

On an unified reduction formula for Srivastava's triple hypergeometric series $F(3)[x, y, z]$

ABSTRACT

Very recently, by applying the so-called Beta integral method to the Henrici's triple product formula for the generalized hypergeometric series, Choi, et al.[Commun. Korean Math. Soc. 28(2013), No.2, pp. 297-301] have obtained an interesting reduction formula for the Srivastava's triple hypergeometric series $F^{(3)}[x,y,z]$. The aim of this short note is to provide a unified reduction formula for the Srivastava's triple hyper geometric series from which as many new reduction formulas (including the one obtained by Choi, et al.) as desired can be deduced. A few interesting special cases have also been given.

Keyword: Generalized hypergeometric function ${}_pF_q$; Gamma function; Pochhammer symbol; Beta integral; Srivastava's triple hypergeometric series $F^{(3)}[x,y,z]$, Henrici's formula.