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On the Infimum of a Quasiconvex Function over an Intersection. Application to the Distance Function

We give sufficient conditions for the infimum of a quasiconvex function f over the intersection $\bigcap_{i\in I} R_i$ to agree with the supremum of the infima of f over the R_i's. We apply these results to the distance function in a normed space.

Keywords: Quasiconvex functions, distance to the intersection.

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