Calcul numérique. Par R. DE MONTESSUS et R. D'ADHÉMAR.
Paris, O. Doin et Fils, 1911. 246 pp.

THIS work is in two parts.

The first part (pages 3–138) is by R. de Montessus and is
entitled Opérations arithmétiques et algébriques. Its prin-
cipal content is in the three chapters devoted to the calcula-
tion of the roots of numerical algebraic equations and of
transcendental equations. For the resolution of these prob-
lems a rich variety of methods is given. Many of these are
elementary and are usually found in texts on the theory of
equations; but others of them are less generally employed.
As examples of the latter are those (in Chapter V) in which
the calculus of differences is employed for numerical approxi-
mations. The methods given are illustrated with many
numerical exercises. This part contains a very convenient
and readable account of its subject matter.

The second part (pages 141–237) is by R. d'Adhémar and
is entitled Intégration. It is concerned primarily with quad-
ratures and differential equations, but contains a short
digression on implicit functions and equations, the latter
being treated by the method of successive approximations.
The author has attempted only an introduction to his subject;
this is desirable and is indeed all that could be done in the
short space employed.

R. D. CARMICHAEL.

Elementary Theory of Equations. By L. E. DICKSON. New
York, John Wiley and Sons, 1914. v + 184 pp.

IT is a good omen for the development of mathematics in
this country when some of our most brilliant men of research
are willing to take the time to prepare elementary texts suited
to the needs of beginners. It is therefore a pleasure to wel-
come this excellent book, by Professor Dickson, on the
elementary theory of equations.

Naturally, no treatment of the difficult Galois theory is
given. On the subject of invariants one finds merely a few
illustrative examples and no systematic exposition. These
omissions will probably be approved by every one who desires
to use the book in his classes. The remaining and more
elementary aspects of the theory of equations are developed
with sufficient fulness to meet the needs of all teachers who
are likely to employ such a book for purposes of instruction.