The Elementary Theory of Tensors. By Tracy Yerkes Thomas. New York, McGraw-Hill, 1931. 10+122 pp.

This text presents the elements of geometry and mechanics in tensor notation. It will in consequence be useful either as a basis for a modernized course in vector analysis or as a reference for the undergraduate who delves into popular Einsteiniana and asks his teacher "What are tensors?".

The argument is well and carefully thought out. In particular, the fundamental equations of euclidean and kinematical transformations are derived by methods not readily available elsewhere. It is perhaps a regrettable consequence of the choice of applications that, with the exception of the vector product, all the physical or geometrical examples of tensors mentioned are first-order tensors, that is, vectors. Besides a few harmless misprints the reviewer noted only two mistakes. The footnote on page 68 implies that every rigid displacement of the plane is a rotation with finite center, although the close reader will recall the mention in the text of the case in which the center recedes to infinity. On page 37 we read "No legal standard of length has been adopted by the United States and in the absence of such a standard the British system of measurement has come into practical use."

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Vorlesungen über die Singulären Moduln und die Komplexe Multiplikation der Elliptischen Funktionen. Part II (Teubner's Sammlung, Band XLI, 2). By R. Fueter. Leipzig, Teubner, 1927. 143–358 pp.

This is the second and concluding volume on the subject by Professor Fueter, the first of which appeared in 1924 and was reviewed by Dresden in the American Mathematical Monthly (vol. 32 (1925), pp. 474–476). The reader is urged to consult the Dresden review for orientation. Let us recall that in Part I the author has developed, compactly, the theory of the modular group and associated functions, and the algebraic-arithmetic theory of quadratic number fields, including ideal-theory and the many concepts stemming from this important branch of mathematics.

In Part II Professor Fueter enters the deeper realms of his subject, giving particularly the important extensions since Weber's *Algebra*, vol. III. While most of the book is arithmetic and algebraic in character, analytic methods are by no means eschewed. Thus, in the course of the volume, there is a much-trodden path leading from the elliptic function addition theorems, and the author, travel far as he might in the higher theory of number fields, never loses contact with these fruitful formulas. In addition, we find on a few occasions that the zeta-functions of Dirichlet and Dedekind are utilized to establish a theorem neatly. The author has given in his preface a two-fold explanation of the advantages of function-theoretic methods; algebraists will be interested in the points that he makes.

The present volume is a continuation of the other both in chapter numbering and paging. Thus we begin with Chapter VI, on the factorization of prime ideals. It should be recalled that the fundamental number fields in this theory are the quadratic imaginary number fields $k(\sqrt{m})$ (or simply k). With respect to k one considers larger containing fields K, and in particular such fields K as have, in k, an abelian group. A field of this character is a relative-abelian field