

次b凸函数和次b凸规划

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Convex function| sub-b-convex set| sub-b-convex function| pseudo-sub-b-convex function| optimality conditions

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摘要 研究一种称为次b凸函数的广义凸函数,并介绍了次b凸集的概念.分别在一般情形及可微情形下讨论了次b凸函数的相关性质,得到了次b凸函数成为拟凸函数及伪凸函数的充分条件.最后,在次b凸函数的条件下给出了无约束及带不等式约束规划的最优性条件.

关键词: [凸函数](#) [次b凸集合](#) [次b凸函数](#) [伪次b凸函数](#) [最优性条件](#)

Abstract: The paper studied a new generalized convex function which called sub-b-convex function, and introduced a new concept of sub-b-convex set. The basic properties of sub-b-convex functions were discussed in general case and differentiable case, respectively. And, obtained the sufficient conditions that the sub-b-convex function become quasi-convex function or pseudo-convex function. Furthermore, the sufficient conditions of optimality for unconstrained and inequality constrained programming were obtained under the sub-b-convexity.

Keywords: [convex function](#), [sub-b-convex set](#), [sub-b-convex function](#), [pseudo-sub-b-convex function](#), [optimality conditions](#)

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