general the sectors of divergence). If η_1 is negative then (15)
represents a curve of t branches lying within the aforemen-
tioned sectors within which the first member of (15) denotes
a negative quantity; and each branch approaches asymp-
totically the rays of the sector including it. In this case the
region of convergence consists in general of t separated regions
each bounded by a curve somewhat resembling one branch
of an hyperbola. In case η_1 is positive the branches of the
curve denoted by (15) lie in the aforementioned sectors
within which the first member of (15) is positive; and again
each branch approaches asymptotically the rays of the sector
including it. In this case the region of convergence is in
general the portion of the plane excluded by the t branches,
which again resemble branches of hyperbolas.

UNIVERSITY OF ILLINOIS,
        April 14, 1917.

SHORTER NOTICE.

Interpolated Six-place Tables. Edited by HORACE WILMER
   MARSH. New York, John Wiley and Sons, 1916. xii +
   155 pp.

THIS volume contains logarithms of numbers and the natural
and logarithmic trigonometric functions, also tables of length,
area, volume, weight, metric conversion, decimal equivalents,
and specific gravity. In view of the many logarithmic tables
on the market, a new compilation is expected to present
valuable improvements. Only one such is evident in this
book, viz., the use of a heavy ruling to denote "the change
in leading figures when occurring in the line, thereby making
the use of the wrong leading figures possible only by 'jumping
the fence.'" Unfortunately on page 39, an omitted "fence"
gives wrong values for log tan 3° 0', 20'', 30'', 40'', and 50''.

In the logarithms of numbers no horizontal spacings or
rulings are used and the number of rows on a page varies from
13 to 31, so that the position of the desired logarithm on the
page is never known "a priori." In the logarithmic trig-
onometric tables the lines are separated into groups of ten
for 6 pages only, though this grouping is used throughout the