

# Elements of Quasiconvex Subdifferential Calculus

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**Abstract:** A number of rules for the calculus of subdifferentials of generalized convex functions are displayed. The subdifferentials we use are among the most significant for this class of functions, in particular for quasiconvex functions: we treat the Greenberg-Pierskalla's subdifferential and its relatives and the Plastria's lower subdifferential. We also deal with a recently introduced subdifferential constructed with the help of a generalized derivative. We emphasize the case of the sublevel-convolution, an operation analogous to the infimal convolution, which has proved to be of importance in the field of quasiconvex functions. We provide examples delineating the limits of the rules we provide.

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