Refutation of 3SAT for Karp's cnf into split clauses as NP-complete

Abstract: We evaluate the conjunctive normal form (cnf) of three variables into split clauses as “the clause \( (A \lor B \lor C \lor D) \) can be replaced by the conjunction of clauses \( (A \lor B \lor Z) \land (\neg Z \lor C \lor D) \)”, which is not tautologous. This refutes Karp’s 3SAT as NP-complete. These results form a non tautologous fragment of the universal logic \( \mathbb{V}_4 \).

We assume the method and apparatus of Meth8/\( \mathbb{V}_4 \) with \( \top \) as tautology, \( \bot \) as contradiction, \( \mathbb{N} \) as truthity (non-contingency), and \( \mathbb{C} \) as falsity (contingency). The 16-valued truth table is row-major and horizontal, or repeating fragments of 128-tables, sometimes with table counts, for more variables. (See ersatz-systems.com.)

\[
\begin{align*}
\text{LET} & \quad \neg \quad \lor \quad \land \quad \wedge \quad \ominus \quad \not\vdash \quad \not\triangleright \quad \not\triangleleft \quad \not\triangleright\!
\end{align*}
\]

Remark 1.2: Eq. 1.2 as rendered is not tautologous, refuting 3SAT for Karp’s cnf into split clauses as NP-complete.