JAPANESE LOOP PUZZLES

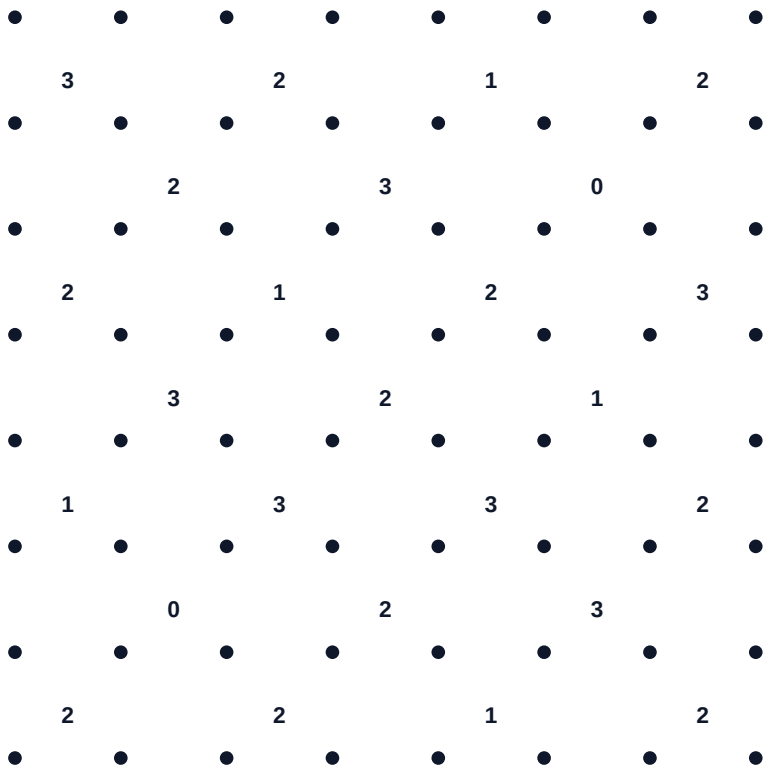
SLITHERLINK LOOP LOGIC CHALLENGE

Classic 7x7 Dot Matrix * Single Continuous Closed Loop * Numeric Clues (0, 1, 2, 3)

SOLVER TIME & SCORE

Start: ___:___ Stop: ___:___

Difficulty: [ ] Easy [ ] Med [ ] Hard



SLITHERLINK LOOP RULES

RULE 1: CONTINUOUS CLOSED LOOP

Connect adjacent dots horizontally or vertically to form exactly one single closed loop with no loose ends.

RULE 2: ZERO BRANCHES

The loop cannot cross itself, branch off, or form secondary detached sub-loops anywhere on the grid.

RULE 3: CLUE NUMBER EXACTNESS

A number in a square indicates how many of its 4 surrounding edges are part of the loop path.

RULE 4: ZERO MEANS NO EDGES

Squares containing '0' have no loop edges. Place small 'x' marks on all 4 surrounding sides immediately.

LOOP THEOREM GUIDE

Corner 3: Outer edges must be lines

Adjacent 3s: Parallel boundary lines

Diagonal 3s: Outer corner turns

Jordan Curve: Inside vs. Outside parity

SLITHERLINK TOPOLOGICAL LOOP DEDUCTION WORKBENCH & CERTIFICATION

TOPOLOGY THEOREMS

Every visited vertex has degree 2

No vertex can have degree 3 or 4

Crossed edges ('x') guide dead-ends

Inside/Outside parity alternation

Loop never isolates any single cell

DEDUCTION TECHNIQUES

Corner 3 rule establishes 2 edges

Two adjacent 3s pin 3 outer edges

Diagonal 3-3 forms cross turns

0 clue corners eliminate 4 paths

Look for unclosed loop extensions

NAVIGATOR SESSION LOG

Solver Name: _____

Start Time: _____ Stop: ____

Total Minutes: _____

Loop Verified Single: [ ] YES

Examiner Stamp: * * * * *

PENCIL DRAFTING GRID (BLANK DOT LATTICE FOR LOOP EXTENSIONS):