

Problem #38 (Solved !)

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Summary: Is unification modulo distributivity decidable?

Is satisfiability of equations in the theory of distributivity (unification modulo modulo one right- and one left-distributivity axiom) decidable? (With just one of these, the problem had already been solved in [TA87].) A partial positive solution is given in [Con93a], based on a striking result on the structure of certain proofs modulo distributivity. Although many more cases are described in [Con92][Con93b], the general case remains open.

Remark

This theory is decidable [SS94][SS97].

Bibliography

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