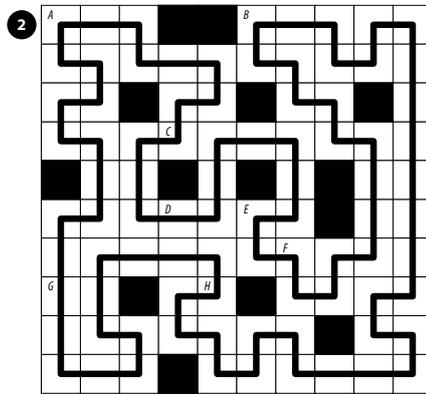
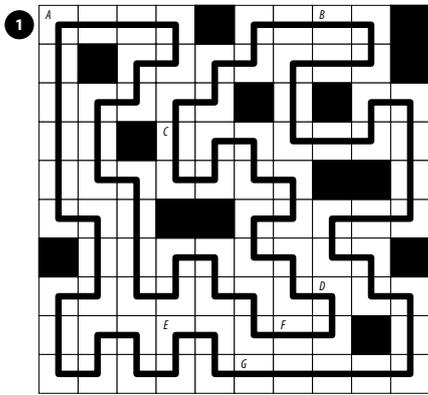




WPF PUZZLE GP 2019 SOLUTION BOOKLET

1-2. Simple Loop [Ashish Kumar] (4, 7 points)

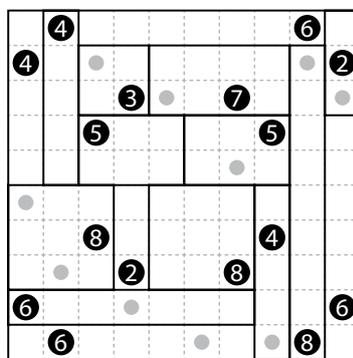
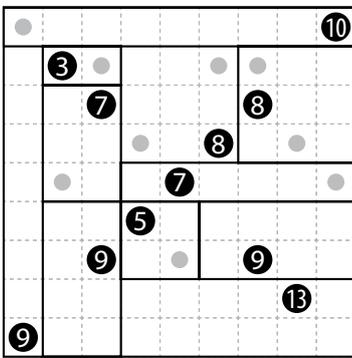


3-4. Skyscrapers [Amit Sowani] (8, 18 points)

		2	2	2	
2	3	1	2	5	4
3a →	4	5	1	2	3
3	2	3	5	4	1
3b →	1	2	4	3	5
	5	4	3	1	2
		2	3		2

		3	3	1	3	
4a →	5	1	4	2	6	3
4b →	3	6	5	4	2	1
3	2	3	6	1	5	4
3	1	5	3	6	4	2
3	4	2	1	5	3	6
1	6	4	2	3	1	5
		3	3	3	5	

6-7. Shikaku (Off-by-One) [Amit Sowani] (18, 20 points)



6 → 9 7 3 8 5 8 8 8 7

7 → 8 8 3 6 7 6 5 4 8 2

8-9. Products (Off-by-One) [Amit Sowani, Rakesh Rai] (31, 95 points)

8 {1-12}

	A	B	C	D	E	F	
	4	23	34	43	49	89	
11	1						10
13	3			4			
21		2		11			
41			7		6		
61		12	5				
71					8	9	

9 {1-11, 14-16, 18, 20}

	A	B	C	D	E	F	G	H	
	59	89	109	179		9	19	29	
9			10			1			
19				9				2	
29	4				7				
159				20	8				
49					16	3			
69		5						14	
89	15					6			
199	18	11							

5. Skyscrapers (Encoded) [Amit Sowani] (70 points)

		I	N	D	I	A	N	
		2	4	6	3	1	5	
5a →		3	1	5	4	2	6	
N		1	6	4	5	3	2	I
		5	2	3	6	4	1	
		6	3	1	2	5	4	
5b →	P	4	5	2	1	6	3	N
		N		G	P		P	



10-11. Tapa [Prasanna Seshadri] (17, 37 points)

10a →

10b →

A 10x10 grid with black squares forming a pattern. Numbers are placed in some white squares: (1,1)=1, (1,4)=4, (1,9)=1, (2,5)=1, (2,6)=2, (2,8)=2, (3,9)=4, (4,2)=2, (4,4)=4, (5,7)=2, (6,1)=1, (6,3)=4, (6,8)=3, (7,2)=4, (8,4)=1, (8,9)=1.

11a →

11b →

11c →

A 10x10 grid with black squares forming a pattern. Numbers are placed in some white squares: (1,3)=1, (2,2)=1, (2,3)=2, (2,5)=2, (2,8)=1, (2,9)=5, (3,2)=2, (3,4)=2, (3,9)=4, (4,1)=5, (4,5)=2, (5,7)=1, (5,8)=2, (6,2)=1, (6,3)=3, (6,8)=3, (6,9)=2, (7,1)=1, (7,3)=1, (7,6)=3, (7,8)=3, (7,9)=1, (8,4)=1, (8,5)=5, (8,9)=1, (9,1)=1, (9,3)=6, (9,5)=1, (9,8)=3.

12. Tapa (LITS) [Prasanna Seshadri] (67 points)

12a →

12b →

A 10x10 grid with grey L-shaped tiles. Numbers are placed in some white squares: (2,2)=4, (2,4)=1, (2,5)=2, (3,2)=1, (3,3)=3, (4,2)=1, (4,3)=1, (5,2)=1, (5,3)=1, (5,4)=1, (5,5)=1, (5,6)=1, (5,7)=1.

14-15. Pentominoes (Myopia) [Prasanna Seshadri] (34, 27 points)

14a →

14b →

A 10x10 grid with grey pentominoes. Letters are placed in some white squares: (1,2)=Y, (1,4)=W, (1,8)=L, (2,4)=N, (2,6)=F, (3,2)=V, (3,4)=P, (3,8)=I.

13. Snake (Myopia) [Prasanna Seshadri] (13 points)

13a →

13b →

A 10x10 grid with black squares forming a pattern. Arrows are placed in some white squares: (1,2)↻, (1,5)↻, (2,4)⊕, (3,2)↔, (3,4)↕, (4,2)↔, (4,5)↻, (4,8)↔, (5,2)←, (5,7)⊕, (6,2)←, (6,9)↑.

15a →

15b →

A 10x10 grid with grey pentominoes. Letters are placed in some white squares: (1,2)=T, (1,4)=X, (1,6)=Z, (1,8)=W, (2,4)=P, (3,2)=I, (3,4)=N, (4,2)=U, (4,4)=Y, (4,6)=L, (4,8)=V, (5,2)=F, (5,4)=L, (5,6)=V.



16-17. Yajilin [Ashish Kumar] (31, 47 points)

16

1 2 3 4 5 6 7 8 9 0

7
9
4
6
2
5
3
2
0

17

1 2 3 4 5 6 7 8 9 0

3
7
5
3
7
0
3
1
0
8

18. Yajilin (Battleships) [Ashish Kumar] (51 points)

18

1 2 3 4 5 6 7 8 9 0

7
2
8
2
2
0
1
1
3
6

19-20. Spiral Galaxies [Rakesh Rai] (44, 46 points)

19a

19b

20a

20b

21. Spiral Galaxies (Tetrominoes) [Rakesh Rai] (79 points)

21a

21b