

ON CERTAIN CLASSES OF MEROMORPHIC HARMONIC CONCAVE FUNCTIONS DEFINED BY AL-BOUDI OPERATOR

(Berkenaan Kelas Fungsi Cekung Meromorfi Harmonik Tertentu
yang Ditakrif oleh Pengoperasi Al-Oboudi)

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ABSTRACT

In this work, a class of meromorphic harmonic concave functions defined by Oboudi operator in the punctured unit disc is introduced. Coefficient conditions, distortion inequalities, extreme points, convolution bounds, geometric convolution, integral convolution and convex combinations for functions f belonging to this class are obtained.

Keywords: Meromorphic function; harmonic function; concave function; Al-Oboudi operator

ABSTRAK

Dalam kajian ini, kelas fungsi cekung meromorfi harmonik yang ditakrif oleh pengoperasi Al-Oboudi diperkenalkan dalam cakera unit terpanciti. Syarat pekali, ketaksamaan erotan, titik ekstrim, batas konvolusi, konvolusi geometri, konvolusi kamiran dan gabungan cembung untuk fungsi f dalam kelas tersebut diperoleh.

Kata kunci: fungsi meromorfi; fungsi harmonik; fungsi cekung; pengoperasi Al-Oboudi

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