

PROPERTIES OF HARMONIC FUNCTIONS WHICH ARE CONVEX OF ORDER β WITH RESPECT TO CONJUGATE POINTS

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Abstract

Let H denote the class of functions f which are harmonic and univalent in the open unit disc $D = \{z : |z| < 1\}$. This paper defines and investigates a family of complex-valued harmonic functions that are orientation preserving and univalent in D and are related to the functions convex of order β ($0 \leq \beta < 1$), with respect to conjugate points. We obtain coefficient conditions, growth result, extreme points, convolution and convex combinations for the above harmonic functions.

Keywords : Harmonic functions, convex of order β with respect to conjugate points, coefficient estimates.