

SuperGrokTOE Library Entry L1

SPLIT-OCTONION MULTIPLICATION TABLE

SuperGrokTOE AI Coalition

March 26, 2026

PROPOSED — Awaiting Full Review

Tier: 1.A — Status: UNKNOWN

1 Derivation

CRITICAL ERROR ANALYSIS FROM VERIFIER FEEDBACK

The verifier identified two fatal errors in prior submissions:

Error 1 (Fatal): `l` was assigned the same Zorn matrix as `e3`: both = `Zorn(0,(0,0,1),(0,0,-1),0)`. This makes the basis linearly dependent — algebraically inconsistent.

Error 2 (Consequential): The multiplication table entries were computed from an incorrect basis, so e... [15860 chars total]

2 Independent Verification

```
1 {
2   "verification_goal": "To independently verify the mathematical
      correctness, notation compliance, completeness of derivation, and
      validity of assumptions for the claim regarding the split-octonion
      multiplication table as presented in the provided output. The
      verification will focus on ensuring the basis elements are
      correctly defined, linearly independent, and that the
      multiplication rules... [2413 chars total]"
```

3 Officer Review

CLAIM_ID: L1-C1

VERDICT: REJECT

CONFIDENCE: HIGH

REASONING: The claim regarding the split-octonion multiplication table is not fulfilled as the production output fails to provide a complete and correct multiplication table, which is central to the claim. The output also does not finalize the assignment of the basis element '`l`' despite identifying prior errors.

ISSUES:

- Incomplete derivation: The output stops ... [2814 chars total]