

Domination in the Families of Frank and Hamacher T-norms

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Abstract: Domination is a relation between general operations defined on a poset. The old open problem is whether domination is transitive on the set of all t-norms. In this paper we contribute partially by inspection of domination in the family of Frank and Hamacher t-norms. We show that between two different t-norms from the same family, the domination occurs iff at least one of the t-norms involved is a maximal or minimal member of the family. The immediate consequence of this observation is the transitivity of domination on both inspected families of t-norms.

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