

BIBLIOGRAPHIE.

Akademische Verlagsgesellschaft.

Leipzig.

BERNOULLI, J., Die Differentialrechnung. Aus dem Jahre 1691/92. Nach der in der Basler Universitätsbibliothek befindlichen Handschrift übers., mit einem Vorwort und Anm. vers. von PAUL SCHAFFHEITLIN. (Oswalds Klassiker der exakten Wissenschaften. No. 211.) — 56 pp. 8. 1924.

G. Bell and Sons.

London.

LEATHAM, J. G., Elements of the mathematical theory of limits. — VIII + 288 pp. 8. 1925.

1. Introductory.

Numbers. Functions and variables. Arithmet. and algebr. illustrations of tendency to limit. Geometr. illustr. of tendency to limit. Infinity.

2. Gen. theory.

Notation and definitions. Sets of numbers. Elementary theorems about limits. Further examples of geometr. limits. Trigonometr. functions and their limits. Infinitesimals and their orders. Infinites and their orders. Limits of sums, products and quotients. Increment, incremental ratio, and continuity of a function. Infinitesimal approximation. Asymptotic approximation. Functional progresses that are not definite tendencies. Miscell. theorems. Discontinuous functions. Discontinuous progresses of the independent variable. Differential coefficients. Existence theorems, etc. Limits and boundaries of a set of numbers. Continuous functions. Exponential and logarithmic limits. Ultimate inequalities. Limits derivable from the exponential limit.

3. Infinite series and products.

Summation and convergence of series. Positive series. Absol. convergence and semi-convergence. Multiplication of infinite series. Binomial and exponential series. Taylors theorem and applic. Infinite products. Integration limits. Limits of simple continued fractions. Irrational numbers.