# Logic Puzzle Open 

## Phase 1: Shading Shade some cells in the grid. Cells with numbers must be unshaded.

Clues indicate the size of the unshaded region the clue is in.

Clues represent the total number of unshaded cells that can be seen in a straight line from the clue vertically or horizontally, including itself.
(Shaded cells block "sight".)

Clues indicate how many shaded cells are in the 8 cells surrounding the clue.

## Area



## Line of Sight



Minesweeper


No Four


Connected


Size 3


The grid must not contain 4 shaded or 4 unshaded cells in a row, vertically or horizontally.

All shaded cells are orthogonally connected.

All shaded cells are contained in connected groups of exactly 3 shaded cells.

Minesweeper

|  | 2 |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  | 3 |
|  | 2 |  |  |
|  |  |  | 3 |
|  | 2 |  |  |
|  |  |  | 3 |
|  | 3 |  |  |
|  |  |  | 3 |

Line of Sight

|  | 3 |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  | 1 |
| 3 |  |  |  |
|  |  | 3 |  |
|  |  | 3 |  |
| 2 |  |  |  |
|  |  |  | 3 |
|  | 3 |  |  |

No Four

| 2 | 3 |
| :--- | :--- |
|  |  |
| 2 |  |
|  |  |
|  |  |
| 3 |  |
|  |  |
| 3 |  |

Area

|  |  | 2 |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  | 3 |  |  |
|  |  | 2 |  |
|  | 2 |  |  |
|  |  | 3 |  |
|  |  |  |  |
|  | 2 |  |  |

Size 3

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  | 2 | 2 |  |
|  |  |  |  |
|  | 3 |  |  |
|  |  | 3 |  |
|  |  |  |  |
|  | 3 | 3 |  |
|  |  |  |  |

Clues indicate the area of the region it is in.

Area


## Area Between



Perimeter Diff


Rectangles


L-Shapes


Snakes


Regions have four sides.

Regions have six sides.

Every cell is adjacent to at most two other cells from its region.


| Rectangles |  |  |
| ---: | ---: | ---: |
| 20 | 20 |  |
| 20 | 20 |  |
|  | 6 |  |
|  | 6 | 4 |
|  | 20 |  |

Area


Perimeter Diff

| 4 |  |
| :---: | :---: |
|  | 10 |
| 20 |  |
| 24 |  |
| 6 |  |
| 12 |  |
| 4 |  |
|  | 6 |


| L-Sha |  | Snakes |  |
| :---: | :---: | :---: | :---: |
|  |  |  | 66 |
| 6 | 6 |  |  |
|  |  | 6 20 |  |
| 20 | 24 |  |  |
| 4 | 24 |  |  |
|  |  |  | 424 |
| 20 | 6 |  |  |
|  |  | 2020 |  |

## Logic Puzzle Open

## Phase 3: Latin Square Place a number from 1 to 6 in each cell. Each number appears in each row and column once.

Clues indicate how many cells in its row or column contain a larger number than all cells before it in that row or column from the direction of the clue.

Clues indicate the absolute difference between the closest and second closest clue to the border of the grid, in the clue's row or column.

Clues indicate the product of the closest and second closest clue to the border of the grid, in the clue's row or column.

Skyscraper


Difference


Product
34

2 | 4 | 3 | 1 | 2 |
| :--- | :--- | :--- | :--- |
| 2 | 1 | 4 | 3 |
| 3 | 2 | 3 | 4 |
| 1 | 4 | 2 | 1 |

Vanilla


There is no additional constraint.


Nonconsecutive


No two even numbers on the grid are orthogonally adjacent.

Orthogonally adjacent numbers in the grid must have a difference of at least 2.

Skyscraper


Product


Difference



Nonconsecutive


## Phase 4: Loop

Draw a loop passing through all cells of the grid. The loop can only turn in 90 degree angles.

Turns

Clue numbers indicate how many times the loop turns in the region the clue is in.

Clue numbers indicate how many times the loop visits the region the clue is in.

Clue numbers indicate the maximal length of a visit to the region. The region must contain a visit of exactly that length.

Maxi


Room Visits



Unequal


Vertigo


The loop may only contain segments of length 1 or 2.

Segments that meet at a turn are not the same length.

Following the loop results in either all right turns or all left turns. The loop may cross itself and if it does, it cannot turn on that cell.


Room Visits


Turns



