

**PROPERTIES OF MAPPINGS OF SCALAR FUNCTIONS TO OPERATOR
FUNCTIONS OF A LINEAR CLOSED OPERATOR****L. F. Korkina, M. A. Rekant**

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We study classes of functions of a linear injective operator constructed on the basis of corresponding scalar functions that are analytic in domains lying outside some angle Δ with vertex at zero containing the negative real semi-axis. The functions have power estimates for the modulus at infinity and, possibly, at zero. It is assumed that the regular set of the operator contains an angle with vertex at zero lying in Δ and containing the negative real semi-axis and that an asymptotic estimate for the norm of the resolvent is known at zero and infinity. This paper continues the authors' studies of the properties of operator functions from relevant classes. Under the assumption of boundedness of the inverse operator, we propose a new sufficient condition for an equality related to raising a power of an operator to a power.

Keywords: linear closed operator, functions of an operator, multiplicative property, invertibility.

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