

CORRIGENDA

S. J. BENKOSKI & P. ERDÖS, "On weird and pseudoperfect numbers," *Math. Comp.*, v. 28, 1974, pp. 617–623.

In Table I, entitled Weird Numbers $\leq 10^6$, the entry 539, 774 should be replaced by 539,744.

SIDNEY KRAVITZ

Picatinny Arsenal
Dover, New Jersey 07801

HENRY E. FETTIS. "A stable algorithm for computing the inverse error function in the 'tail-end' region," *Math. Comp.*, v. 28, 1974, p. 585.

The L.H.S. of the last equation on p. 585 should read

$$\sqrt{\pi}e^{y^2}\operatorname{erfc}(y).$$

HENRY. E. FETTIS

1885 California, Apartment 62
Mountain View, California 94041

G. MICULA, "Approximate solution of the differential equation $y'' = f(x, y)$ with spline functions," *Math. Comp.*, v. 27, 1973, pp. 807–816.

It was kindly pointed out to the author by H. Brunner (Dalhousie University, Halifax, Canada) and D. Voss (Western Illinois University) that the order of convergence obtained in the above article should be reduced by one, since:

The discrete multistep method based on the recurrence formula:

$$y_{k+1} - 2y_k + y_{k-1} = \frac{h^2}{6} [f(x_{k+1}, y_{k+1}) + 4f(x_k, y_k) + f(x_{k-1}, y_{k-1})]$$

has second-order accuracy (and not third-order) provided the starting values are sufficiently accurate; also, the multistep method,

$$y_{k+1} - y_k - y_{k-1} + y_{k-2} = \frac{h^2}{12} [f(x_{k+1}, y_{k+1}) + 11f(x_k, y_k) + 11f(x_{k-1}, y_{k-1}) + f(x_{k-2}, y_{k-2})]$$

has fourth-order accuracy, provided the starting values are sufficiently accurate.

These considerations change the conclusions of Theorems 4 and 6 on pages 812 and 813, respectively, as follows:

THEOREM 4. *If $f \in C^3([0, b] \times \mathbf{R})$ and s is the cubic spline function approximating the solution of problem (6)–(7), then there exists a constant K such that, for any $h < (6/A)^{1/2}$ and $x \in [0, b]$*

$$\begin{aligned} |s(x) - y(x)| &< Kh^2, & |s'(x) - y'(x)| &< Kh^2, \\ |s''(x) - y''(x)| &< Kh^2, & |s'''(x) - y'''(x)| &< Kh, \end{aligned}$$

provided $s'''(x_k)$ is given by (15) with $m = 3$.

THEOREM 6. *If $f \in C^4([0, b] \times \mathbf{R})$ and s is the spline function of the fourth-degree approximating the solution y of (6)–(7), then there exists a constant K , such that, for any $h < (12/A)^{1/2}$, and $x \in [0, b]$:*

$$|s^{(j)}(x) - y^{(j)}(x)| < Kh^{4-j}, \quad j = 0, 1, 2, 3,$$

$$|s^{(4)}(x) - y^{(4)}(x)| < Kh,$$

provided that $s^{(4)}(x_k)$ is calculated by (15) for $m = 4$.

Acknowledgements. I am deeply indebted to H. Brunner and D. Voss for their remarks concerning the errors, which made this correction possible.

G. MICULA

Faculty of Mathematics
University of Cluj
Cluj, Romania