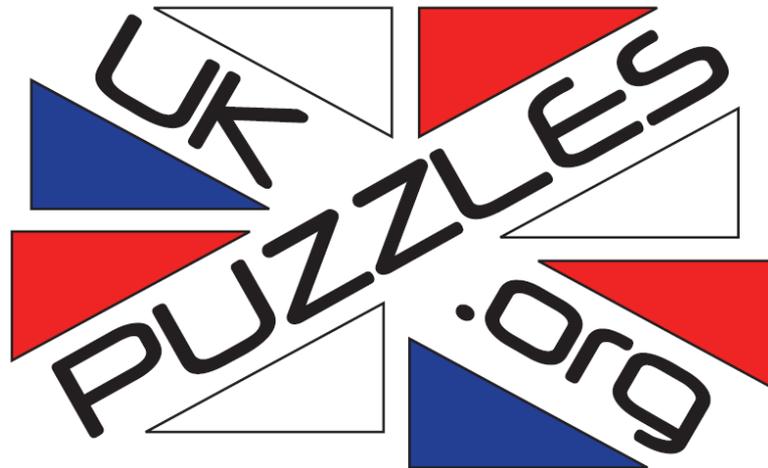


Name:		Points:	
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UKPA Open Tournament
14th – 15th March, 2020
Round 5
Puzzles by James McGowan

	Puzzle	Points
1	Minesweeper	11
2	Fillomino	13
3	Elbschiffer Loop	22
4	No Same Sums	60
5	Diagonal Chains	19
6	Hideout Fences	20
7	Outside Yin Yang	24
8	Equality	36
9	Spiral Galaxies	65
	Total	270

Time: 35 minutes.

1 Minesweeper (11)

Place a mine into some of the empty cells so that each number represents the total number of mines in the neighbouring cells, including diagonally adjacent cells.

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

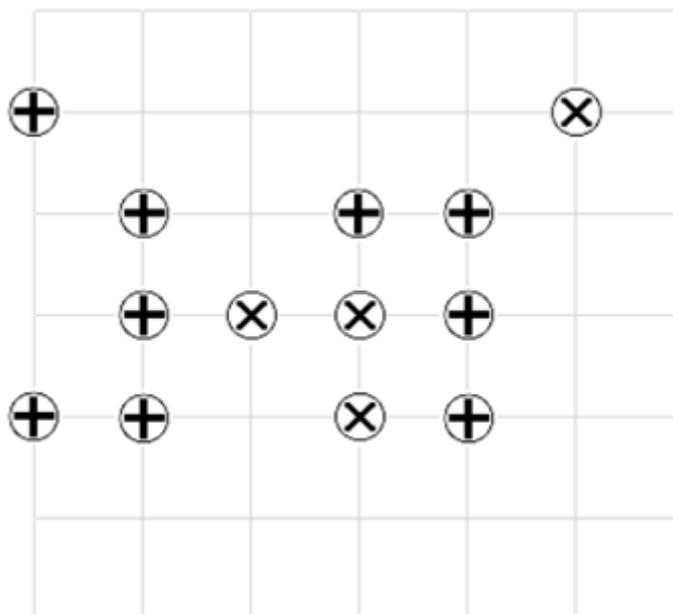
2 Fillomino (13)

Divide the grid into different regions along the grid lines. Regions of the same size cannot touch each other by a side. Numbers in the grid indicate the size of the region the cell is part of. Regions can contain none, one or multiple clues.

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

3 Elbschiffer Loop (22)

Draw a closed loop along the dotted lines that uses each grid point at most once. The loop must pass through all marked grid points marked with either a + or X. Travelling along the loop, in each point marked + the loop must turn left and in each grid point marked X the loop must turn right. Identifying the direction of the loop is part of the puzzle.



4 No Same Sums (60)

Divide the grid into regions of any sizes and shapes, so that no number appears more than once within a region. Regions that have at least one common number cannot touch each other, even at a point. When the numbers in a region are added together the resulting totals must be different for each region.

4	5	2	1	4
3	1	4	6	2
6	8	9	5	0
7	0	2	4	3
1	3	7	6	7

5 Diagonal Chains (19)

Shade some cells to create diagonal chains. Shaded cells cannot share an edge and no shaded cell can touch more than two other shaded cells. There can be no “rings” – each group of diagonally connected cells must have at least one shaded cell with less than two diagonally touching shaded neighbours. Cells with numbers cannot be shaded. The numbers indicate the sum of the lengths of all such chains where at least one shaded cell touches the numbered cell horizontally, vertically or at a point.

						10
			5			
2						
5			8			6
				2		4

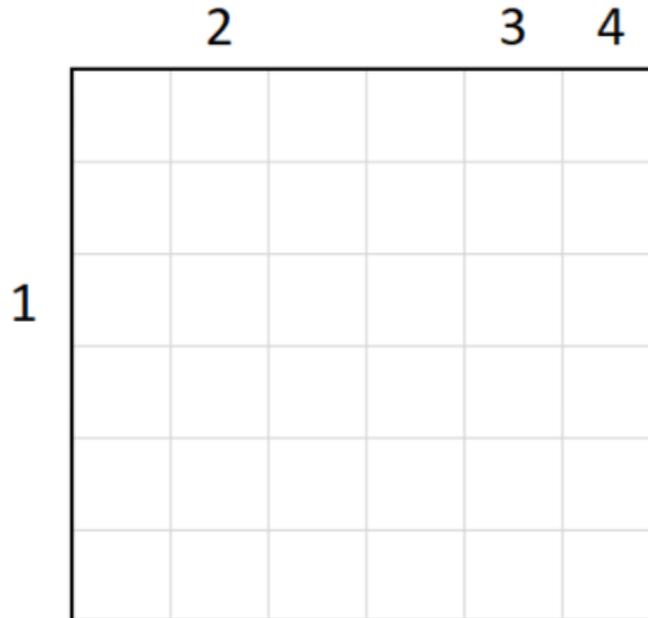
6 Hideout Fences (20)

Draw a closed loop uses each grid point at most once. The loop travels horizontally and vertically along the cell borders. Numbers outside the grid indicate the sum of the numbers directly behind the cell borders that are part of the loop in the respective row or column.

		3	4	5	2	1	3
5	1	1	1	1	1	1	1
	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
	1	1	1	1	1	1	1

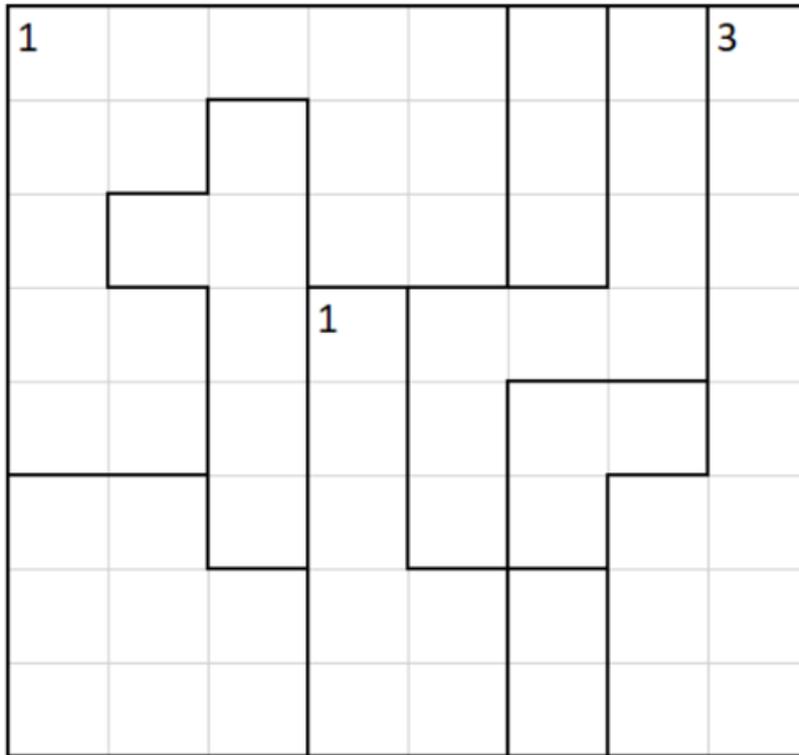
7 Outside Yin Yang (24)

Divide the grid along the grid lines into two parts, so that within each part all cells must be connected and each cell must belong to one of the parts. No 2x2 square is located completely in one part. The numbers outside the grid indicate the longest contiguous block of cells in the respective row or column that all belong to the same part.



8 Equality (36)

Draw a closed loop in the grid that runs horizontally and vertically and passes through each cell at most once. The loop must enter and leave each region at least twice. For multiple visits to the same region, each visit must pass through the same number of cells. That number can be equal or different for different regions. If a region contains a number, that number indicates how many cells in that region are not used by the loop.



9 Spiral Galaxies (65)

Divide the grid so that each region contains one circle. Each region should have rotational symmetry about the circle.

