

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  $d_1$ :

$$\begin{array}{ll} q = 2^2, d = 16, d_1 = 15 & q = 5, d = 21, d_1 = 11 \\ q = 2^3, d = 8 & q = 5^2, d = 10 \\ q = 2^4, d = 6 & q = 7, d = 10 = d_1 \\ q = 2^5, d = 4 & q = 11, d = 10, d_1 = 8 \\ q = 3, d = 26, d_1 = 15 & q = 13, d = 10 \\ q = 3^2, d = 9 & q = 17, d = 10 \\ & q = 19, d = 10. \end{array}$$

The representation for  $\text{GF}(p^\alpha)$ ,  $\alpha \geq 1$ , 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  $n \geq 2$  is not primitive of the first, second, or third kind [1].

J. W. W.

1. J. T. B. BEARD, JR., "Computing in  $\text{GF}(q)$ ," *Math. Comp.*, v. 28, 1974, pp. 1159–1166.
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. I. WEST, "Factorization tables for  $x^n - 1$  over  $\text{GF}(q)$ ," *Math. Comp.*, v. 28, 1974, pp. 1167–1168.
4. J. T. B. BEARD, JR. & K. I. WEST, "Factorization tables for trinomials over  $\text{GF}(q)$ ," *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.

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**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.

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**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.