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Correction to

On the solution of simultaneous first order implicit differential equations

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By

SMBAT ABIAN and ARTHUR B. BROWN in Flushing N. Y.

Appraisal (45) on page 15 for $Q_2(x)$ must be modified since, as Prof. W. J. COLES of The University of Utah pointed out, Lemma 4 was applied incorrectly on line 6 of page 16. This is because the identification of the right side of (47) with the first line of (26) requires that $\frac{d}{dx}(b_i) = c_i$, so that (45) is proved only for the special case that $c_i = 0 (i = 1, \ldots, n)$. However, the main conclusion (first sentence) of Theorem 4, as well as appraisal (46) for $Q_2(x)$, remain valid, since their proofs were given correctly. (In (46) the left bracket symbol and the Σ symbol should be interchanged.)

The correction is accomplished by adding to the right side of (45) the term $+ |x - a| \max_i \sum_j A_{ij} |c_j|$, and replacing, on page 16, lines 6, 7, 8 and the first half of line 9 by the following: "which, by (15) and (44),

$$\leqq \sum_j \left[A_{ij} \left| \int_a^x F_j(t, b, c)\, dt \right| + B_{ij} |F_j(x, b, c) - c_j| \right],$$

and, by Lemma 3, (30) and (33), we infer that (45) as modified is correct."

We observe also that (46) is true regardless of the choice of $Y_i(x; 1)$, providing (10) are satisfied, since the proof of (46) makes no reference to (44).

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