ations used in the book, an index of authors of works cited, and an index of insti-
tutes referred to in the body of the book.

Although it is disappointing to note the perpetuation of errors and deficiencies
noted previously in the first edition, it should be pointed out that this new edition
does serve as a valuable supplement to the FMRC *Index*, particularly with respect
to the listing of publications that have appeared since about 1961.

<div style="text-align:right">J. W. W.</div>

1. A. FLETCHER, J. C. P. MILLER, L. ROSENHEAD & L. J. COMRIE, *An Index of Mathematical Tables*, second edition (in two volumes), Addison-Wesley, Reading, Mass., 1962. (See *Math. Comp.*, v. 17, 1963, pp. 302–303, RMT **33**.)
2. *MTAC*, v. 10, 1956, pp. 100–102, RMT **34**.
3. J. A. GREENWOOD & H. O. HARTLEY, *Guide to Tables in Mathematical Statistics*, Princeton Univ. Press, Princeton, N. J., 1962. (See *Math. Comp.*, v. 18, 1964, pp. 157–158, RMT **13**.)

57[A, K].—RUDOLPH ONDREJKA, *The First* 100 *Exact Subfactorials*, ms. of 9 pp.
(handwritten) deposited in the UMT file.

The subfactorial of n, designated here by the symbol n_i following the notation
of Chrystal [1], is most commonly associated with the number of derangements of
n objects so that none is in its original place. This interpretation yields the well-
known formula

$$n_i = n! \sum_{k=0}^{n} (-1)^k/k! ,$$

which implies the useful recurrence relation $n_i = n(n-1)_i + (-1)^n$.

The author has thereby calculated the present carefully checked table of the
exact values of the first one hundred subfactorials, which appears to be by far the
most extensive tabulation of its kind.

Examples of previous compilations are to be found in books by Whitworth [2]
and by Riordan [3]. These extend to only $n = 12$ and $n = 10$, respectively.

<div style="text-align:right">J. W. W.</div>

1. G. CHRYSTAL, *Textbook of Algebra*, 6th ed., Chelsea, New York, 1952, Vol. II, p. 25.
2. W. A. WHITWORTH, *Choice and Chance*, 5th ed., Bell, Cambridge and London, 1901, p. 107.
3. J. RIORDAN, *An Introduction to Combinatorial Analysis*, Wiley, New York, 1958, p. 65.

58[G, H, X].—FRANK S. CATER, *Lectures on Real and Complex Vector Spaces*, W. B.
Saunders Co., Philadelphia, Pa., 1966, x + 167 pp., 24 cm. Price $5.00.

This is an abstract development, some of which is considered suitable for under-
graduates, and all of it for first-year graduates. The presentation is quite condensed
and an amazing amount of material is covered.

There are five "Parts," the first, on "Fundamental Concepts," consists of three
"Lectures." The Maximum Principle and the Axiom of Choice are stated and their
equivalence asserted. Other topics include the factorization of polynomials and the
definition of vector spaces and linear combinations. The remaining Parts are made
up of six or seven Lectures each, and each Lecture is followed by a page or more of
problems. The Cayley-Hamilton Theorem and the Jordan normal form occur in
Part 3. Part 4 deals with infinite-dimensional spaces and operator algebras; Part 5
with finite-dimensional unitary spaces.