

of life and What is wrong with Communism; other chapters discuss the causes of trouble in Europe and in the world, the emergence of Asia as a trouble spot which has been aroused as Europe became exhausted, and the transition period of the colonial peoples.

The third section is devoted to the world community, with chapters on collective security, the path to peace, the United Nations charter and organization, the possible production of collective security as a halfway step to world government and the problems and rewards when this is attained, and what the consequences of an actual world government would be.

The fourth section contains four chapters dealing, respectively, with what the United States can do in the world picture, the origins of the productive might of the United States, the causes of depressions and inflations, the problems of our foreign policy, and those of United States aid to the world. The final section deals with propaganda and its origins, and the bases for human freedom and happiness.

The authors are experts in their fields, and the individual viewpoints have been well integrated. The general appearance of the book, printed by photo-offset from typed pages, is that of a low-priced textbook in one of its earlier editions. An excellent list of suggested supplementary readings is included, together with short biographical sketches of the authors and a well-prepared index.

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Theory of Equations. Cyrus Colton MacDuffee. Wiley, New York; Chapman & Hall, London, 1954. 120 pp. Illus. \$3.75.

This book was written for use as a text in a one-semester course in theory of equations. The mathematical maturity demanded of the student or reader is that of college juniors or seniors. The author intends the book both for those who plan to follow mathematics as a profession and those who will use it as a tool in other

fields. He has used modern methods of algebra to present a complete study of linear systems of equations and of polynomials. The introduction of the abstract ideas of rings and fields forms a bridge between elementary algebra and advanced algebra and gives the student an insight into the more advanced work in modern algebra at an early stage in his training. These abstract ideas are introduced so naturally that they do not disturb the basic nature of the course, and a student who is not primarily interested in them will not object to them.

The topics considered include those covered in most of the standard texts on theory of equations, with the one exception that the study of determinants has been omitted. The author thinks that the study of determinants and matrices makes a good course for a second semester's work. The treatment of the topics differs from that of other authors in that the main emphasis is placed upon the theory of polynomials and use is made of modern methods in the development of this theory.

The text begins with a review of the solution of linear equations, and here the idea of a field is introduced. The second chapter contains a concise introduction to the theory of numbers, which some instructors might wish to expand. In the third chapter, the author gives an exact definition of rings and fields. After the definition of polynomials as elements of certain rings, the theory of polynomials is developed rigorously. The text ends with a discussion of Euclidean rings and systems of equations of higher degree.

The computational part of the subject has not been neglected. There are illustrative examples throughout the book. A sufficient number of good exercises (with answers) are provided for student drill.

At first glance, it may seem that there is not sufficient material for a one-semester course. But the abstract ideas of rings and fields cannot be pushed too fast in some classes, and an instructor may find that extra help and drill will need to be provided.

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New Books

Advances in Electronics, Vol. V. L. Marton, Ed. Academic Press, New York, 1953. 420 pp. Illus. \$9.50.

Higher Transcendental Functions, Vol. I. Based, in part, on notes left by Harry Bateman; compiled by the staff of the Bateman Manuscript Project, California Institute of Technology. McGraw-Hill, New York-London, 1953. 302 pp. \$6.50.

1954 Medical Progress. A review of medical advances during 1953. Morris Fishbein, Ed. Blakiston, New York, 1954. 345 pp. \$5.00.

Human Behavior in the Concentration Camp. Elie A. Cohen. Trans. by M. H. Braaksmas. Norton, New York, 1953. 295 pp. \$5.00.

Infrared Absorption Spectra of Steroids: An Atlas. Konrad Dobriner, E. R. Katzenellenbogen, and R. Norman Jones. Interscience, New York, 1953. Introduction + 308 spectra charts. \$11.50.

Sound. A physical textbook. 5th rev. ed. E. G. Richardson. St Martin's Press, New York; Edward Arnold, London, 1953. 352 pp. Illus. \$5.00.

Introduction to Aeronautical Dynamics. Manfred Rausher. Wiley, New York; Chapman & Hall, London, 1953. 664 pp. Illus. \$12.00.

Who's Who in British Science, 1953. British Book Centre, New York, 1954. 292 pp. \$9.00.

Evolution: Die Geschichte ihrer probleme und Erkenntnisse. Walter Zimmerman. Verlag Karl Alber, Freiburg-München, Germany, 1953. 623 pp. Illus. + plates. DM 32.

Main Currents of Scientific Thought. A history of the sciences. S. F. Mason. Abelard Schuman, New York, 1954. 520 pp. \$5.00.

Man, Rockets and Space. Burr W. Leyson. Dutton, New York, 1954. 188 pp. Illus. \$3.50.

Music Therapy. Edward Podolsky, Ed. Philosophical Library, New York, 1954. 335 pp. Illus. \$6.00.