

# WPF PUZZLE GP 2017 COMPETITION BOOKLET

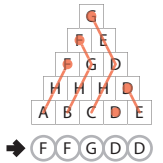
**Host Country: Slovakia**

**Author: Matus Demiger**

**Special Notes:** All puzzles are bonus-eligible.

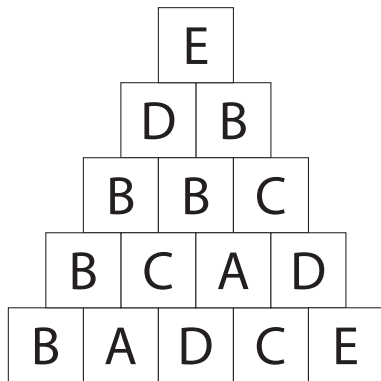
## C1-2. Pyramid Climbers (2, 27 points)

Each cell at the bottom of the pyramid has a "climber" associated with it. Each climber climbs up a path of adjacent cells, each containing a different letter. (Climbers do not climb sideways.) Each cell is reached by exactly one climber.



**Answer:** For each climber (going from left to right), enter the top-most letter on its path.

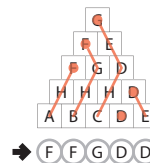
**Example Answer:** FFGDD



**C3. Pyramid Climbers (60 points)**

**Answer:** For each climber (going from left to right), enter the top-most letter on its path.

**Example Answer:** FFGDD

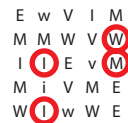


**3** →

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○

**C4-5. Find the Differences (5, 6 points)**

Find the 5 differences between the grid of letters and its reflection. The individual letters have *not* been reflected. Lower-case letters are considered different from capital letters.



**Answer:** For each difference, enter its letter on the *top* grid, in order from top to bottom. If multiple differences are in the same row, enter them from left to right.

**Example Answer:** WIMI

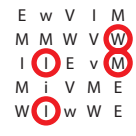
<p><b>4</b></p> <p>N Z Z N Z N Z N N</p> <p>Z N Z N N Z N N Z</p> <p>Z Z N N N N Z Z N</p> <p>N Z Z Z Z Z Z Z N</p> <p>Z N Z N Z N Z N Z</p> <p>N Z Z N N Z Z N Z</p> <p>Z Z N Z Z N N Z N</p> <p>Z N N N N N N Z Z</p> <p>Z Z N N N Z Z N Z</p> <p>N N Z N Z N Z Z N</p> <p>Z Z N Z N N Z N Z</p> <p>N Z Z N N N N Z Z</p> <p>N Z Z Z Z Z Z Z Z</p> <p>Z N Z N N N Z N Z</p> <p>Z Z Z Z N N Z Z N</p> <p>N Z N N Z N N Z Z</p> <p>Z Z N N N N N N Z</p> <p>Z N Z Z N N N Z Z</p>	<p><b>5</b></p> <p>G g G g G p G P g</p> <p>G p P G g g p g G</p> <p>g P g g G p P P p</p> <p>P p P p P p G g g</p> <p>g G g P G g g G p</p> <p>G p G P G g G p P</p> <p>P g G p g G g p g</p> <p>P G g P G g P G p</p> <p>G p G G p G P p G</p> <p>g P G p G g G g G</p> <p>G g p g p G P P G</p> <p>p P P p G g g P g</p> <p>g g G p P p P p P</p> <p>p g g g G P g G g</p> <p>P p G g g P G p G</p> <p>g p g G g p G g P</p> <p>p G P g G P P G P</p> <p>G p P G p G G p G</p>
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**C6. Find the Differences (20 points)**

Find the 12 differences between the grid of letters and its reflection. The individual letters have *not* been reflected. Lower-case letters are considered different from capital letters.

**Answer:** For each difference, enter its letter on the *top* grid, in order from top to bottom. If multiple differences are in the same row, enter them from left to right.

**Example Answer:** WIMI



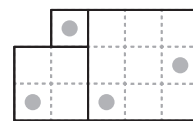
6

S	L	O	V	A	K	I	A	I	A	S	O	L	I	S	V	S	I	L
O	I	S	L	I	L	V	K	L	O	V	S	A	S	K	L	I	S	K
L	K	A	S	A	I	S	O	A	I	L	K	L	O	A	O	S	V	L
A	I	O	I	V	S	O	K	V	A	S	A	V	L	K	A	V	I	K
I	L	K	L	O	K	L	I	L	O	V	O	L	S	I	S	K	L	S
O	I	S	V	L	V	K	S	V	K	S	I	S	A	O	L	I	A	O
L	K	I	O	A	S	I	O	A	I	O	V	L	I	V	A	O	S	K
I	S	A	S	I	O	L	K	L	S	I	A	S	O	A	O	L	K	O
L	V	O	I	O	A	V	L	O	K	O	L	V	L	V	S	I	S	V
A	S	I	L	S	O	I	S	V	L	A	S	I	S	O	L	O	A	S
O	V	A	I	K	S	A	O	K	O	I	O	K	V	I	K	S	I	L
A	O	S	O	L	I	L	I	A	I	S	K	S	L	S	V	A	S	A
L	S	V	I	V	O	I	L	V	O	L	V	O	I	L	I	S	O	V
A	I	O	K	S	I	S	O	A	I	K	I	S	K	A	K	A	I	L
S	K	L	S	K	L	K	A	S	O	A	L	V	O	V	O	L	S	O
I	O	S	A	V	I	S	I	V	L	I	O	I	S	K	L	I	O	S
O	L	V	O	S	O	V	L	A	S	V	S	L	V	A	O	S	V	I
S	K	S	I	L	K	S	A	O	I	O	I	K	L	S	I	A	L	S
V	L	O	L	S	A	L	O	S	L	K	S	L	O	V	A	K	I	A
L	I	S	V	S	I	L	O	S	A	I	A	I	K	A	V	O	L	S
K	S	I	L	K	S	A	S	V	O	L	K	V	L	I	L	S	I	O
L	V	S	O	A	O	L	K	L	I	A	O	S	I	A	S	A	K	L
K	I	V	A	K	L	V	A	S	A	V	K	O	A	V	I	O	I	A
S	L	K	S	I	S	K	O	V	O	L	I	L	K	O	L	K	L	I
O	A	I	L	O	A	S	I	S	K	V	S	K	V	L	V	S	I	O
K	S	O	A	S	I	L	V	O	I	A	O	I	S	A	S	I	K	L
O	K	L	O	A	O	S	A	I	S	L	K	L	O	I	S	A	S	I
V	S	I	S	V	L	V	L	O	K	O	L	L	A	O	I	O	V	L
S	K	O	L	O	S	I	S	A	L	V	S	I	O	S	L	I	S	A
L	I	S	K	I	V	O	K	I	O	K	O	A	S	K	I	A	V	O
A	S	A	V	S	L	S	K	S	I	A	I	L	I	L	O	S	O	A
V	O	S	I	L	I	O	V	L	O	V	L	I	O	V	I	V	S	L
L	I	A	V	A	K	S	I	K	I	A	O	S	I	S	K	O	V	A
O	S	L	O	V	O	V	L	A	O	S	A	K	L	K	S	L	K	S
S	O	I	L	K	S	I	O	I	L	V	K	S	I	V	A	S	O	I
I	V	S	O	A	V	L	S	V	S	A	L	V	O	S	O	V	L	O
S	L	O	I	S	L	K	I	O	I	O	A	S	K	L	I	S	K	S
A	I	K	A	V	O	L	S	K	L	S	O	L	A	S	L	O	L	V

**C7. Square Division (8 points)**

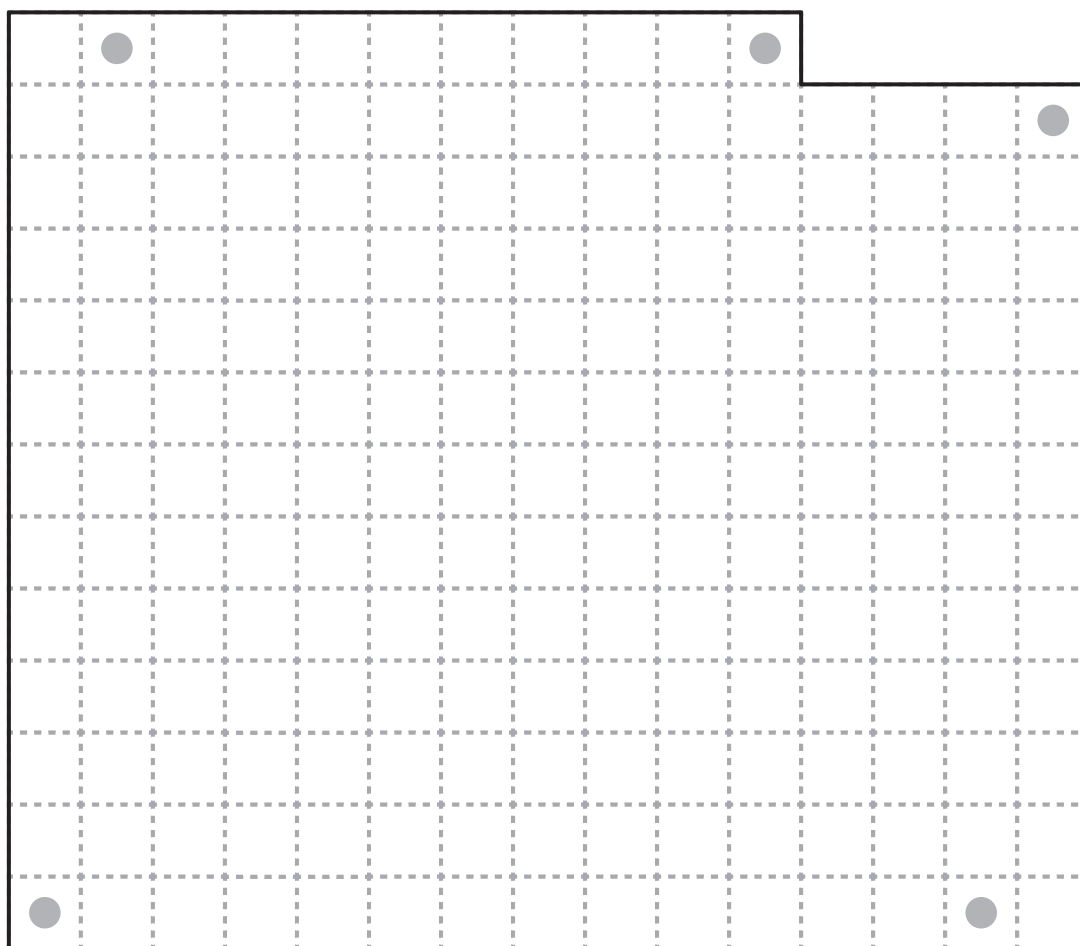
Divide the shape, along the grid lines, into squares. All squares must be differently sized and cannot overlap.

*The dots in the grid are only for entering your answer.*



**Answer:** Enter the edge length of the square each dotted cell 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 10×10 square.

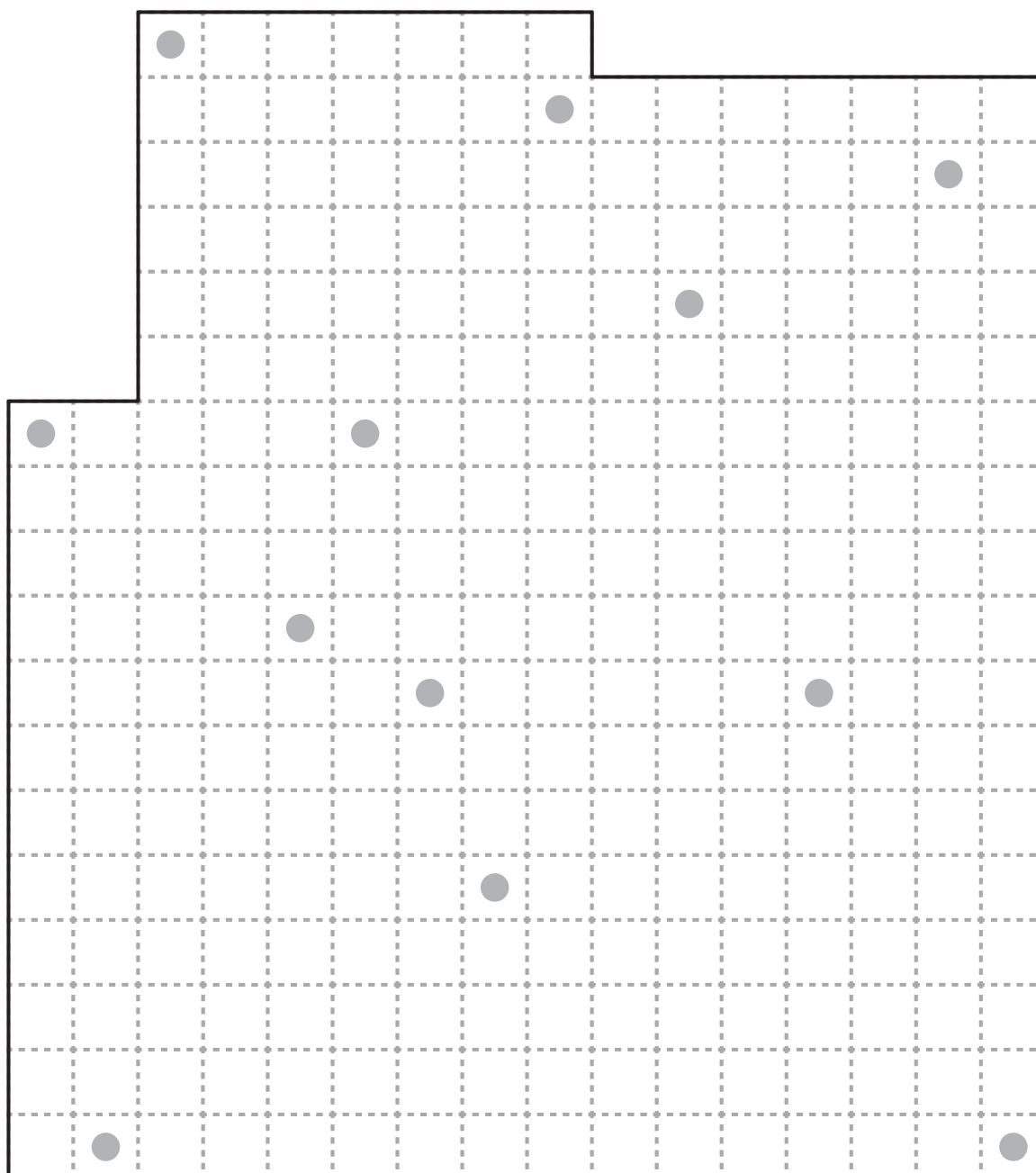
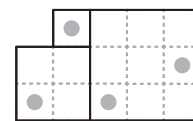
**Example Answer:** 2133



**C8. Square Division (9 points)**

**Answer:** Enter the edge length of the square each dotted cell 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 10×10 square.

**Example Answer:** 2133



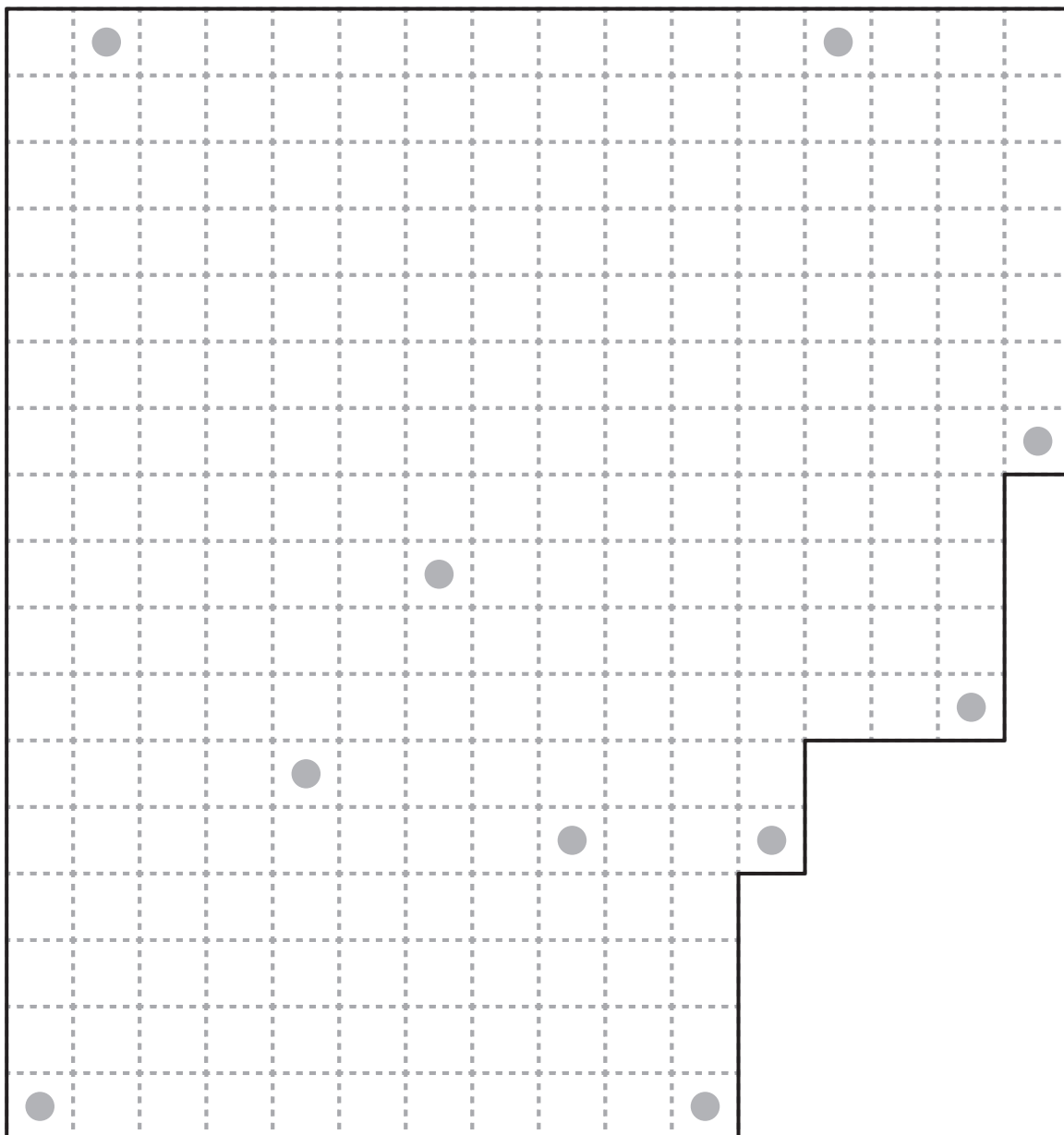
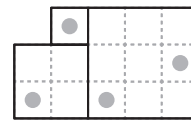
8 →

○ ○ ○    ○ ○ ○ ○ ○    ○    ○    ○ ○

**C9. Square Division (9 points)**

**Answer:** Enter the edge length of the square each dotted cell 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 10×10 square.

**Example Answer:** 2133



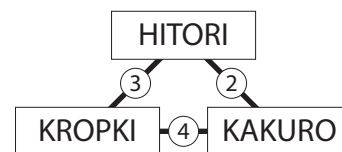
9 →

**C10-11. Common Letters (10, 22 points)**

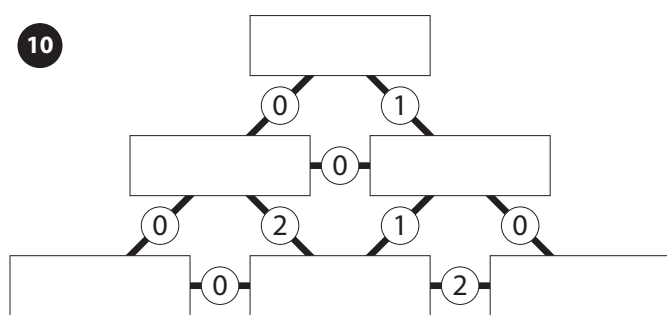
Put each word into a different box such that the number between two boxes indicate the number of letters those words have in common. Duplicate letters are counted separately; for example, AABBB and BBCCA have three letters in common.

**Answer:** Enter the first two letters of each word, going from top to bottom. If two words are in the same row, enter them from left to right.

**Example Answer:** HIKRKA

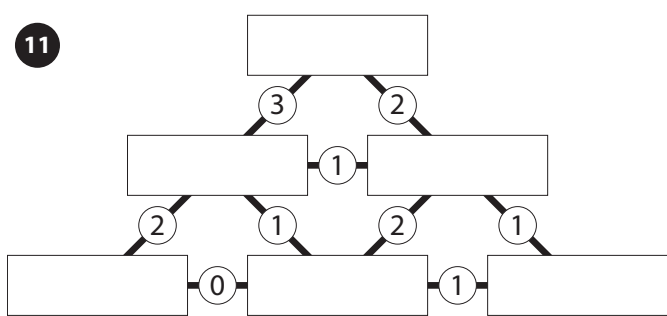


10



COLD                  HARD                  HATE  
 WARM                  SOFT                  LOVE

11



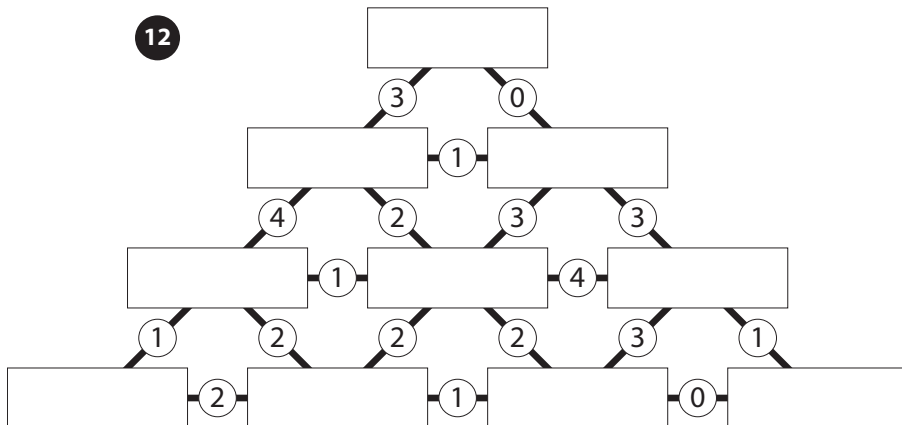
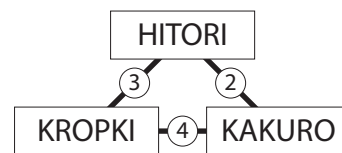
APPLE                  GUAVA                  MANGO  
 GRAPE                  LEMON                  PEACH



**C12. Common Letters (41 points)**

**Answer:** Enter the first two letters of each word, going from top to bottom. If two words are in the same row, enter them going from left to right.

**Example Answer:** HIKRKA



- |       |       |       |
|-------|-------|-------|
| BENIN | INDIA | NIGER |
| CONGO | ITALY | SYRIA |
| GABON | LIBYA | TONGA |
|       | MALTA |       |

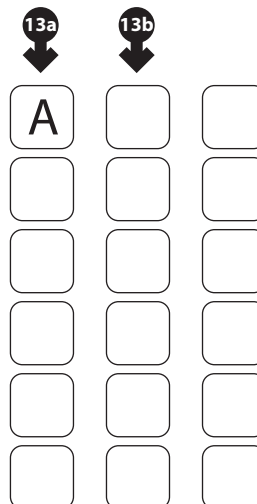
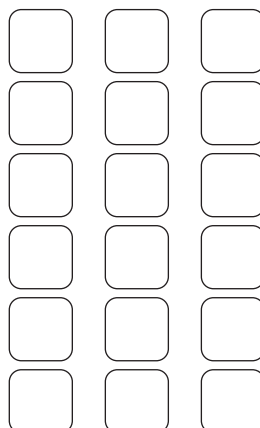
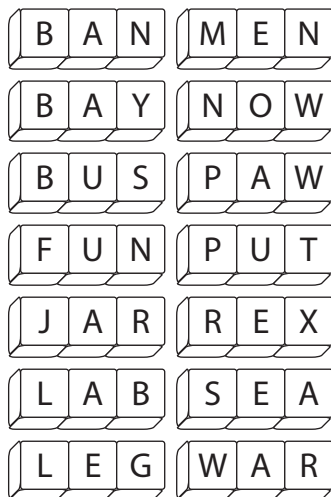
**C13. Alphabet Blocks (7 points)**

There are multiple cubes, each of which has six faces. Each face is labeled with a letter. No letter appears more than once. For each of the words in the list, it is possible to spell the word using all the cubes, one cube for each letter in the word. Determine which letters are on which cube. Ignore rotations of the letters (for example, you may not use the same face for "M" and "W").

*An extra set of blank faces is provided for your solving convenience.*

**Answer:** Alphabetically sort the letters of the six letters on each cube, then sort the cubes by their first letter. (The order of the alphabet is ABCDEFGHIJKLMNOPQRSTUVWXYZ.) Enter the faces of all but the last cube.

**Example Answer:** AMNOSX, CDFHTW





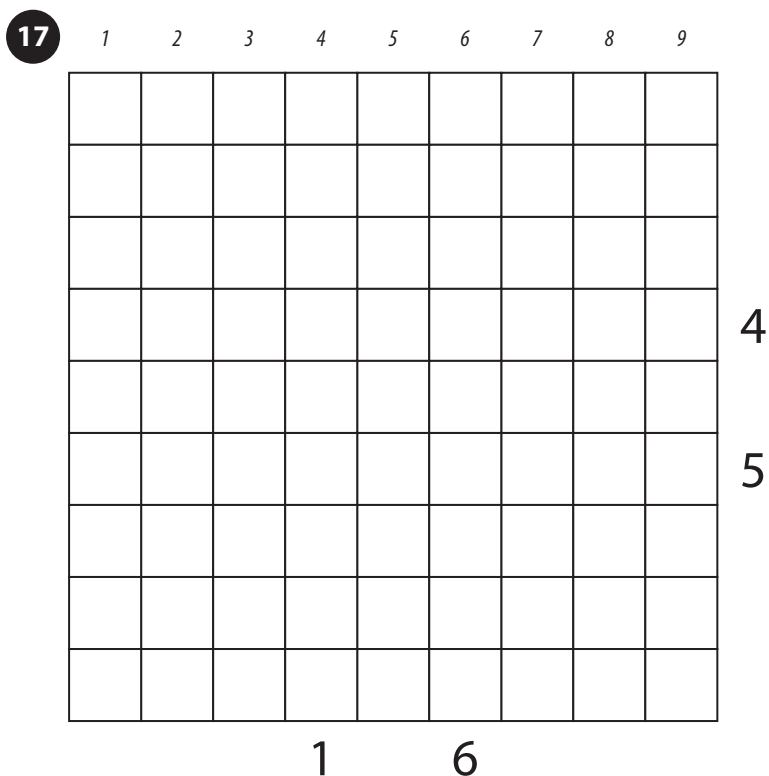
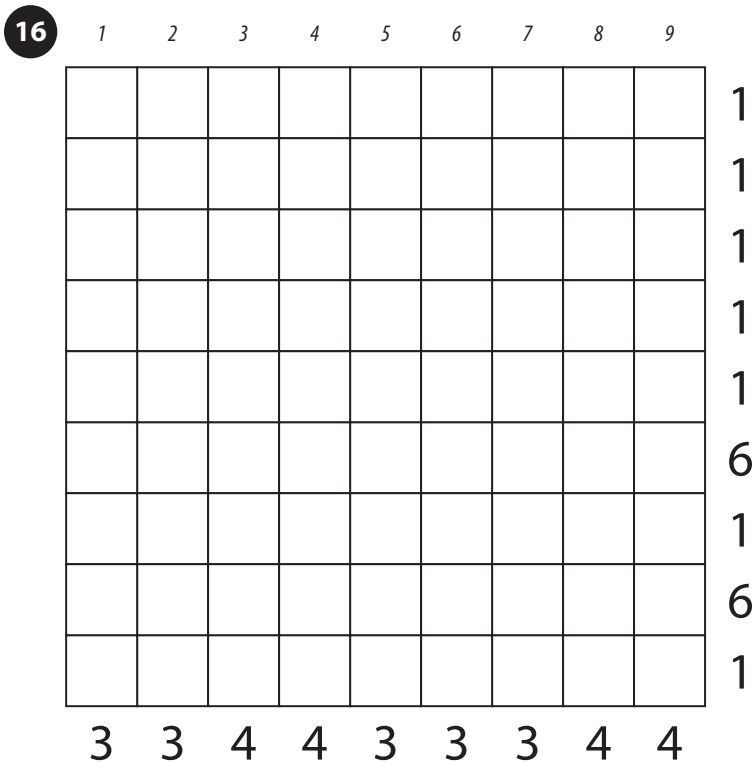
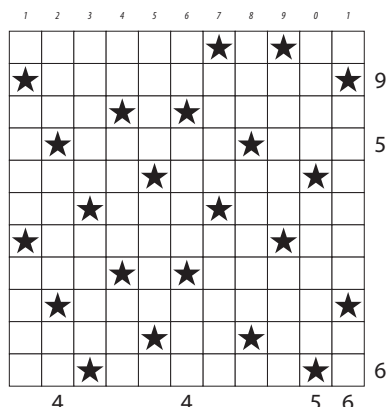
**C16-17. Star Gaps (13, 24 points)**

Place stars into some cells in the grid, no more than one star per cell. Each row and each column must contain exactly two stars. Cells with stars may not touch each other, not even diagonally. Numbers along the right and bottom of the grid indicate the number of empty cells between the two stars in that row or column, respectively.

*The numbers on top of the diagram are for Answer purposes only.*

**Answer:** For each row from top to bottom, enter the number of the first column from the left where a star appears (the number on top of that column). Use only the last digit for two-digit numbers; e.g., use '0' if the star appears in column 10.

**Example Answer:** 71425314253

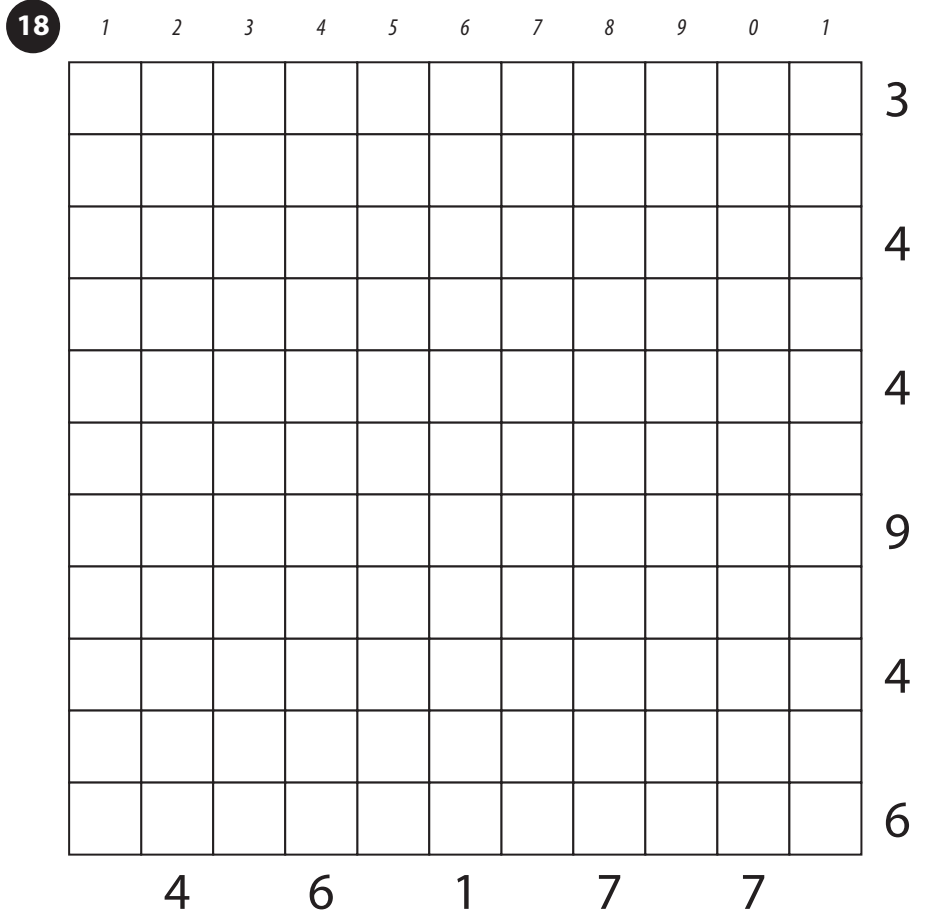
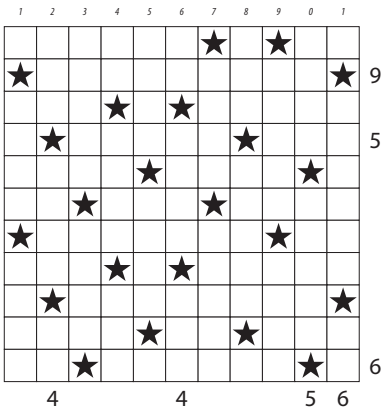




**C18. Star Gaps (35 points)**

**Answer:** For each row from top to bottom, enter the number of the first column from the left where a star appears (the number on top of that column). Use only the last digit for two-digit numbers; e.g., use '0' if the star appears in column 10.

**Example Answer:** 71425314253



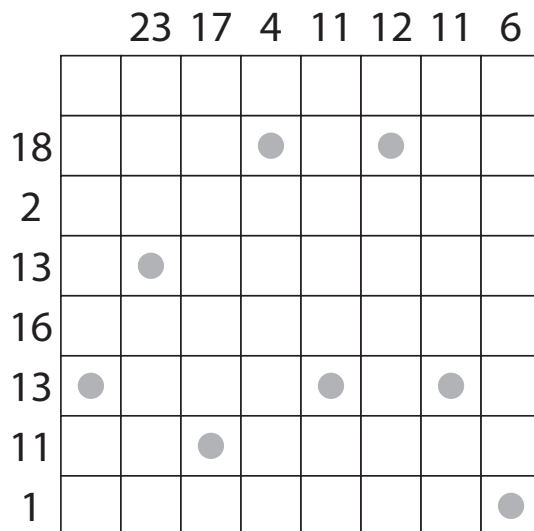
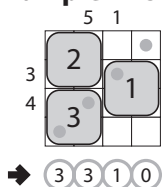
**C19. Pillboxes (24 points)**

Locate the indicated set of pillboxes in the grid. Pillboxes have a 2x2 shape and do not overlap each other. Each pillbox has a different value, as indicated to the right of the grid. Each number to the left and top of the grid reveals the total value of all pillboxes in that row or column, respectively.

*The dots in the grid are only for entering your answer.*

**Answer:** Enter the contents of each dotted cell, reading the dots from left to right. (Ignore which row the dots are in.) If the cell is part of a pillbox, enter the value of that pillbox; if the cell is not inside a pillbox, enter '0'.

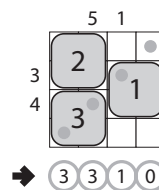
**Example Answer:** 3310



**C20-21. Pillboxes (22, 45 points)**

**Answer:** Enter the contents of each dotted cell, reading the dots from left to right. (Ignore which row the dots are in.) If the cell is part of a pillbox, enter the value of that pillbox; if the cell is not inside a pillbox, enter '0'.

**Example Answer:** 3310



4 6 17 15 7 12 17 12

5			•					
13						•		
15		•						
8								
8				•	•		•	
13	•							
17								•
11								

1	2	3
4	5	6
7	8	9

20 → ○ ○ ○ ○ ○ ○ ○ ○

10 21 24 12 9 6

10			•					
4		•						
11				•			•	
16								
17					•			
15	•							•

1	2	3
4	5	6
7	8	9

21 → ○ ○ ○ ○ ○ ○ ○ ○