

Worksheet WS-1

Worksheet WS-1 — Build the $n=4$ Palindromic Rest

Goal: starting from any $n=4$ covering, reach the palindromic rest with zero defects.

Steps:

- 1) Draw a 4×4 grid with checkerboard parity lanes (mark mirrors).
- 2) Place symbols 1..4 to realize any covering (every length-4 permutation appears once).
- 3) Count paired defects (mismatched mirror neighbors).
- 4) Apply palindromic local flips (Alena #1) that reduce defect count without adding motion/Joker.
- 5) Repeat until defects=0. Record final pose and color swap if any.

Evidence: photograph sheet; ledger the moves; compute page hash.