WPF PUZZLE GP 2017
INSTRUCTION BOOKLET

Host Country: USA

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Special Notes: Puzzles 10-15 are not bonus-eligible (that is, you may Claim Bonus if you have solved Puzzles 1-9 and have time remaining).

Points:

C1.	Arithmetic Square	26		C9.	Word Search	71
C2.	Arithmetic Square	22		C10.	Fill in the Blank	4
C3.	Arithmetic Square	27		C11.	Fill in the Blank	31
C4.	Arukone	4		C12.	Fill in the Blank	18
C5.	Arukone	13		C13.	Shape Division	8
C6.	Arukone	15		C14.	Shape Division	17
C7.	Letter Pairs	17		C15.	Shape Division	26
C8.	Letter Pairs	44				
				TOTAL:		343

C1-3. Arithmetic Square (26, 22, 27 points)

Place each number from 1 to 9 into the cells (a different single number in each cell) so that the indicated equations/relations are correct. Evaluate from left-to-right and top-to-bottom (ignore the usual precedence of the operators).

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

Answer: For each designated row, enter the contents of the cells, in order from left to right.

Example Answer: 987,643,521

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ROUND 4C

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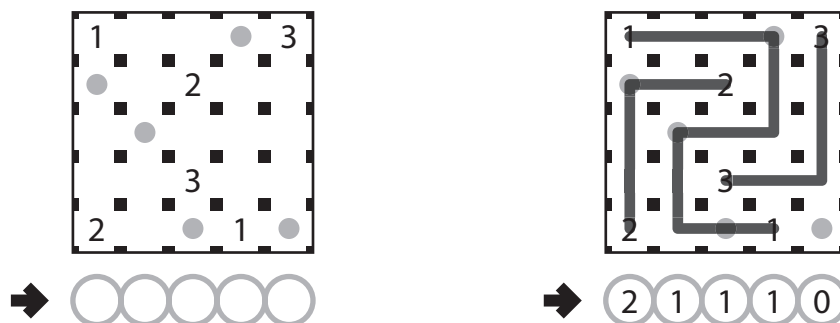2017

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C4-6. Arukone (4, 13, 15 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. Each cell may be visited by at most one path, and may be visited at most 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: 21110

C7-8. Letter Pairs (17, 44 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. Each letter is used by exactly one word (the words do not cross or overlap each other). If a dot is given between two cells, it means that both cells contain the same letter. If a dot is not given between two cells, it means that both cells do not contain the same letter (and either or both might be left empty).

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: NUF,EYL

NICE
UGLY
FULL
EMPTY

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ROUND 4C

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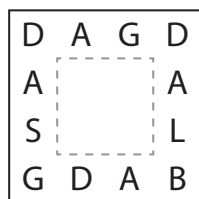2017

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C9. Word Search (71 points)

Locate the list of words in the grid. Words always appear in a line in one of the eight standard directions. Some letters in the middle of the grid (inside the dotted lines) are missing and you must rediscover what they are while solving.
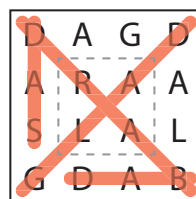
One word will not be found in the grid.

Answer: Enter the missing word.

Example Answer: `SLAB`

```
D A G D        GLAD
A     A        SAD
S     L        SLAB
G D A B        BAD
               DRAB
```

```
D A G D        GLAD
A R A A        SAD
S L A L        SLAB
G D A B        BAD
               DRAB
```

C10-12. Fill in the Blank (4, 31, 18 points)

Determine what should replace the "?" symbol to make the most sensible pattern.

Answer: What replaces the "?" symbol. Individual puzzles may have more instructions on how to submit your answer.

Example Answer: `21`

2, 3, 5, 8, 13, ?, 34

C13-15. Shape Division (8, 17, 26 points)

Divide the shape into the indicated number of congruent parts along the grid lines. (Congruent parts have the same shape and size but may be rotated and/or reflected.)

Answer: For each designated row, enter the length in cells of each contiguous segment within the same shape from left to right. Empty space divides segments, even within the same shape. Use only the last digit for two digit numbers; e.g., use '0' for a segment of length 10.

Example Answer: `311,22`

2 parts

2 parts