Problem #77 (Solved !)

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Summary: Is there a finite, normal form, associative-commutative term-rewriting system for lattices?

Remark

J Jezek, J. B. Nation, and R. Freese [Fre93] have shown that there is no finite, normal form, associative-commutative term-rewriting system for lattices. This is somewhat surprising because every lattice term is equivalent under lattice theory to a shortest term which is unique up to associativity and commutativity (known as "Whitman canonical form").

Bibliography

[Fre93] R. Freese. personal communication, 1993.