

1106-30-81

Yusuf Abu-Muhanna and **Rosihan M Ali*** (rosihan@cs.usm.my), School of Mathematical Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia. *Distortion estimates for harmonic univalent maps.*

New distortion estimates in terms of the hyperbolic metric are obtained for harmonic univalent maps $f = h + \bar{g}$, with h and g analytic in the unit disk. An estimate for the second coefficient is also obtained for functions h mapping the unit disk onto a hyperbolic domain, which as a consequence, yields a vastly improved second coefficient estimate for harmonic functions f . (Received July 05, 2014)