ADVANCED MATRIX LOGIC & X-WING LAB

DIAGONAL SUDOKU X-WING ADVANCED CHALLENGE

Sudoku X Rules: Standard 9x9 Constraints Plus Both Major Diagonals

DIFFICULTY / SPEC
Standard US Letter
Bespoke Printable

7				2				9
	3						4	
		8				1		
			5		6			
4				1				8
			9		7			
		2				3		
	6						5	
1				8				4

SUDOKU X & X-WING AXIOMS

1. Diagonal Constraint (Sudoku X): The two shaded diagonal lines spanning corner-to-corner MUST each contain digits 1-9 uniquely.

2. Intersecting Apex: Center cell (4,4) belongs to BOTH diagonals, row 5, col 5, and the center 3x3 box.

3. X-Wing Technique: When a candidate appears exactly twice in two parallel rows/cols forming a rectangle, all other candidates in those columns/rows can be eliminated.

DIAGONAL TRACKER:

Main Diag: [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] 6 [ ] 7 [ ] 8 [ ] 9

Anti Diag: [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ] 6 [ ] 7 [ ] 8 [ ] 9

ADVANCED SOLVING STRATEGY: CANDIDATE GRID & X-WING CODES

Candidate Scan: Identify rows where digit 5 is restricted to exactly two cells: Row _____ and Row _____

Column Lock: Verify column intersection alignment: Col _____ and Col _____

Elimination Action: Clear all candidate 5s from the conjugate columns outside the rectangle corners.

SOLVER PROFILE

Logician: _____

Logic Club: _____

Date Attempted: _____

DIAGONAL AUDIT

[ ] Standard 9x9 Checked

[ ] Main Diagonal (NW-SE) OK

[ ] Anti Diagonal (NE-SW) OK

CHALLENGE SCORE

Solving Time: _____ Minutes

X-Wing Applied: [ ] YES

Logic Rank: * * * * *

CANDIDATE PENCIL MARK GRID & DUAL-DIAGONAL ELIMINATION NOTES: