Discussion of the Structure of Uninorms.

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Abstract: The paper deals with binary operations in the unit interval. We investigate connections between families of triangular norms, triangular conorms, uninorms and some decreasing functions. It is well known, that every uninorm is build by using some triangular norm and some triangular conorm. If we assume, that uninorm fulfils additional assumptions, then this triangular norm and this triangular conorm have to be ordinal sums. The intervals in ordinal sum are depending on the set of values of a decreasing function.

Keywords: uninorm; triangular norm; triangular conorm; binary operation; increasing operation; idempotent operation; associative operation;

AMS Subject Classification: 06F05; 03E72; 03B52;