

However, machines can never displace mathematical thought. A characteristic of mathematical thought is its boldness, its imaginative power. Such creative mathematics, which at times finds no immediate application in technical science, has always found fertile ground in our Academy; and its development must continue on a broad scale. Such subjects as non-Euclidean geometry, the tensor calculus and the theory of groups, which seem to be abstract studies absolutely cut off from life and from reality, nevertheless suddenly assume a decisive significance at definite stages of scientific development.

This explains the inclusion in the Academy's plan of the problems of the theory of numbers, abstract algebra, topology and mathematical logic.

QUERIES

24. INTEGRAL OF A STRUVE FUNCTION.—In a problem of diffraction the following integral comes up: $\int_0^x H_0(t) dt$. Where may I find a published table of this integral for the range $x = [0(.1)10; 6D]$?

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EDITORIAL NOTE: Since we received this Query for publication there came from Dr. JOHN W. WRENCH, JR., a copy of a table of $\int_0^x H_0(t) dt$, $x = [.1(.1)10; 8D]$. This was obtained by numerical integration of the values of $H_0(x)$ tabulated in G. N. WATSON, *A Treatise on the Theory of Bessel Functions*, second ed., Cambridge and New York, 1944, p. 666–684. For integral values of the upper limit the integral was calculated to about 15D by infinite series. This check on certain of the entries indicates that the maximum error in any entry should not exceed 0.6×10^{-8} .

25. RUSSIAN BESSEL FUNCTION TABLES.—According to an advertisement in *Matematicheskii Sbornik*, v. 51, no. 3, 12 June 1941, the Mathematical Institute of the USSR Academy of Sciences was at this time in 1941 about to publish a volume entitled *Tablitsy Besselyvykh Funktsii Mnimogo Argumenta* [Tables of Bessel Functions with Complex Argument]. It was announced that the volume contained about 400 pages and was to cost 25 roubles. The Library of Brown University has long but vainly tried to procure a copy. Can any reader report on the ownership of this volume of tables by any individual or library, or on a copy for sale?

R. C. A.

QUERIES—REPLIES

33. PORTRAITS AND BIOGRAPHIES OF BRITISH MATHEMATICAL TABLE MAKERS (Q21, v. 2, p. 286).—Herewith are submitted references to biographical material concerning four of these table makers. (a) PETER BARLOW: Amer. Acad. Arts & Sci., *Proc.*, v. 6, 1866, p. 15–16; Inst. Civil Engin., *Proc.*, v. 22, 1863, p. 615–618; R.A.S., *Mo. Not.*, v. 23, 1863, p. 127–128; R. Soc. London, *Proc.*, v. 12, 1863, p. xxxiii–xxxiv. Sir HUMPHRY DAVY, *Six Discourses*, London, 1827, p. 111–115, also in H. DAVY, *Coll. Works*, v. 7, London, 1840, p. 76, 83–89. (b) RICHARD FARLEY: R.A.S., *Mo. Not.*, v. 40, 1880, p. 192–194. (c) HIRSCH FILIPOWSKI: *Jewish Encyclopedia*, v. 5, New York, 1903, p. 383 (M. BEER). (d) PETER GRAY: R.A.S., *Mo. Not.*, v. 48, 1888, p. 163–165.

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