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Summaries of Papers Appearing in this Issue

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S. K. SARKAR, India: *Quasi-static thermal deflection in a solid circular plate in the axisymmetric case*. Apl. mat. 13 (1968), 291–298. (Original paper.)

In this paper a problem of thermal deflection in a solid circular plate in the axisymmetric case is solved (On the base of Forray-Newmann method). In this case, the temperature is found to be a function of co-ordinate r and time parameter t .

JAROSLAV MORÁVEK, MILAN VLACH, Praha: *On necessary conditions for a class of systems of linear inequalities*. Apl. mat. 13 (1968), 299–303. (Original paper.)

In this note a class of convex polyhedral sets of functions is studied. A set of the considered class is non-empty if it satisfies certain conditions. Using Theorem 1 of this paper in the case of multi-index transportations problems we obtain necessary conditions for the existence of a feasible solution to this problem.

JITKA ŽÁČKOVÁ, Praha: *On maximizing a concave function subject to linear constraints by Newton's method*. Apl. mat. 13 (1968), 339–355. (Original paper.)

The paper deals with an adaptation of Newton's method for solving nonlinear programming problems. The adaptation is derived by replacing the gradient direction in Rosen's method by Newton's direction and both its convergence and practical aspects are discussed. Convergence properties of another adaptation of Newton's method (suggested by Hájek) are studied, too.