1016-30-67

Roger W Barnard\* (roger.w.barnard@ttu.edu), Dept of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409, and Samy Ponnusamy (samy@iitm.ac.in), Madras, India. Univalency of Hypergeometric Functions.

We will discuss how we use the properties of hypergeometric functions to represent integral transforms. We then use the properties of integral transforms and convolution theory to determine ranges of the parameters for hypergeometric functions that imply their one-to-oneness on the unit disk in the plane. This answers a number of questions posed in the literature. (Received January 28, 2006)