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Title: Explicit formulas for generators of triangular norms

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Triangular norms are associative operations which represent conjunctions in fuzzy logic. They were also studied in the context of probabilistic metric spaces. It is known that each continuous Archimedean triangular norm can be determined by additive and multiplicative generators. However, finding a generator of a given triangular norm may be a difficult task. The geometry of the generator does not seem to reflect the properties of the triangular norm in an intuitive way. We show that this need not be the case for a large class of triangular norms which allow to reconstruct the generators from partial derivatives of triangular norms. This class is broad enough to cover all continuous Archimedean triangular norms which we found in the literature.

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