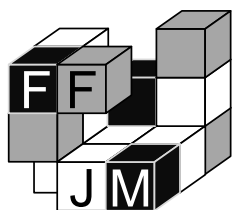


# Part I

Name

Rectangles	20 points	(10+10)
Domino Hunt	40 points	
Mirrors	15 points	(5+10)
Skyscrapers	15 points	(5+10)
Tri-Squares	25 points	(10+15)
Meanders	25 points	(10+15)
Fences	15 points	(5+10)
Tents	15 points	(5+10)
Hungarian Count	40 points	
Loopfinder	15 points	(5+10)
ABC Connect	10 points	
Number Crossword	15 points	



# Part I

## 1. Rectangles

20 points

Divide the grid into rectangles so that each rectangle contains exactly one number, and so that each number represents the number of squares of its corresponding rectangle.

	4				3		2		4	2
			3		2	4		6		
		3								2
6			2							
					8					
					3		2			
					3		2			10
2	10				2				4	
	6			4		6	2	8		
					3			2		
2					3	2				4
	3					4	2		2	2

4				2			2				8
		10									
						4	2				
					6						
		3				4	2	10			
4					6		4				10
			8								
					6						
							2				8
	8	2								4	
		3			3					4	
3			2	2				2		4	2

# Part I

## 2. Domino Hunt

40 points

A complete domino set (55 dominoes from 0-0 to 9-9) has been placed in the grid. The sides of the dominoes have been erased and the spots have been replaced by numbers. Draw the edges of the dominoes in the grid.

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

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

# Part I

## 3. Mirrors

15 points

Place ten diagonal two-faced mirrors (each the size of a square) in each grid, in such a way that the trajectory of a ray of light emitted straight into the diagram from anywhere on its boundary passes through a number of squares equal to the given value.

	6	2	7	3	5	3	
2							3
5							7
12							3
5							5
3							12
5							12
	6	3	12	9	5	9	

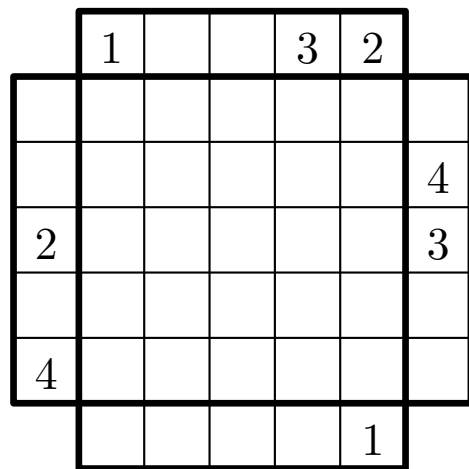
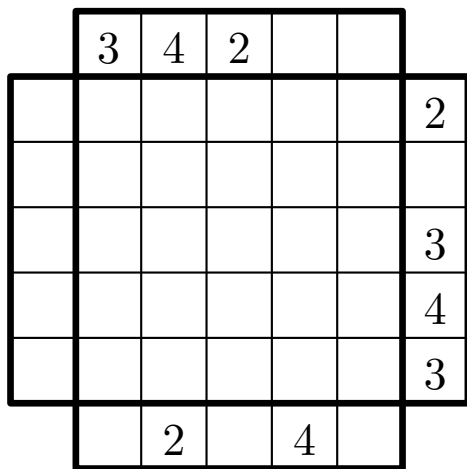
	1	11	10	4	6	11	
1							10
7							4
4							7
8							6
11							2
2							8
	4	2	6	11	6	2	

# Part I

## 4. Skyscrapers

15 points

Each grid symbolizes a group of skyscrapers. Each row and column contains skyscrapers of different heights (1-5). The numbers outside the grid indicate how many skyscrapers are visible from that direction (a building located behind a taller one in the same row is completely hidden).



**Part I**

**5. Tri-Squares**

**25 points**

Place the numbers 1 to 15 into each grid, in order, so that each number is in the same row or column as the number preceding it. The resulting path may cross or double-back on itself, and successive numbers need not be adjacent. There must be exactly three numbers placed in each row and column. The numbers outside the grid reveal the sum of the numbers in the corresponding row or column.

	30	9	21	27	33
27					
39					
15					
14					
25					

	9	22	24	39	26
33					
30					
9					
18					
30				13	







# Part I

## 8. Tents

15 points

Locate the tents in each grid. Each tree (symbolized by T in the diagram) is connected to exactly one tent, found in a horizontally or vertically adjacent square. Tents do not touch each other, not even diagonally. The numbers outside the grid reveal the total number of tents in the corresponding row or column.

	1	3	2	2	3	1	3	1	3	2
3	T			T				T		
2			T				T			
3				T			T			
1					T			T	T	
3	T			T						
1					T		T			
2							T			
2					T					
2		T				T				
2	T			T						T

	4	1	3	2	2	2	1	2	1	4
3						T				T
2	T		T			T	T			
3		T	T							
1				T					T	
3	T									
2					T			T		
1		T								T
2				T			T			
2	T								T	
3		T			T					T

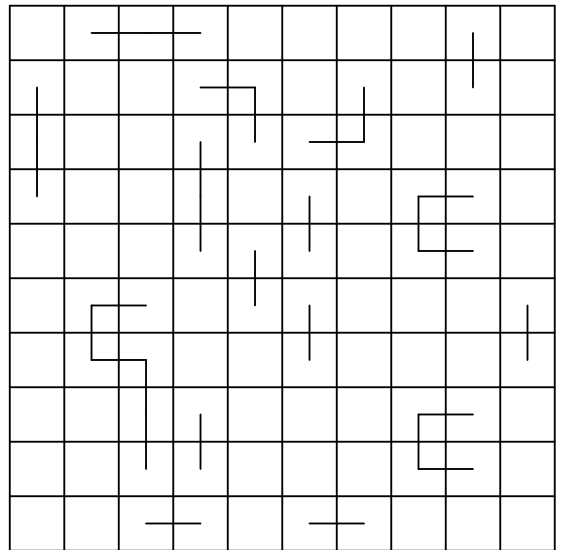
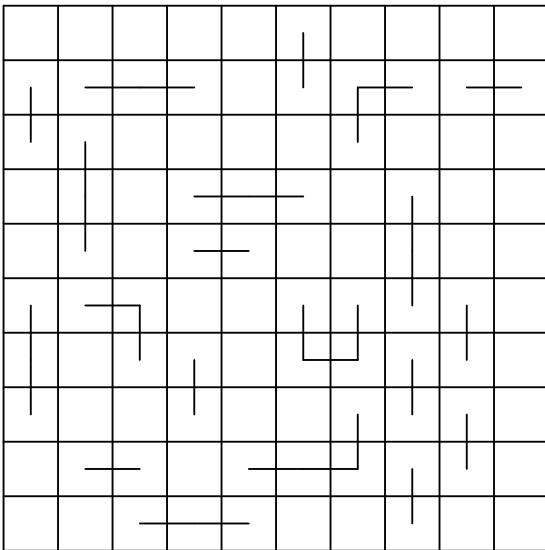


# Part I

## 10. Loopfinder

15 points

Draw a continuous loop of straight sections such that: the loop connects the middles of the squares, and may turn only at middle points of squares ; the loop must not cross or overlap itself and must visit all squares. Some parts are already given.





# Part I

## 12. Number Crossword

15 points

Enter digits from 1 to 9 into the grid, one per square, so that the digits in each series of empty squares multiply up to the number in front of, or above the series.

No digit is ever repeated in a continuous series of digits, and all the digits are used exactly twice in the whole grid.

			24	120	14
		48			
		1440			
	840				
	378				
54			4		
			6		
90					
168					