MYSTERY
HUNT

## Logic Puzzle Open

## Round 2: Made in America Advanced Division

Name:

| A.2.1 Square Jam | 3 points | A.2.10 Isowatari | 3 points |
| :--- | :--- | :--- | :--- | :--- |
| A.2.2 Square Jam | 7 points | A.2.11 Isowatari | 5 points |
| A.2.3 Square Jam 12 points | A.2.12 Isowatari | 7 points |  |
| A.2.4 Aquapelago 2 points | A.2.13 Pentominous (Borders) | 4 points |  |
| A.2.5 Aquapelago | 6 points | A.2.14 Pentominous (Borders) | 5 points |
| A.2.6 Aquapelago 15 points | A.2.15 Pentominous (Borders) | 8 points |  |
| A.2.7 Castle Wall | 4 points |  |  |
| A.2. Castle Wall 7 points |  |  |  |
| A.2.9 Castle Wall 12 points |  |  |  |

## A.2.1-A.2.3: Square Jam

Divide the grid into square regions of orthogonally connected cells. A number indicates the side length of the square it's in. Region borders may not form any four-way intersections.

## Puzzle A.2.1 (3 Points)



Puzzle A.2.2 (7 Points)



## A.2.4-A.2.6: Aquapelago

Shade some cells so that no two shaded cells are orthogonally adjacent and the remaining unshaded cells form one orthogonally connected area. No $2 \times 2$ area may be entirely unshaded. Clued cells must be shaded, and indicate the number of shaded cells in the diagonally connected group they belong to.

## Puzzle A.2.4 (2 Points)



Puzzle A.2.5 (6 Points)



## A.2.7-A.2.9: Castle Wall

Draw a non-intersecting loop through the centers of some cells. The loop may not enter outlined cells or cells containing clues. White cells with outlines must lie inside the loop, while black cells with outlines must lie outside the loop. Grey cells may either be inside or outside the loop. A number represents the sum of the lengths of loop segments in the indicated direction.

Puzzle A.2.7 (4 Points)


Puzzle A.2.8 (7 Points)


|  | $\overrightarrow{3}$ |  |  |  | 4.1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 |  |  |  |  |  |
|  |  | 31] |  |  |  |
|  |  |  |  |  | 5 |
|  | 31) |  | 3! |  |  |
| $\overrightarrow{3}$ |  |  |  |  |  |
|  |  |  |  |  | 5 |
|  | 21 |  | 21 |  |  |
| $\overline{2}$ |  |  |  |  |  |
|  |  | 3 |  |  |  |
|  |  |  |  |  | 11 |
| $\overrightarrow{4}$ |  |  |  | 11 |  |

Puzzle A.2.9
(12 Points)

## A.2.10-A.2.12: Isowatari

Shade some cells such that all shaded groups are of the indicated size, all unshaded cells are orthogonally connected, and no $2 \times 2$ area is fully unshaded.

Black circles must be shaded, while white circles must remain unshaded.


Puzzle A.2.11 (5 Points)

$$
N=4
$$



Puzzle A.2.12 (7 Points)
$\mathrm{N}=5$


## A.2.13-A.2.15: Pentominous (Borders)

Divide the grid into regions of five orthogonally connected cells so that no regions of the same shape share an edge, counting rotations and reflections as the same. Clued cells must belong to a region with the pentomino shape associated with that letter. Borders must separate two different regions.

Puzzle A.2.13 (4 Points)


Puzzle A.2.14 (5 Points)


Puzzle A.2.15
(8 Points)


