binomial in these tables is the multiplicative order of the companion matrix of B(x).

The tables correspond, respectively, to the following sets of values of q, d, and  $d_1$ :

$$q = 2^2$$
,  $d = 16$ ,  $d_1 = 15$   $q = 5$ ,  $d = 21$ ,  $d_1 = 11$   
 $q = 2^3$ ,  $d = 8$   $q = 5^2$ ,  $d = 10$   
 $q = 2^4$ ,  $d = 6$   $q = 7$ ,  $d = 10 = d_1$   
 $q = 2^5$ ,  $d = 4$   $q = 11$ ,  $d = 10$ ,  $d_1 = 8$   
 $q = 3$ ,  $d = 26$ ,  $d_1 = 15$   $q = 13$ ,  $d = 10$   
 $q = 3^2$ ,  $d = 9$   $q = 17$ ,  $d = 10$   
 $q = 19$ ,  $d = 10$ .

The representation for  $GF(p^{\alpha})$ ,  $\alpha \ge 1$ , is that discussed in [1] and used previously in [2], [3], and [4]. In the introduction to the present tables the authors prove that a prime binomial of degree  $n \ge 2$  is not primitive of the first, second, or third kind [1].

J. W. W.

- J. T. B. BEARD, JR., "Computing in GF (q)," Math. Comp., v. 28, 1974, pp. 1159-1166.
   J. T. B. BEARD, JR. & K. I. WEST. "Some primitive polynomials of the third kind."
- 2. J. T. B. BEARD, JR. & K. I. WEST, "Some primitive polynomials of the third kind," Math. Comp., v, 28, 1974, pp. 1166-1167.
- 3. J. T. B. BEARD, JR. & K. l. WEST, "Factorization tables for  $x^n-1$  over GF(q)," Math. Comp., v. 28, 1974, pp. 1167–1168.
- 4. J. T. B. BEARD, JR. & K. I. WEST, "Factorization tables for trinomials over GF(q)," Math. Comp., v. 30, 1976, pp. 179-183.
- 26 [2.05, 2.10, 3.00, 4.00, 5.00, 6.15].—D. A. H. JACOBS, Editor, *The State of the Art in Numerical Analysis*, Academic Press, London, 1977, xix + 978 pp., 23 cm. Price \$39.00.

This volume is based on material presented at a conference held at the University of York in the spring of 1976. The topics surveyed are: linear algebra, error analysis, optimization and non-linear systems, ordinary differential equations and quadrature, approximation theory, parabolic and hyperbolic problems, elliptic problems, and integral equations. In all there are twenty-three authors each contributing a section of one of the above-mentioned chapters.

J. B.

27 [2.00].—J. DESCLOUX & J. MARTI, Editors, *Numerical Analysis*, Proceedings of the Colloquium on Numerical Analysis, International Series of Numerical Mathematics, Birkhäuser Verlag, Basel, Switzerland, 1977, 248 pp., 24 cm. Price approximately \$22.00.

This volume contains papers presented at a meeting organized by the editors. This meeting took place at Lausanne, Switzerland, October 11–13, 1976.

J. B.

28 [10.35].—DAN ZWILLINGER, *Magic Labellings*, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1977, iii + 81 pages of computer output filed in stiff covers and deposited in the UMT file.