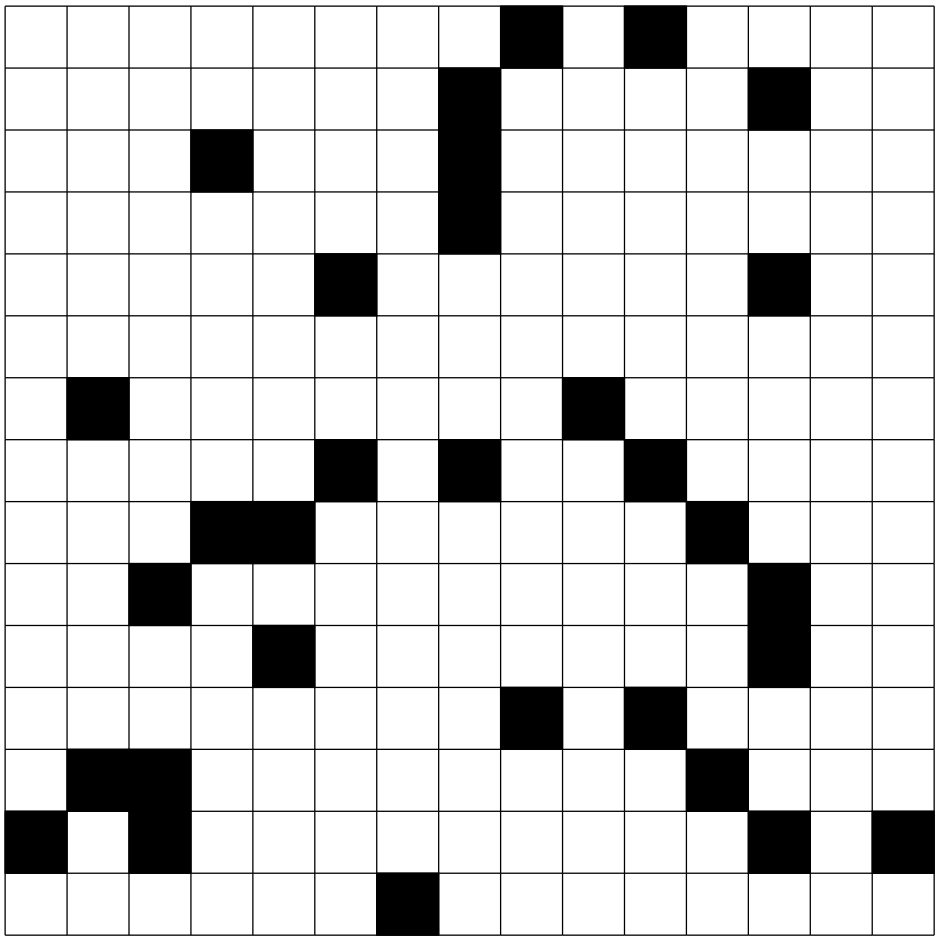
VINGTQUATRE
DVACETCHTYRI
VENTIQUATTRO
VINTEEQUATRO
VEINTICUATRO
ARBAAWAISHRUN
VIERENTWINTIG

VIERUNDZWANZIG
DOUAZECISIPATRU
KAKSKUMMENDNELI
VIGINTIQUATTUOR
DVADESETICETIRI
DWADZIESCIACZTERY
KAKSIKYMMENTANELJA

8C: Jumping Crossword

80 points

Place at most one letter per cell so that every word in the bank can be read forwards, either across or down. Words may have one or more gaps, possibly including the beginning and end of the word. No two empty squares can share an edge. Words are listed by their length in the grid.



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6
BILL
CARLO
DANA
KAREN
PROBE
RAVER
SMART

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BAUER
EAVMO
LEAK
MARTHA
NARA
RENEE
UNDER
WALSH

8
ALMEIDA
DESADE
FEORE
GEORGE
KATEE
KIEFER
RAINES

9
BERKELY
IGNUMAN
PALMER

10
JERALD

13
NORDLING
WERSCHING

14
HASTINGS

15
DIAMANTOPOULOUS
SUTHERLAND