

ON CERTAIN CLASSES OF ANALYTIC FUNCTIONS WITH NEGATIVE COEFFICIENTS

¹Aini Janteng, ²Suzeini Abdul Halim, ³Maslina Darus

^{1,2}Institute of Mathematical Sciences, Universiti Malaya, 50603 Kuala Lumpur

³School of Mathematical Sciences, Faculty of Sciences and Technology,
Universiti Kebangsaan Malaysia,
43600 Bangi, Selangor

E-mail : aini_jg@ums.edu.my, suzeini@um.edu.my, maslina@pkisc.cc.ukm.my

Research Report No. 6/2005

Abstract

This paper introduces the class $M^\sigma(\alpha, k)$, $\sigma > 0$, $\alpha < k \leq 1$, consisting of analytic functions with negative coefficients in $D = \{z : |z| < 1\}$. We highlight properties of $M^\sigma(\alpha, k)$ on coefficient estimates, growth and distortion results as well as on radius of starlikeness and convexity.

Keyword : Univalent, coefficient estimates, growth and distortion