



**ERRATA: INEQUALITIES ASSOCIATING HYPERGEOMETRIC FUNCTIONS
WITH PLANER HARMONIC MAPPINGS**

OM P. AHUJA AND H. SILVERMAN

DEPARTMENT OF MATHEMATICS
KENT STATE UNIVERSITY
BURTON, OHIO 44021-9500
oahuja@kent.edu

DEPARTMENT OF MATHEMATICS
UNIVERSITY OF CHARLESTON
CHARLESTON, SOUTH CAROLINA 29424
silvermanh@cofc.edu

Received 13 April, 2006; accepted 04 August, 2006

Communicated by N.E. Cho

ABSTRACT. The purpose of this note is to give some corrections for our published article in [1].

Key words and phrases: Errata, Planar harmonic mappings, hypergeometric functions.

2000 *Mathematics Subject Classification.* 30C55, 31A05, 33C90.

These errata give the following correct statements for the corresponding statements on the cited page of our published article [1].

Page 2

$$\phi_2(z) := F(a_2, b_2; c_2; z) - 1 = \sum_{n=1}^{\infty} \frac{(a_2)_n (b_2)_n}{(c_2)_n (1)_n} z^n, \quad |a_2 b_2| < |c_2|.$$

Page 8 (After Remark 2.10: Line 4)

$$\psi_2(z) := \varphi(a_2, c_2; z) - 1 = \sum_{n=1}^{\infty} \frac{(a_2)_n}{(c_2)_n} z^n, \quad |a_2| < |c_2|,$$

Page 8 (After Remark 2.10: Line 9)

$$\psi_1(1) = F(a_1, 1; c_1; 1) = \frac{c_1 - 1}{c_1 - a_1 - 1} \quad \text{and}$$

$$\psi_2(1) = F(a_2, 1; c_2; 1) - 1 = \frac{a_2}{c_2 - a_2 - 1}.$$

Page 8 (Theorem 2.2': Last line)

$$\frac{(c_1 - 1)(c_1 - 2)}{(c_1 - a_1 - 1)(c_1 - a_1 - 2)} + \frac{a_2^2}{(c_2 - a_2 - 1)(c_2 - a_2 - 2)} \leq 2.$$

Page 9 (Theorem 2.4': Line 3)

$$\frac{c_1 - 1}{(c_1 - a_1 - 1)} \left[1 + \frac{3a_1}{c_1 - a_1 - 2} + \frac{2a_2}{(c_1 - a_1 - 3)_2} \right]$$

$$+ \frac{a_2}{(c_2 - a_2 - 1)} \left[\frac{a_2}{c_2 - a_2 - 2} + \frac{2(a_2)_2}{(c_2 - a_2 - 3)_2} \right] \leq 2.$$

Page 9 (Theorem 2.7': Line 3)

$$\frac{a_1}{c_1 - a_1 - 1} + \frac{c_2}{c_2 - a_2 - 1} \leq 1.$$

REFERENCES

- [1] OM P. AHUJA AND H. SILVERMAN, Inequalities associating hypergeometric functions with planer harmonic mappings, *J. Inequal. Pure Appl. Math.*, **5**(4) (2004), Art. 99. [ONLINE: <http://jipam.vu.edu.au/article.php?sid=454>].