



WPF PUZZLE GP 2022 COMPETITION BOOKLET

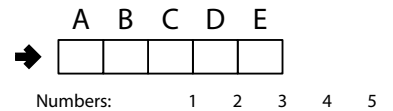
Host Country: India

Rakesh Rai, Prasanna Seshadri, Swaroop Guggilam

Special Notes: None.

1. Letter Weights [Rakesh Rai] (35 points)

Write a number under each letter (in each cell) so that the numbers corresponding to the letters in each given word have the given sum. Different letters must have different numbers. The list of allowed numbers is given in a row underneath the cells.



Answer: Enter the contents of the cells, from left to right. Enter all digits for multi-digit numbers (for example, if the cell contents were 12, then 5, then 25, enter 12525).

CAB = 11
BEE = 7
ABE = 8

Example Answer: 25431

	A	D	G	I	N	O	P	R	X		
1 →											
Numbers:			1	2	3	4	5	6	7	8	9

GRIP = 20
GRAND = 20
PRIX = 21
ARGON = 21
GOD = 21
RADIO = 23

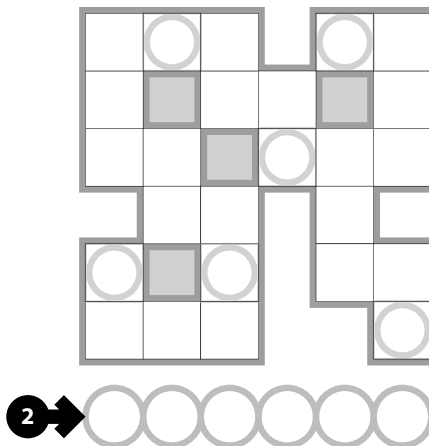
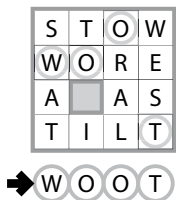


2. Criss-Cross [Rakesh Rai] (10 points)

Enter the given words in the grid, one character per cell. Each word is used exactly once, and will either read left-to-right or top-to-bottom.

The circles in the diagram are for Answer purposes only.

Answer: Enter the characters in each of the circled cells, from left to right. (Ignore the row each circle is in. The characters will not necessarily spell anything meaningful.)



- | | | | | |
|---|---|---|---|---|
| A | T | F | I | N |
| E | R | F | L | U |
| H | I | I | N | N |
| I | S | O | I | L |
| L | O | R | I | P |
| N | O | S | U | N |
| O | H | T | O | P |
| O | K | | | |
| P | A | | | |
| U | P | | | |

Example Answer: WOOT

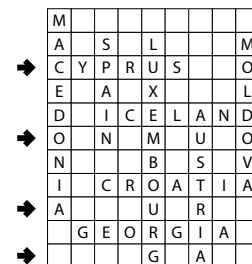
3. Scrabble [Rakesh Rai] (46 points)

Put at most one letter into each cell so that the given words can be read either across (left-to-right) or down (top-to-bottom) in consecutive cells in the grid. Every word must appear in the grid exactly once, and no other words may appear in the grid (that is, if two cells are filled and are adjacent orthogonally, then there must be a word that uses both of them). Every word must have either a blank cell or the edge of the grid before and after it. All letters must be (orthogonally) connected in a single group.

Some letters may be already supplied in the grid. For any such letter, all instances of that letter are given.

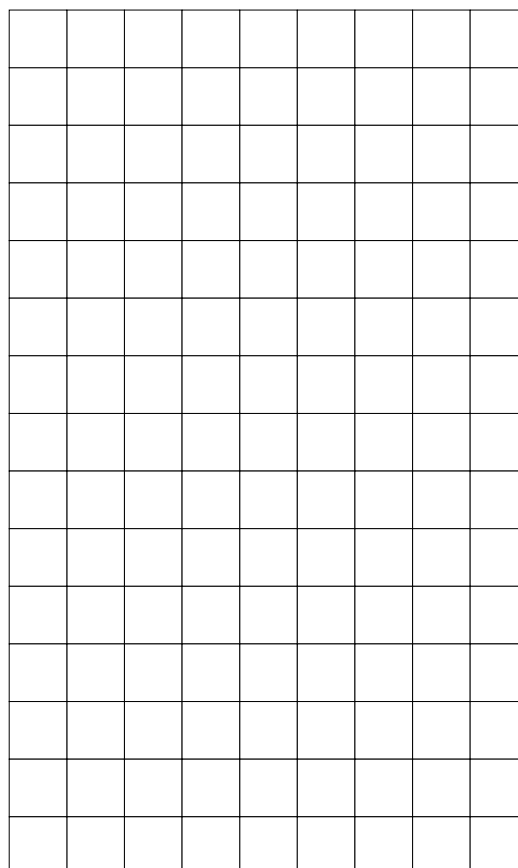
Answer: For each designated row, enter its contents from left to right, ignoring any blank cells. If all cells in the row are blank, enter a single letter 'X'.

Example Answer: CYPRUSO, ONMUO, AUR, GA



- L I E
- I T E M
- I M A G E
- S E H N S U C H T
- T R I C K S T E R
- T R O U V A I L L E
- C O D D I W O M P L E
- S T R I K H E D O N I A
- T H A L A S S O P H I L E
- S C H W E L L E N A N G S T

3a →



3b →

4. Scrabble [Rakesh Rai] (75 points)

Answer: For each designated row, enter its contents from left to right, ignoring any blank cells. If all cells in the row are blank, enter a single letter 'X'.

Example Answer: CYPRUSO, ONMUO, AUR, GA

M															
A	S	L													M
C	Y	P	R	U	S										O
E	A	X													L
D	I	C	E	L	A	N	D								
O	N	M	U	O											
N		B	S	V											
I	C	R	O	A	T	I	A								
A				U	R										
		G	E	O	R	G	I	A							
						G	A								

- | | | | |
|------|--------|---------|-------------|
| BAD | CLOTH | DAZZLED | CLEMENCY |
| ALIA | FLOCK | DICTION | SIZZLING |
| BUZZ | PIZZA | HAPPILY | PAPARAZZI |
| FIZZ | SWEPT | INITIAL | QUIZZICALLY |
| NICK | WHIZZ | PALAZZO | |
| WAIL | PUZZLE | WALKING | |

4a →

Z		Z		Z		Z		Z		Z		Z			
Z		Z		Z		Z		Z		Z		Z		Z	
														Z	

4b →

								Z							
								Z							
												Z	Z		



5-6. Yajilin [Prasanna Seshadri] (12, 25 points)

Draw a single closed loop passing through some empty cells in the grid. The loop connects centers of orthogonally adjacent cells, makes only right-angle turns or goes straight, and does not intersect or cross itself.

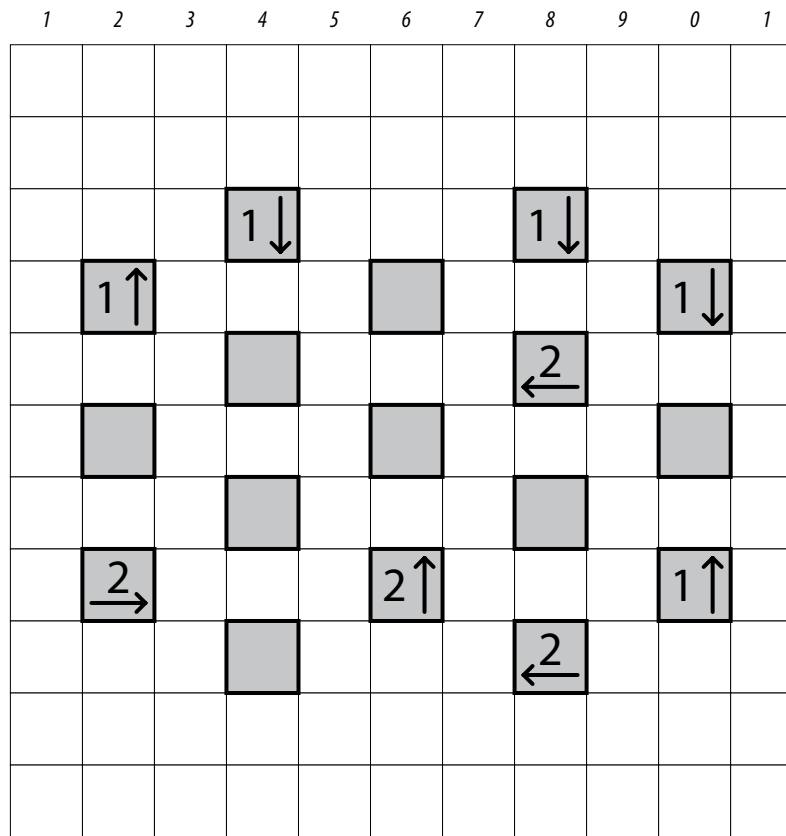
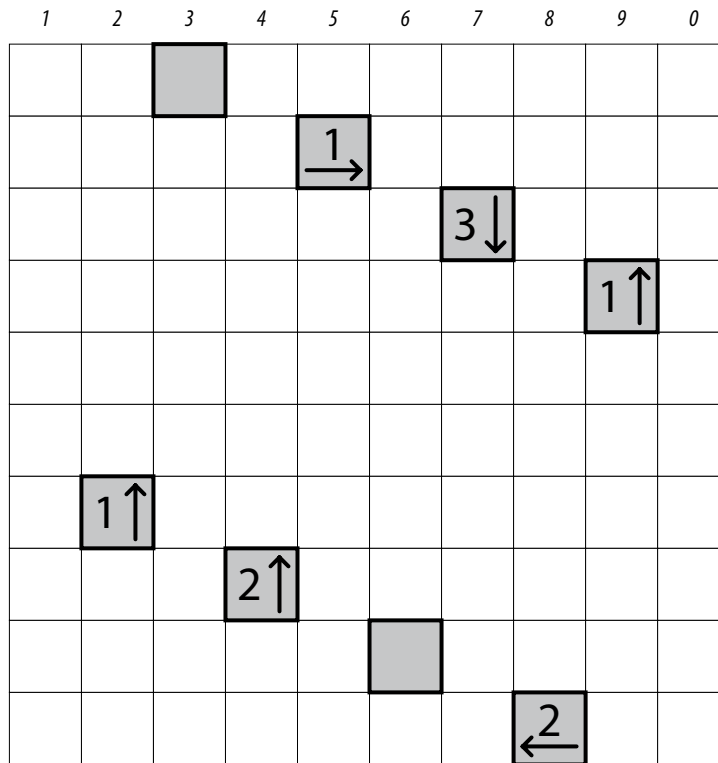
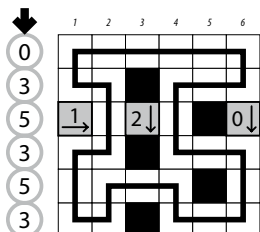
Some cells will remain empty; such cells are "unused" and cannot share an edge with each other.

The grid contains some outlined gray cells that cannot be part of the loop. Numbered arrows in such cells indicate the total number of unused cells along the direction of the arrow, starting in the arrowed cell and going along a row or column to the edge of the grid.

The numbers on top of the diagram are for Answer purposes only. It may be helpful to shade the unused cells, as per the example answer.

Answer: For each row from top to bottom, enter the column number of the left-most unused cell. (Outlined cells are not unused.) Use only the last digit for two-digit numbers; e.g., use '0' for column 10. If none of the cells in a row are blackened, enter '0' for that row.

Example Answer: 035353



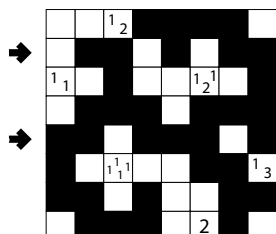
8. Tapa [Swaroop Guggilam] (16 points)

Shade some empty cells black; cells with numbers cannot be shaded. All black cells connect along edges to create a single connected region. (It is permissible for the region to touch itself at a corner, but touching at a corner does not connect the region.) No 2x2 group of squares can be entirely shaded black.

Numbers in a cell indicate the lengths of contiguous black cell groups along the "ring" of 8 cells touching that cell (fewer for cells along the outside edge). If there is more than one number in a cell, then there must be at least one white (unshaded) cell between the black cell groups. The numbers are given in *no particular order*. As a special case, if the number given in a cell is a zero (0), it means that none of the cells around that cell can be shaded black.

Answer: For each designated row, enter the length in cells of each of the shaded segments from left to right. Use only the last digit for two-digit numbers; e.g., use '0' for a segment of size 10. If there are no black cells in the row, enter a single digit '0'.

Example Answer: 212, 231



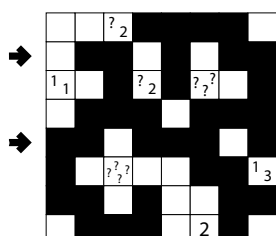
					1		1	
	1	5						
			1	5				1
5			1	5		1	5	
								5
	5			1	5			
							1	5
1			5					

9. Tapa (Unknowns) [Swaroop Guggilam] (4 points)

All rules for Tapa apply, with this additional rule:

Some numbers have been replaced with question marks ('?'). Ignore the arrangement of numbers; for example, a "? 2" could be a "1 2", "2 2", or "3 2". If there is more than one number or question mark in a cell, none of them can be zero (0).

Example Answer: 212, 231



						?
	?			?	?	
		?	?	?		?
	?	?		?		
					?	



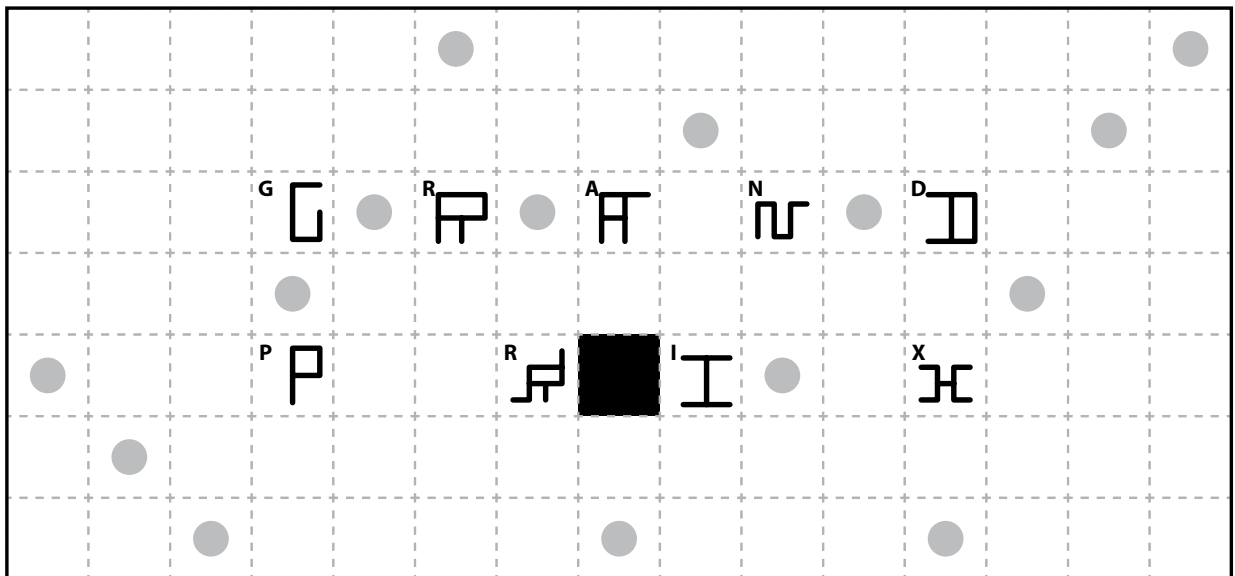
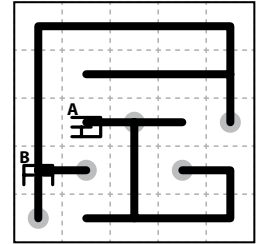
12. Curve Data [Rakesh Rai] (72 points)

Draw lines that connect cells orthogonally through their centers. Some cells have shape clues in them. For each shape clue, the shape of the lines that connect to that clue must match the shape, except that the lengths of straight lines do not have to match (but cannot be zero). Each cell without a shape clue must be connected to exactly one cell with a shape clue. Cells with shape clues cannot be connected to each other.

The letters and dots inside the cells are for Answer purposes only. The competition puzzle has a hole in the center that is not part of the grid.

Answer: Enter the letter for each cell that a dot is in, from left to right. (Ignore which row the dots are in.) The letter for a cell is the letter next to the shape clue that includes that cell.

Example Answer: AABBA



12 →



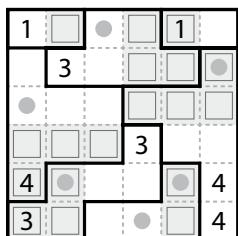
13-14. Double Choco [Prasanna Seshadri] (31, 28 points)

Divide the grid along grid lines into regions. Each region must contain one group of connected white cells and one group of connected gray cells. Both connected groups must form the same shape (rotations and reflections are allowed). Numbers indicate the area of the group (not region) that number is in. (Regions may contain no numbers, or multiple given numbers, even in the same color.)

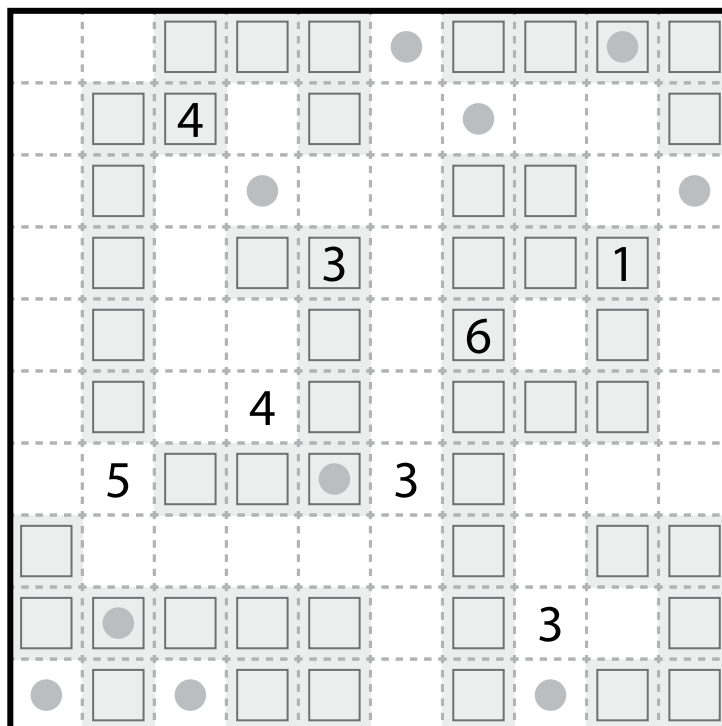
The squares in gray cells are only to make them distinctive in poor printing conditions. The dots in cells are only used for entering your answers.

Answer: Enter the area of the group (not region) each dot is in, reading the dots from left to right. (Ignore which row the dots are in.) Use only the last digit for two-digit numbers; e.g., use '0' for a polyomino of size 10.

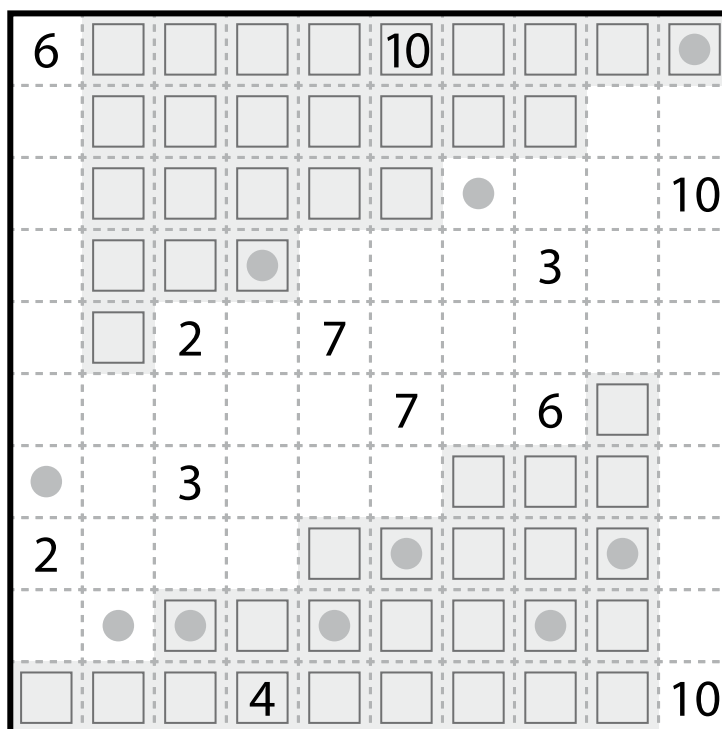
Example Answer: 433224



→ 4 3 3 2 2 4



13 → ○ ○ ○ ○ ○ ○ ○ ○ ○ ○



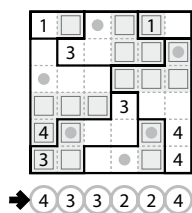
14 → ○ ○ ○ ○ ○ ○ ○ ○ ○ ○



15. Double Choco [Prasanna Seshadri] (72 points)

Answer: Enter the area of the group (not region) each dot is in, reading the dots from left to right. (Ignore which row the dots are in.) Use only the last digit for two-digit numbers; e.g., use '0' for a polyomino of size 10.

Example Answer: 433224



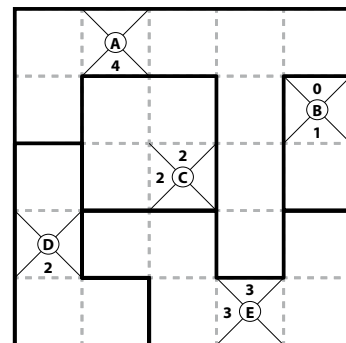
			12	12		8			
						8			
5		●					6		
5					8				
5									
					●		●	●	
	6					6			
			7					6	
									2
				6					1
	●			●					
			●			●			
		5							6
●			1						
			3		2	5			●

15 → ○ ○ ○ ○ ○ ○ ○ ○ ○ ○



16. Compass [Rakesh Rai] (55 points)

Divide the grid along the dotted lines into regions (groups of cells that are connected orthogonally). Each cell must be in exactly one region, and each region must contain exactly one clue (an X-like symbol that contains up to four numbers). For each clue, the number in the north part (north being towards the top of the page) indicates how many cells of that clue's region are located North of the clue cell (irrespective of their East-West location). Analogously, numbers in the west, east, and south part indicate how many cells of that region are located West, East and South of the clue cell. If there is no number in a part, the number of cells in that direction are not given to you.



The letters in the clue cells are for Answer purposes only.

Answer: For each designated row, enter the letter of the region each cell belongs to.

Example Answer: ACCAB, DEEAE

16a →

16b →

