SHORTER NOTICES.

Elements of Plane Trigonometry. By D. A. MURRAY. New
York, Longmans, Green, and Company, 1911. ix + 136 pp.
+ 95 pp. of tables.

PROFESSOR Murray's Elements gives a much briefer treat-
ment of the subject than the Plane Trigonometry previously
published by him. Among the topics receiving more or less
special emphasis are the variation, periodicity, and graphs of
functions, general expressions for all angles having one func-
tion in common, and methods of checking solutions.

Problems requiring the use of trigonometric tables are
introduced almost at the very beginning of the book. One
wonders if it might not be better to defer the first use of such
tables, which, for some reason or other, the student usually
finds rather difficult, until he shall have grown more
familiar with the meaning of trigonometric functions by
use of the functions of 45°, 30°, and 60°, and by the solution
of problems such as those involving the determination of the
remaining functions of an angle from a single given function,
and the solution of right triangles from one side and a function
of one angle.

In the matter of oblique triangles, the various formulas
connected with the solution of such triangles are first worked
out merely as "relations between the sides and angles of a
triangle." Then, in a separate chapter the solution of
triangles is taken up and the formulas previously developed
are made use of. While this arrangement may serve to
emphasize "theory for the sake of theory," it would seem
that a combination of the two chapters in one might, without
detracting much, if any, from this emphasis, make the work
more simple and interesting for the student.

                                            CORA B. HENNEL.

A Brief Course in Analytic Geometry. By J. H. TANNER and
JOSEPH ALLEN. New York, American Book Company,
1911. x + 282 + xxiv pp.

THE student beginning the study of analytic geometry
usually finds himself, almost at the very start, in the midst of