WPF SUDOKU/PUZZLE **GRAND PRIX** 2017

ROUND 5C

WPF PUZZLE GP 2017 COMPETITION BOOKLET

Host Country: Czech Republic

Author: Jan Novotný, Jakub Ondroušek

Special Notes: Point values will be added in a later update. All puzzles are bonus-eligible.

C1. Crisscross [Jan Novotný] (13 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. 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.

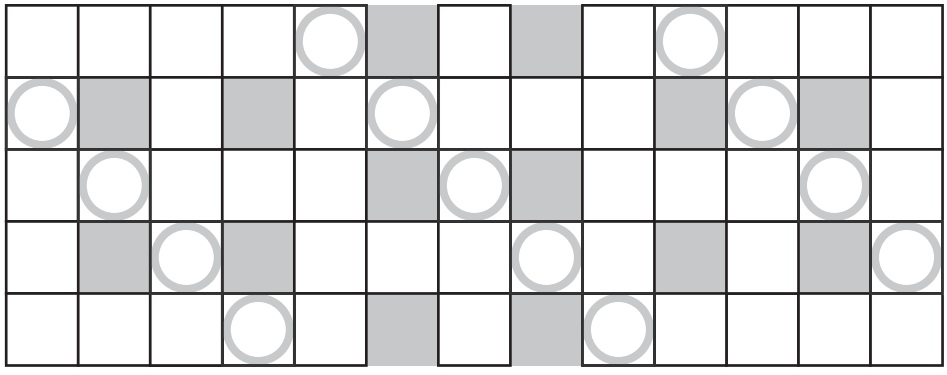
Answer: Enter the characters in each of the circled cells, from left to right. (Ignore the row each circle is in. The characters will not necessarily spell anything meaningful.)

Example Answer: WOOT

A	R	E	N	A
B	A	Z	E	N
B	E	D	N	A
B	U	D	I	K
D	E	B	U	T

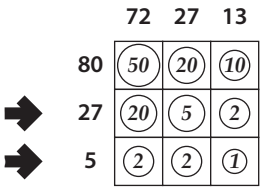
J	E	D	L	E
K	A	J	A	K
K	O	B	R	A
K	R	A	V	A
K	U	K	L	A

N	I	T	K	A
N	U	D	L	E
O	S	A	D	A
R	Y	S	K	A
Z	O	B	A	K



C2-3. Coins [Jakub Ondroušek] (10, 13 points)

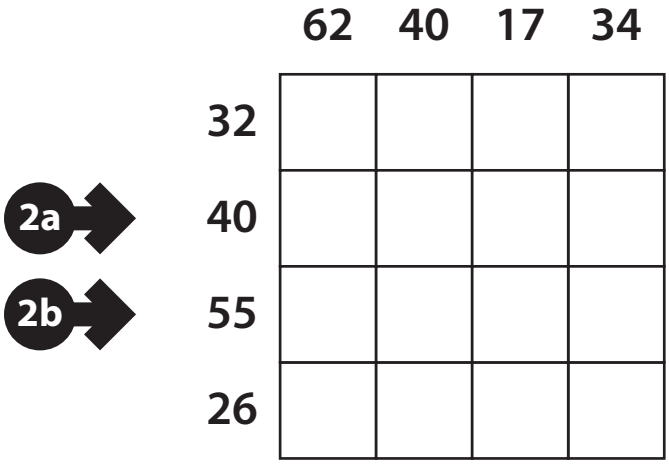
Place one coin into each cell such that the sum of the coins in each row (and column) matches the number to the left (and the top). The valid denominations of coins are supplied with the puzzle; the same denomination may be used multiple times in each row (or column).

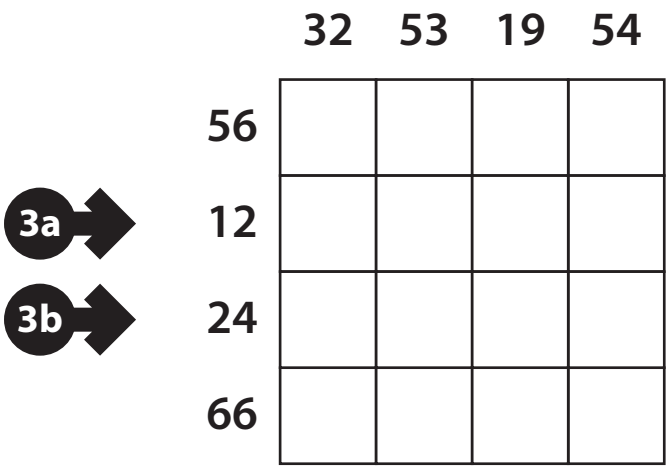


The size of the coins are only for cosmetic purposes. It is possible for any denomination to remain unused in the correct solution.

Answer: For each designated row, enter its contents from left to right. The content of each cell is the denomination of the coin in that cell.

Example Answer: `2052,221`

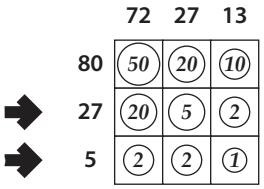


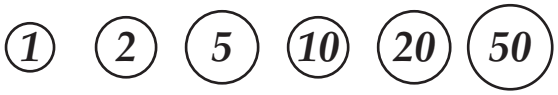


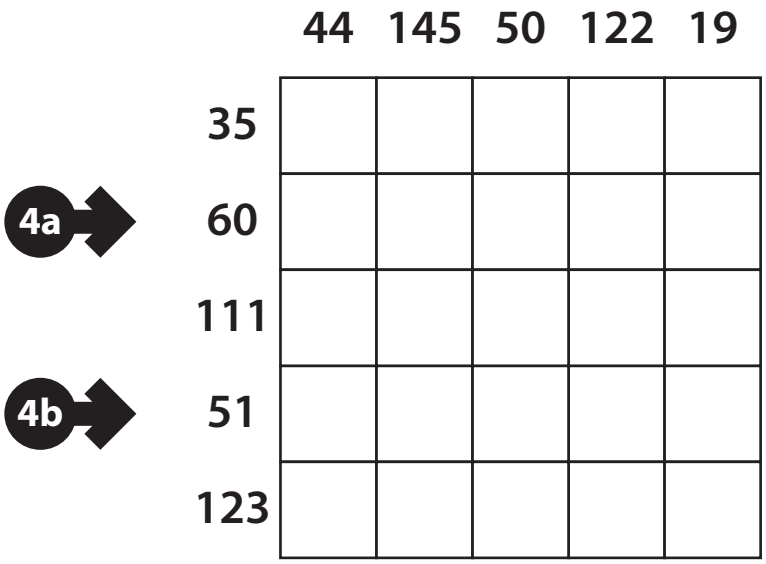
C4-5. Coins [Jakub Ondroušek] (37, 33 points)

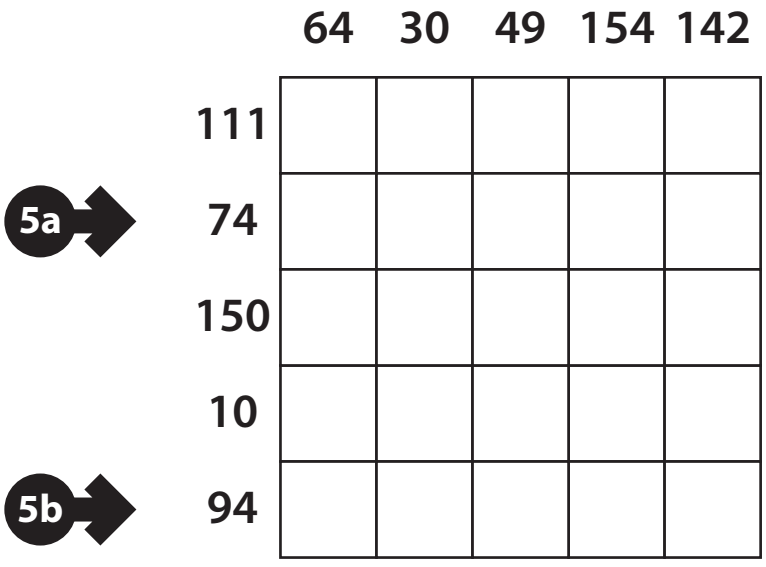
Answer: For each designated row, enter its contents from left to right. The content of each cell is the denomination of the coin in that cell.

Example Answer: 2052, 221

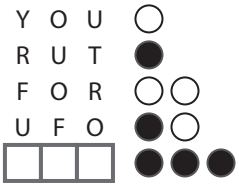








C6-7. Mastermind [Jan Novotný] (4, 16 points)



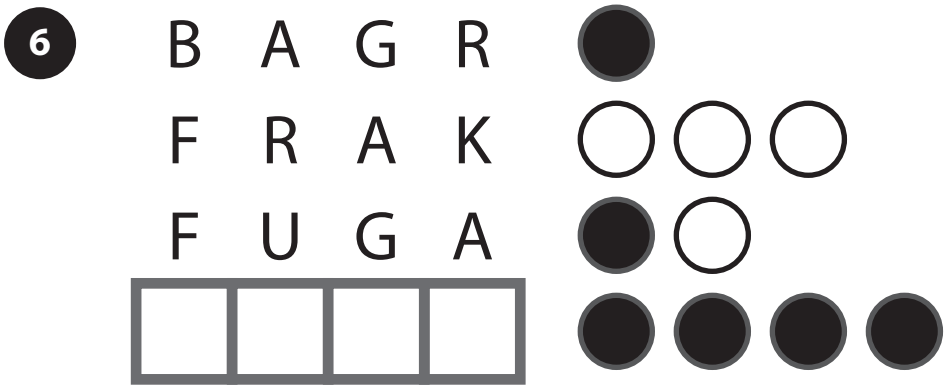
Each row represents a guess at a secret code. A black dot represents a letter in the guess that is in the same position as a letter in the secret code. A white dot represents a letter in the guess that is in the secret code, but not in the same position. The dots are given in no specific order. Each letter in the secret code appears in at least one guess. Blank spaces can appear in the guesses but will never appear in the secret code.

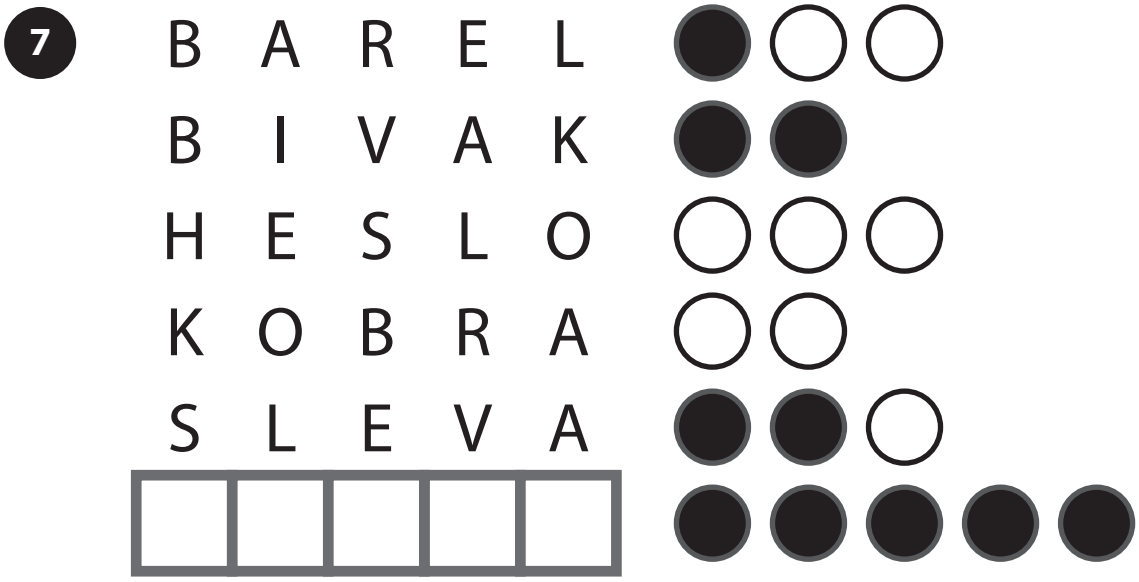
Guesses and the secret code will never contain duplicate letters.

The last line with empty space for the secret code, and any notes on the side, are given for aesthetic reasons only. The secret code may or may not be a word.

Answer: Enter the secret code.

Example Answer: OFT





C8. Triangle Word Search [Jan Novotný] (18 points)

Locate the list of words in the grid. Words always appear in a triangular shape.

Two words will not be found in the grid.

Answer: Enter the missing words, in alphabetical order.

Example Answer: ASGARD, SALADS

ASGARD
BALLAD
BADASS
DALLAS
SALADS

8

K	B	A	P	R	A	S	T	E	P	I	L
A	A	T	L	Y	E	U	A	C	C	O	C
M	E	R	A	K	N	I	M	E	B	R	I
L	K	A	E	B	A	C	P	E	K	D	N
A	K	T	A	F	L	Z	I	L	O	H	Y
D	E	O	N	E	N	A	C	S	D	R	T
L	E	S	T	A	K	L	K	O	O	A	E
S	O	T	O	A	L	C	O	P	M	Z	K
Y	P	U	P	P	E	P	A	P	Y	L	O

B L A N K A
C E P I C E
C L A N E K
C P A V E K
D R O B E K
F L E T N A
H O D I N Y
H R A D L O
K A M E R A

K A P O T A
K A R T E L
K L A D K A
K L E N B A
K L E P A C
L Z I C K A
M I N U T A
M O Z O L Y
O P I L C I

P L A T B A
P O K L O P
P O S T U P
R A K E T A
S E K Y R A
S L E P C I
S L O U P Y
T E L E S O
Z M A T E K

C9-10. Chess Attacks [Jan Novotný] (13, 91 points)

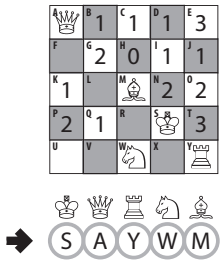
Place the five chess pieces (king, queen, rook, knight, bishop) on the board such that each number in a cell represents the number of pieces that attack that cell.

Pieces do not attack pieces of the same color (so, any cell that is occupied by a piece is attacked by 0 pieces). The queen's, rook's, and bishop's attacks can be blocked by other pieces. Pieces do not attack themselves.

The letters in the cells and the circles are used only to help you enter your answer. The shading of the cells is for cosmetic purposes only.

Answer: Enter the letters corresponding to the cells with the corresponding pieces.

Example Answer: SAYWM



A	B	C	D	E	F	G	H
0	1	0	0	1	1	0	1
I	J	K	L	M	N	O	P
1	1	2	1	0	2	2	1
Q	R	S	T	U	V	W	X
0	0	0	0	2	0	1	1
Y	Z	A	B	C	D	E	F
0	0	2	1	5	1	2	0
G	H	I	J	K	L	M	N
0	1	1	0	2	2	0	2
O	P	Q	R	S	T	U	V
1	0	1	1	2	0	1	0
W	X	Y	Z	A	B	C	D
0	0	0	1	1	0	0	2
E	F	G	H	I	J	K	L
0	0	0	0	2	0	1	0

9 ➔ ○○○○○

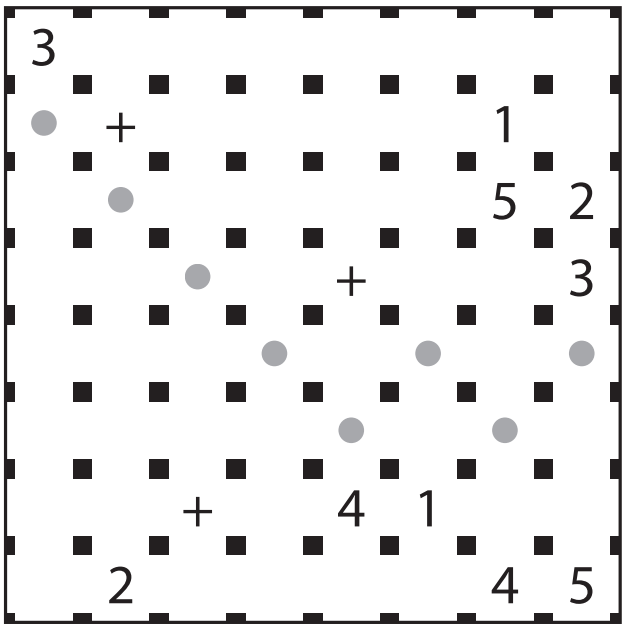
A	B	C	D	E	F	G	H
I	J	K	L	M	N	O	P
Q	R 2	S	T 2	U	V 1	W	X 1
Y	Z	A 4	B 3	C	D	E 1	F 2
G	H 2	I	J 1	K	L 1	M	N 0
O	P	Q	R	S	T	U	V
W	X	Y	Z	A	B	C	D
E	F	G	H	I	J	K	L

10 ➔ ○○○○○

C11-12. Arukone with Crossings [Jakub Ondroušek] (8, 14 points)

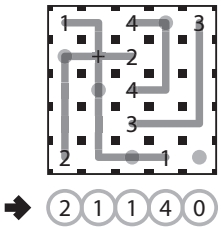
Some cells in the grid are marked with numbers; each number appears exactly twice and no cell contains more than one number. For each pair of identical numbers, draw a path that connects those two numbers. The paths must go through orthogonally adjacent cells. Cells marked with a cross must be visited by two different paths, which cross over each other at those cells. All other cells may be visited by at most one path, and may not be visited more than once by that path. (It is permissible for a cell to not be visited by any path.)

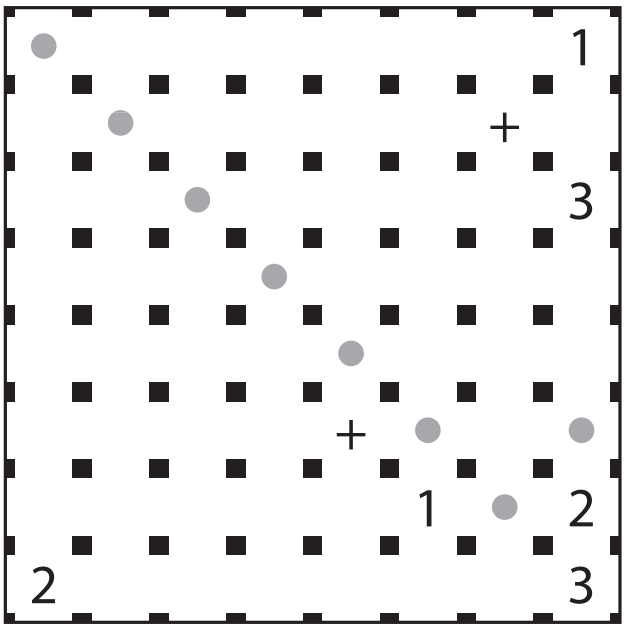
The dots in the diagram are for Answer purposes only.



Answer: Enter one digit for each of the dotted cells, from left to right. If the path does not go through the cell, enter a single digit '0'. Otherwise, enter the number associated with the path that goes through the cell. Use only the last digit for two digit numbers; e.g., use '0' if the dot is on the path that connects 10 and 10.

Example Answer: 21140

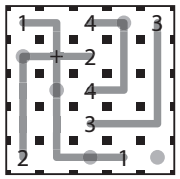




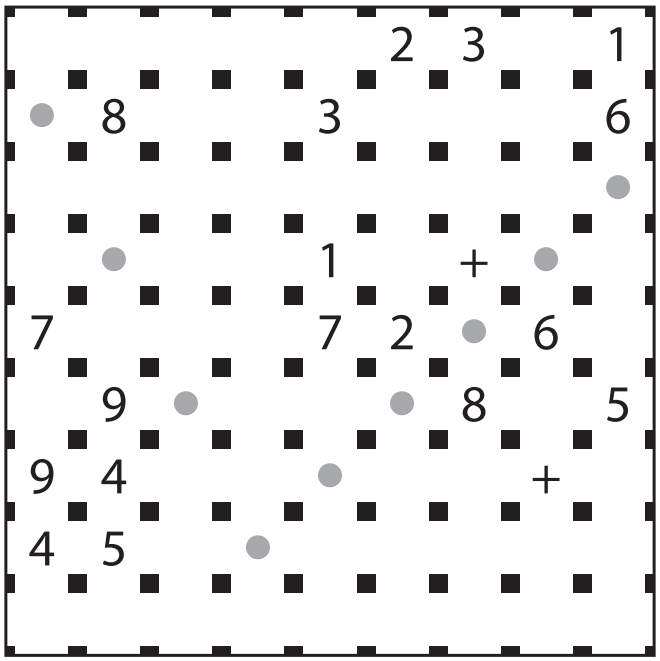
C13-14. Arukone with Crossings [Jakub Ondroušek] (3, 9 points)

Answer: Enter one digit for each of the dotted cells, from left to right. If the path does not go through the cell, enter a single digit '0'. Otherwise, enter the number associated with the path that goes through the cell. Use only the last digit for two digit numbers; e.g., use '0' if the dot is on the path that connects 10 and 10.

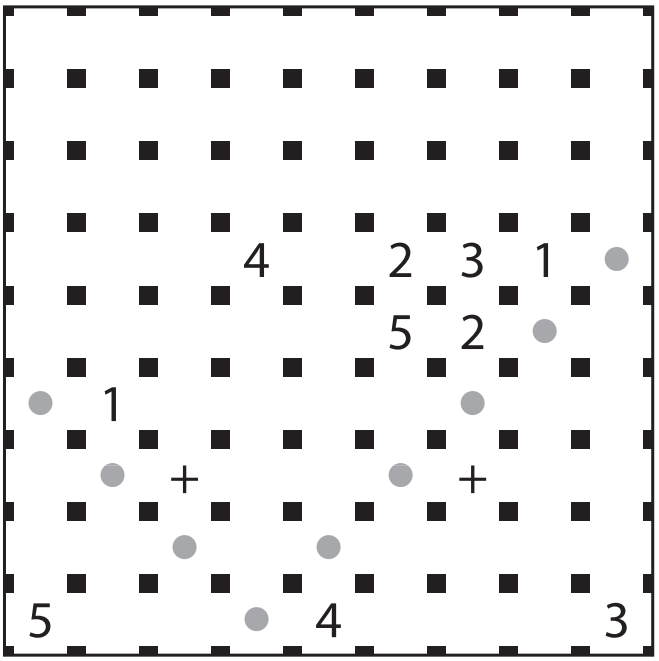
Example Answer: 21140



→ (2) (1) (1) (4) (0)

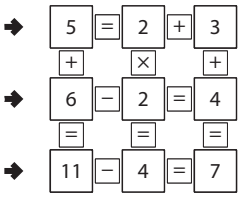


13→ ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )



14→ ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )

C15-16. Arithmetic Square Operations [Jakub Ondroušek] (6, 34 points)



Place the given set of numbers into the large cells and the given set of operators and equality signs into the small cells so that each row and column contains a valid equation. Use the standard precedence of the operators (multiplication and division take priority over addition and subtraction). Some cells may already be filled in for you.

It is possible for expressions and partial expressions to be negative or non-integral.

Answer: For each designated row, enter the contents of the large (number-containing) cells, in order from left to right.

Example Answer: `523,624,1147`