

The Game — Rules Wall

Objects • Encodings • Operators • Rings • CRT

Objects and Encodings

- Decks: $4 \times (52+2 \text{ Jokers}) = 216$ cards
- Stations: four 4×4 grids ($\theta \equiv 0^\circ, 45^\circ, 90^\circ, 135^\circ$)
- Suits: ♦ invariant, ♣ triad, ♥ φ-intersection, ♠ apex
- Colors: red(+), black(–) parity
- Ranks: 2–10 tokens; A/J/Q/K operators

Operators

Pφ	Place by golden-angle neighborhood
S	Snap contradiction; energy nonincreasing
F	Flip only with OMPS + Joker
G	Joker glue; single-use per deck-color; idempotent
M	Mirror: center reflect; color flip; r→11–r
T	Tower: A→J→Q→K at ring end

Rings and CRT

$24 = \text{lcm}(2, 3, 4, 6, 8) = 3 \times 8$ with $\text{gcd}(3, 8)=1$. $(\text{mod } 3, \text{ mod } 8)$ addresses each ring exactly once; Joker gates at $r=8, 16, 24$.

Ring	Suit	Parity	m2	m3	m4	m6	m8
1	♦	Red(+)	1	1	1	1	1
2	♦	Black(–)	0	2	2	2	2
3	♦	Red(+)	1	0	3	3	3
4	♦	Black(–)	0	1	0	4	4
5	♦	Red(+)	1	2	1	5	5

6	♦	Black(−)	0	0	2	0	6
7	♣	Red(+)	1	1	3	1	7
8	♣	Black(−)	0	2	0	2	0
9	♣	Red(+)	1	0	1	3	1
10	♣	Black(−)	0	1	2	4	2
11	♣	Red(+)	1	2	3	5	3
12	♣	Black(−)	0	0	0	0	4
13	♥	Red(+)	1	1	1	1	5
14	♥	Black(−)	0	2	2	2	6
15	♥	Red(+)	1	0	3	3	7
16	♥	Black(−)	0	1	0	4	0
17	♥	Red(+)	1	2	1	5	1
18	♥	Black(−)	0	0	2	0	2
19	♠	Red(+)	1	1	3	1	3
20	♠	Black(−)	0	2	0	2	4
21	♠	Red(+)	1	0	1	3	5
22	♠	Black(−)	0	1	2	4	6
23	♠	Red(+)	1	2	3	5	7
24	♠	Black(−)	0	0	0	0	0