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CLOSE-TO-CONVEX FUNCTIONS WITH STARLIKE POWERS

(Fungsi Hampir Cembung dengan Kuasa Bak Bintang)

D K THOMAS

ABSTRACT

Let K^{α} be the set of functions *f,* analytic in $z \in D = \{z : |z| < 1\}$ satisfying $\mathrm{Re}\left(\frac{f'(z)}{(g(z)/z)^{\alpha}} \right) > 0$, for g starlike in D and $0 \le \alpha \le 1$. It is shown that such functions form a subset of the close-to-convex functions. Sharp bounds for the coefficients are given and the Fekete-Szegö problem is solved.

Keywords: univalent functions; starlike functions; close-to-convex functions; coefficients; Fekete-Szegö

ABSTRAK

Andaikan K^{α} set fungsi *f*, analisis dalam $z \in D = \{z : |z| < 1\}$ memenuhi $Ny\left(\frac{f'(z)}{(g(z)/z)^{\alpha}} \right) > 0$, untuk g bak bintang dalam D dan $0 \le \alpha \le 1$. Dapat ditunjukkan bahawa fungsi tersebut merupakan subset bagi suatu set fungsi hampir cembung. Batas-batas terbaik bagi pekali diberikan dan masalah Fekete-Szegö diselesaikan.

Kata kunci: fungsi univalen; fungsi bak bintang; fungsi hampir cembung; pekali; Fekete-Szegö

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Department of Mathematics
Swansea University
Singleton Park
Swansea, SA2 8PP
UNITED KINGDOM
*E-mail: d.k.thomas@swansea.ac.uk**

*Corresponding author