WPF SUDOKU/PUZZLE **GRAND PRIX** 2017

ROUND 3C

WPF PUZZLE GP 2017 COMPETITION BOOKLET

Host Country: Netherlands

Author: Bram de Laat

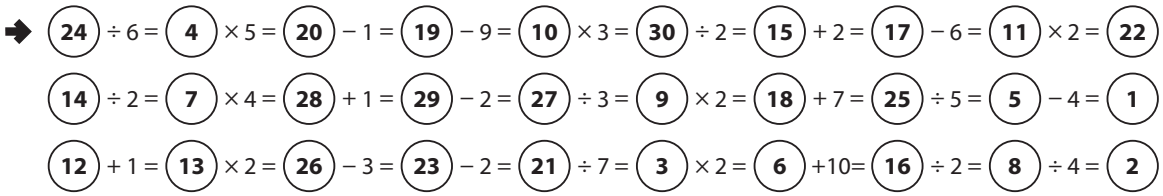
Special Notes: Puzzles 12 and 13 are not bonus-eligible (that is, you may Claim Bonus if you have solved all the other puzzles and have time remaining).

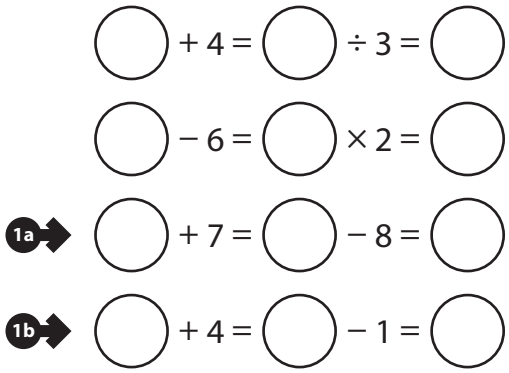
C1-2. Chains (10, 8 points)

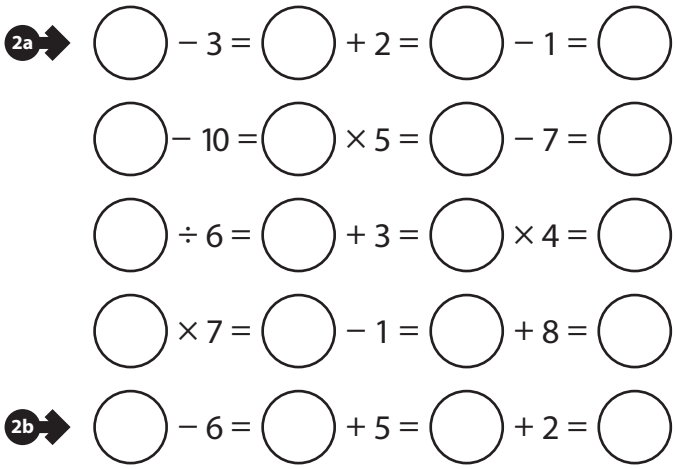
Enter the numbers from 1 to X in the circles, once each, so that the given equations are correct. (Each equation begins at one circle and ends at the next circle; X is the total number of circles.)

Answer: For each indicated row, enter the last digit of each number, from left to right.

Example Answer: 4409005712







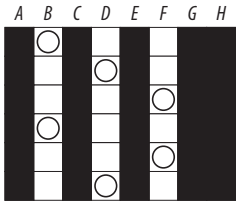
C3. Column Dance (19 points)

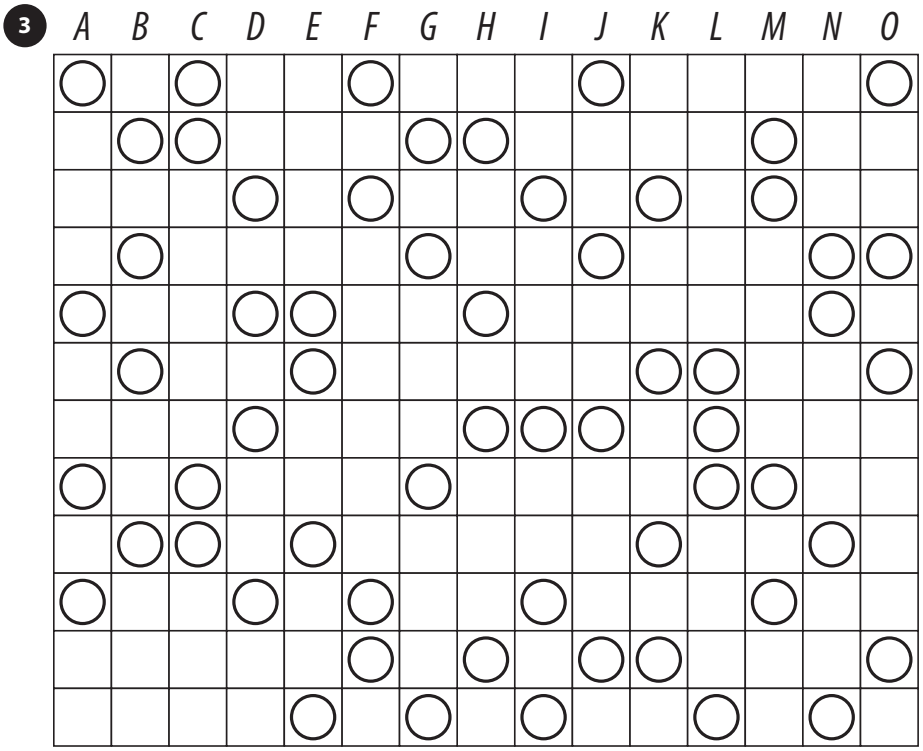
Remove some columns so that there is exactly one symbol in each row.

Any difference between the symbols or cell lines are purely for decorative purposes.

Answer: Enter the letters above the non-removed columns, from left to right.

Example Answer: BDF





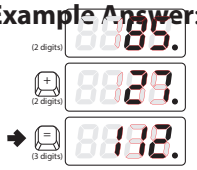
C4-5. Broken Calculator (15, 10 points)

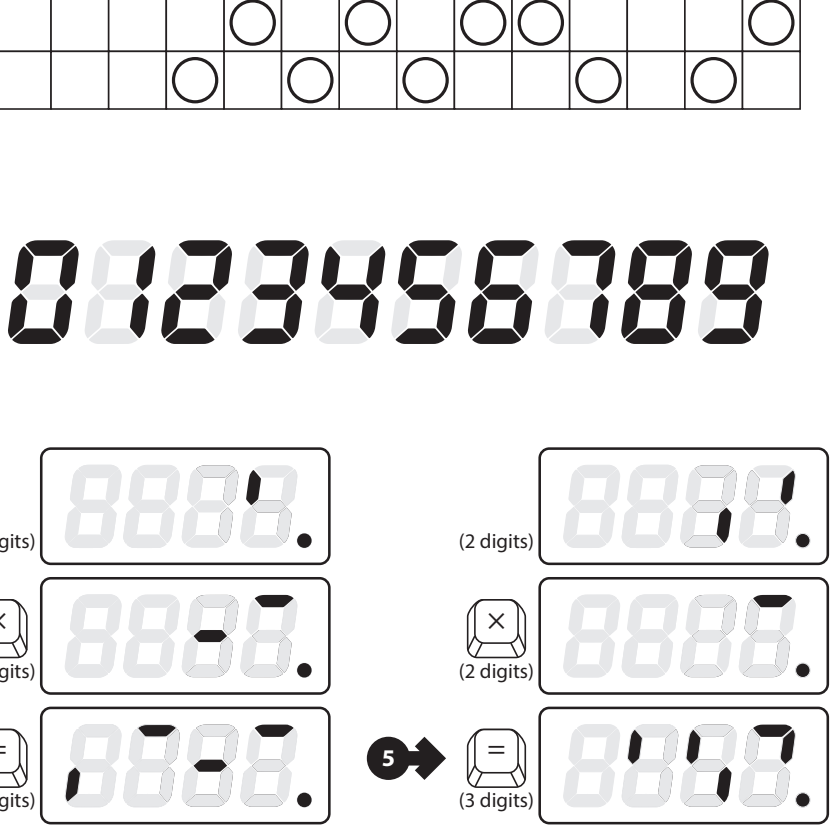
A broken calculator has been used to calculate an expression. However, many segments of the calculator's display are broken, meaning that they are stuck in the "off" position (and do not display even if they are supposed to be "on" in the digit). The broken segments are consistent between numbers (but can be different between digits of the same number). The length of each number (in digits) is provided; the numbers do not have any leading zeroes. Determine the original expression.

A list of how the digits would appear on a working display has been provided for your convenience.

Answer: Enter the last number of the expression.

Example Answer: 112





C6. Crisscross (6 points)

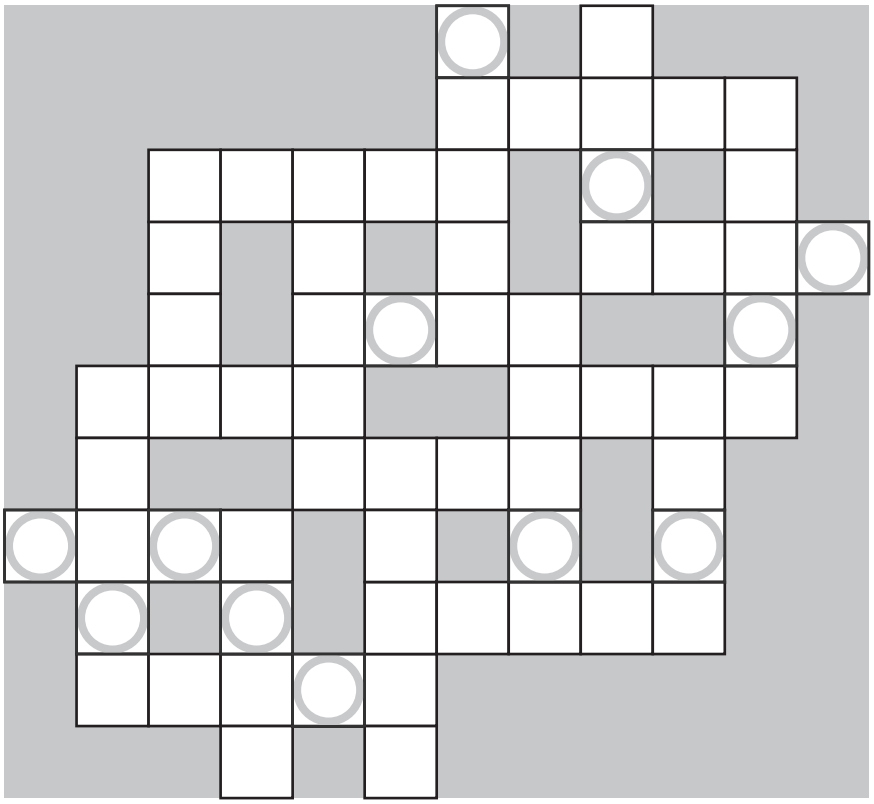
S	T	O	W
W	O	R	E
A		A	S
T	I	L	T

Enter the given words in the grid, one character per cell, to complete the crisscross pattern. 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.)

Example Answer: WOOT



6

C R O W
K N O T
N E X T
O V A L
O U Z O
S T A R
T I C K
T I M E
W A I T
Z A N Y

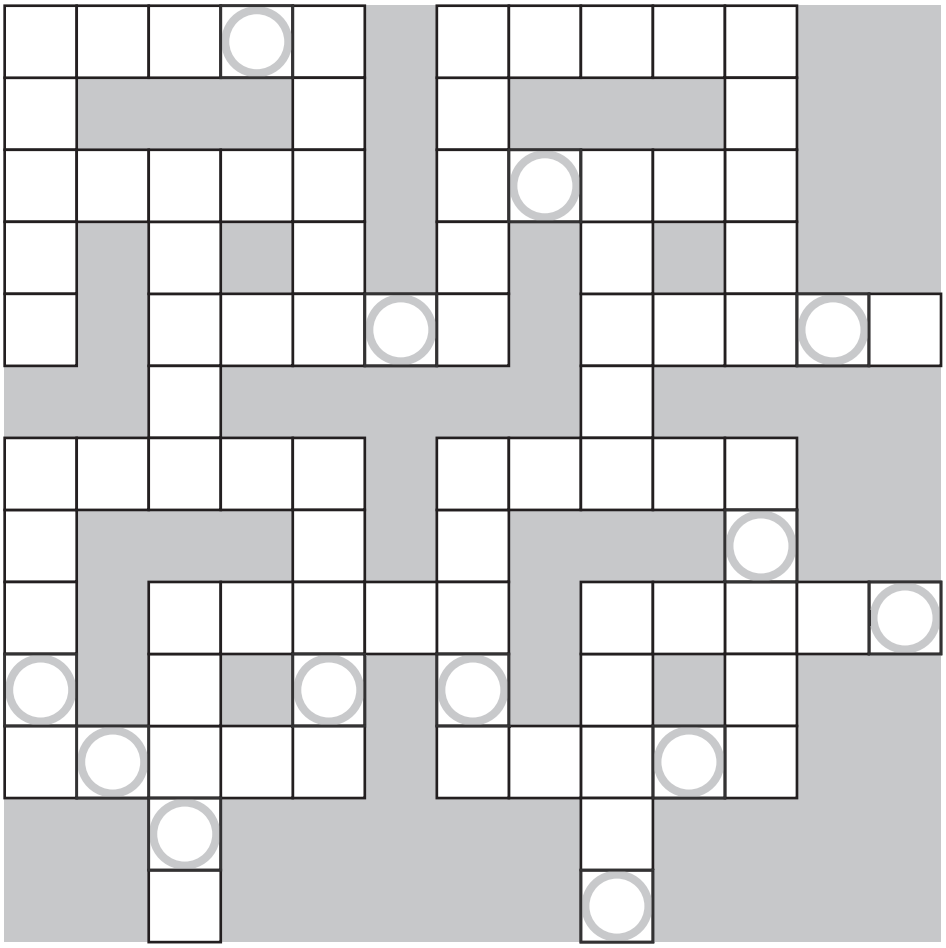
A R E N A
B L O W N
C L A I M
E V I C T
G E C K O
I R O N Y
L O T T O
M I M I C
R E N I G
S A B R E

C7. Crisscross (17 points)

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.)

Example Answer: WOOT

S	T	O	W
W	O	R	E
A		A	S
T	I	L	T



7

D A T E D
D E V I L
D I T S Y
D W A R F
F I E N D
F L O O D
I N D E X
L A T I N
L E A S T
L I N G O
L U N C H
P E T A L
P O K E R
P O S I T
P R I N T
Q U I C K
R A V E N
R E B E L
R I F T S
R O T O R
T E N E T
T R A I T
T U Q U E
T U R I N

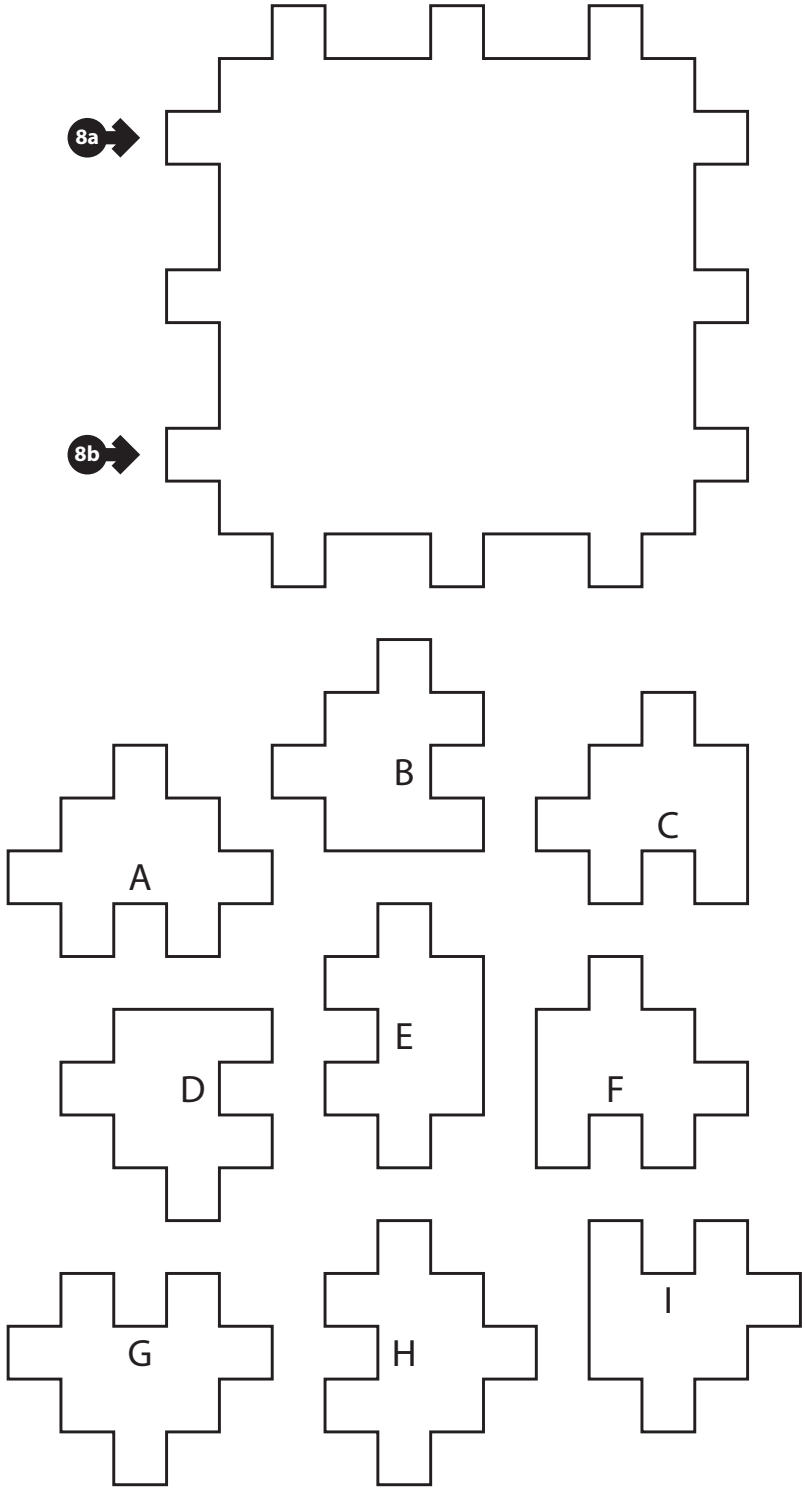
C8. Jigsaw Puzzle (15 points)

You are given jigsaw puzzle pieces, to assemble to a complete image as shown. Pieces may not be rotated or reflected.

You may use scissors or other cutting implements for this puzzle, but they might not help you solve the puzzle faster.

Answer: For each indicated row, enter the letters corresponding to the pieces in that row.

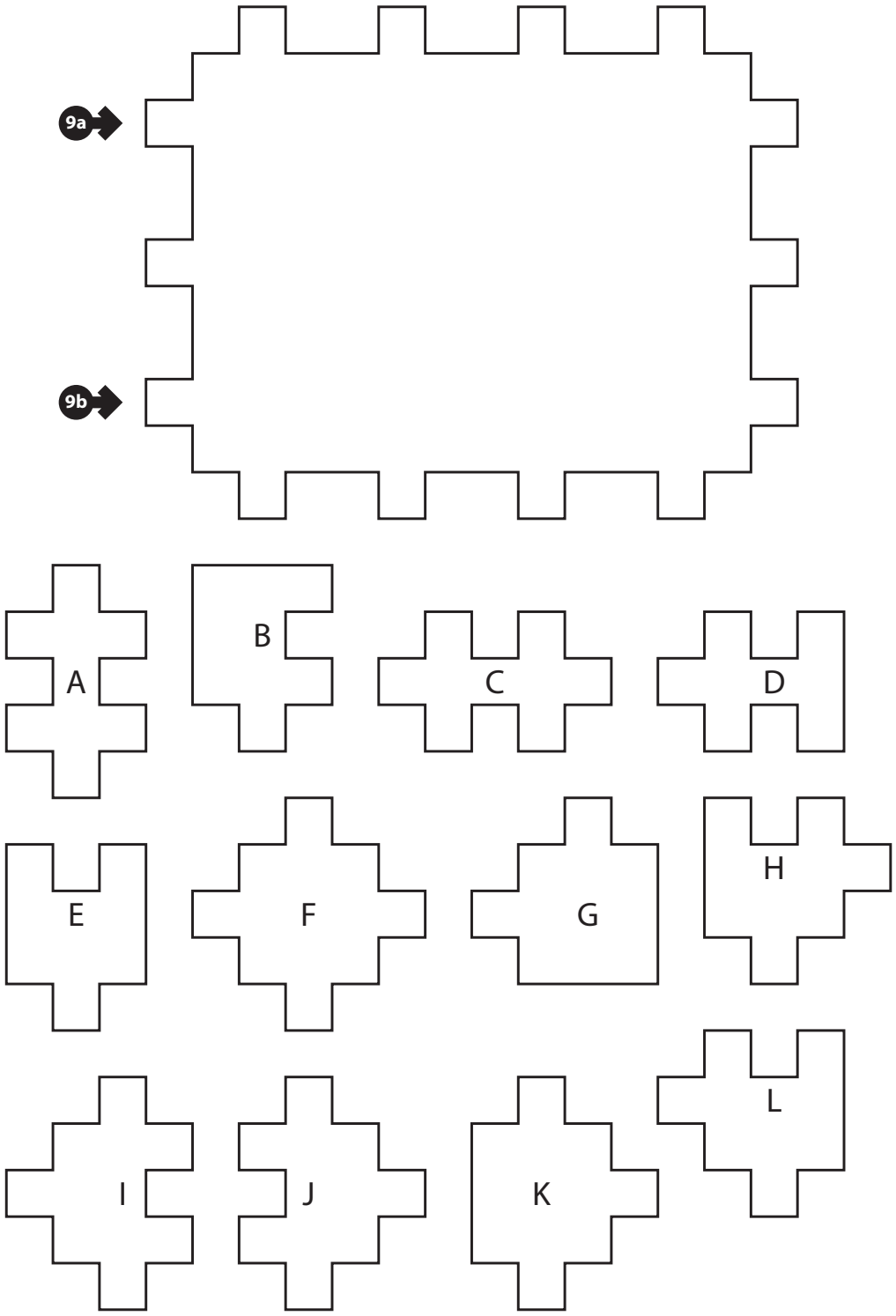
Example Answer: BCGH, MKEO



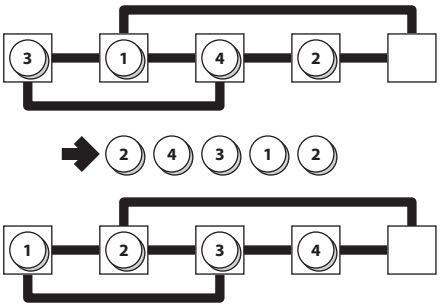
C9. Jigsaw Puzzle (27 points)

Answer: For each indicated row, enter the letters corresponding to the pieces in that row.

Example Answer: BCGH, MKEO



C10. Sliding Blocks (18 points)

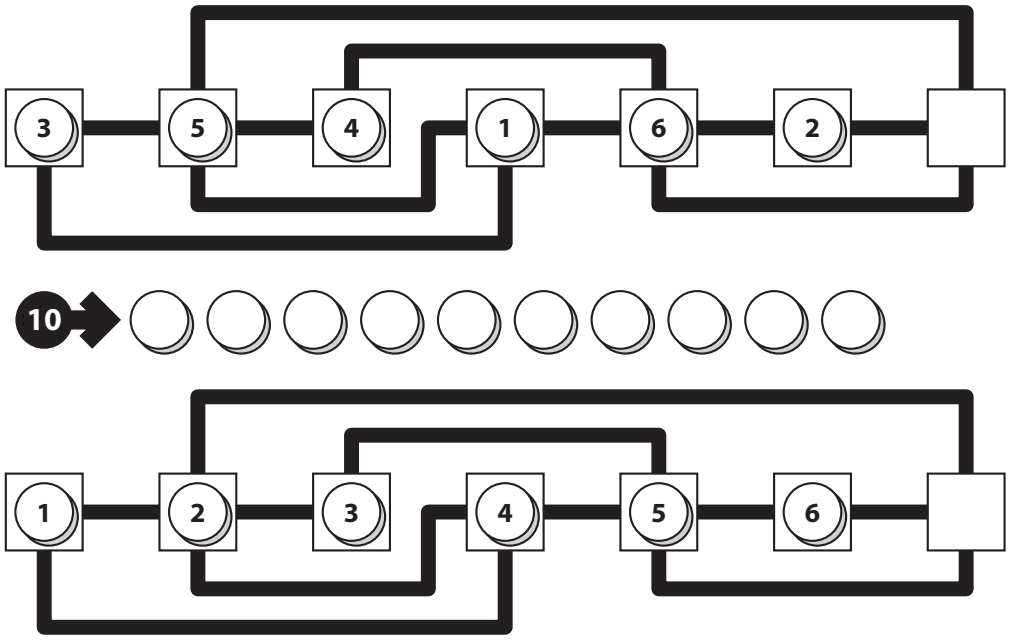


Use a series of valid moves to get from the starting position to the ending position. A valid move is defined by moving a round token from a square, along the given paths, to an empty square. The number of moves you must use is provided.

You may use scissors or other cutting implements for this puzzle, but they might not help you solve the puzzle faster.

Answer: Enter the numbers on the tokens you have moved, in order. If a token is moved more than once, enter it multiple times, once for each move.

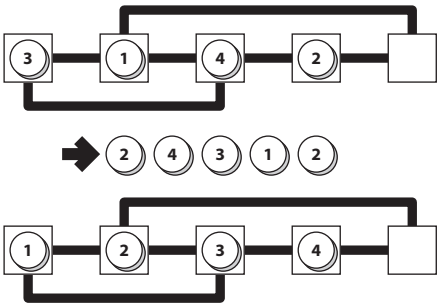
Example Answer: 24312

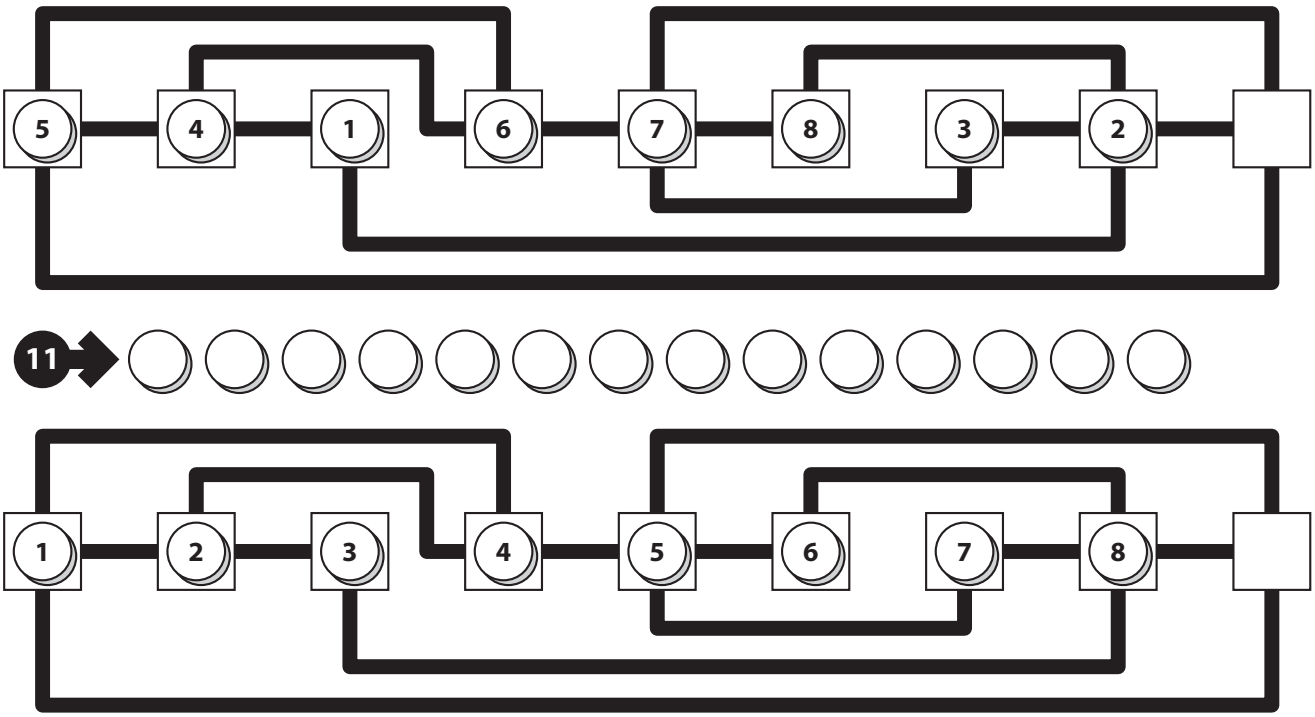


C11. Sliding Blocks (48 points)

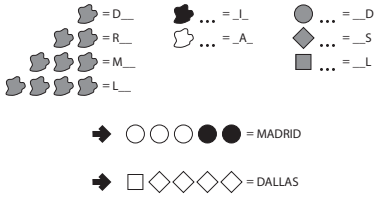
Answer: Enter the numbers on the tokens you have moved, in order. If a token is moved more than once, enter it multiple times, once for each move.

Example Answer: 24312





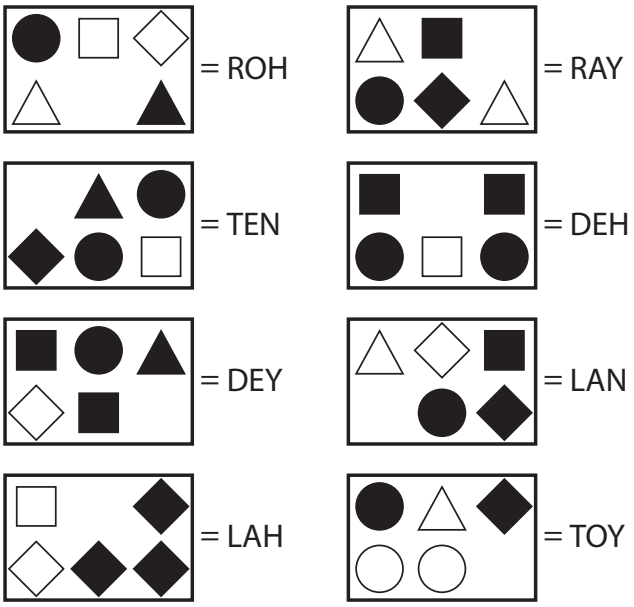
C12-13. Crack the Code (33, 63 points)

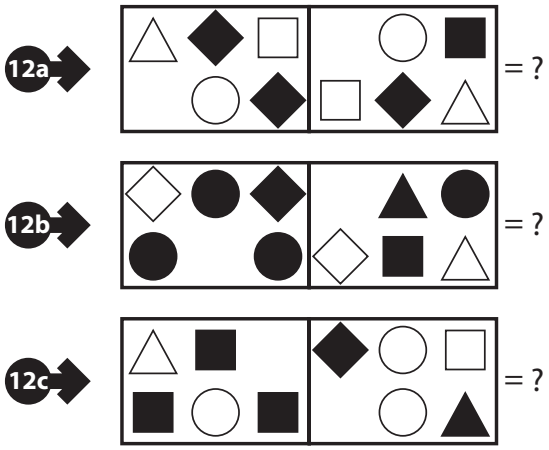


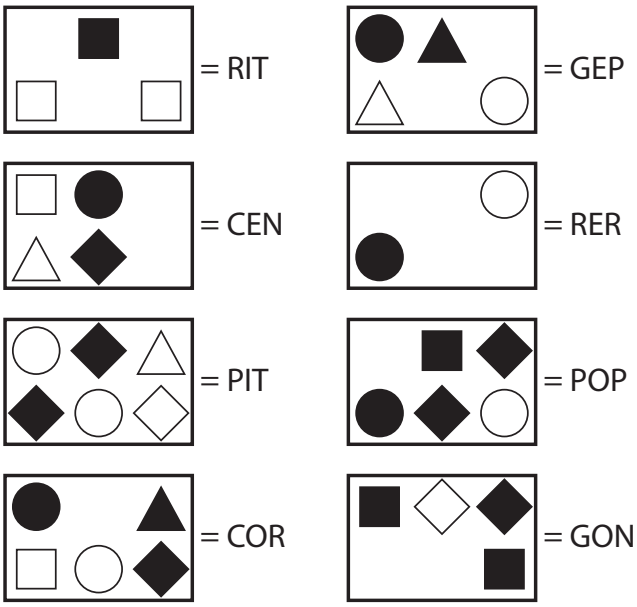
A group of symbols has been used to encode a short message. Given some sample codes and decoded messages, figure out the messages encoded by the given symbols.

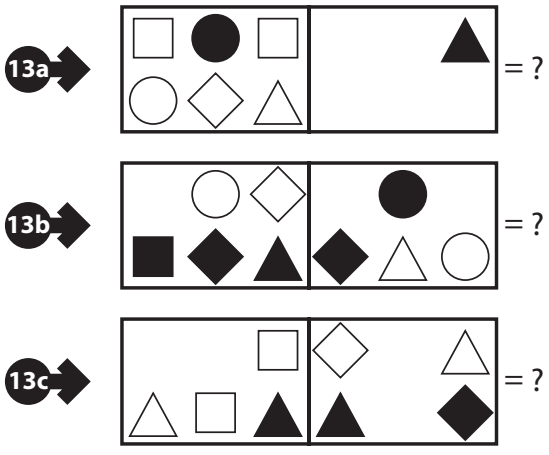
Answer: Enter the encoded messages.

Example Answer: MADRID, DALLAS









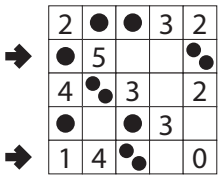
C14-15. Double Minesweeper (43, 91 points)

Place mines into the un-numbered cells in the grid, at most two mines per cell, so that each number in a cell represents the number of mines adjacent to that cell (including diagonally adjacent cells).

The number of mines you must locate is NOT provided.

Answer: For each designated row, enter its contents from left to right. Use '1' for a cell containing one mine, '2' for a cell containing two mines, and 'X' for a cell that does not contain any mines (but may contain a number).

Example Answer: 1XXX2, XX2XX



14a

14b

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

15a

15b

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