Thus for $n = 6$ we have

$$\sigma_{12}(\nu) = \frac{42\nu^3 + 362\nu^2 + 1026\nu + 946}{2^{12}(\nu + 1)^6(\nu + 2)^3(\nu + 3)^2(\nu + 4)(\nu + 5)(\nu + 6)}.$$

D. H. L.

[1] RAYLEIGH, London Math. So. *Proc.*, s. 1, v. 5, 1874, p. 119–124; *Scientific Papers*, v. 1, 1899, p. 192, 195. The entry for $n=8$ is due to A. CAYLEY; see also his *Collected Papers*, v. 9, 1896, p. 20.

[2] J. R. AIREY, *Phil. Mag.*, s. 6, v. 41, 1921, p. 200–203.

[3] C. G. J. JACOBI, *Astr. Nachrichten*, v. 28, 1849, cols. 93–94; *Gesammelte Werke*, Berlin, v. 7, 1891, p. 173 [*for* $10i + 32$, *read* $10i + 22$].

[4] J. H. GRAF & E. GUBLER, *Einleitung in die Theorie der Bessel'schen Funktionen*, v. 1, Bern, 1898, p. 130.

[5] N. NIELSEN, *Handbuch der Theorie der Cylinderfunktionen*, Leipzig, 1904, p. 360.

[6] W. KAPTEYN, *Archives Néerlandaises d. Sci. exactes et nat.*, s. 2, v. 11, 1906, p. 149, 168.

[7] A. R. FORSYTH, *Mess. Math.*, s. 2, v. 50, 1920, p. 135.

[8] G. N. WATSON, *A Treatise on the Theory of Bessel Functions*, Cambridge, 1922 or 1944, p. 502.

QUERIES

13. TABLES OF INTEGRALS.—We are now interested in evaluating integrals of the following forms: $\int_x^\infty e^{-t}dt/t^n$, $\int_x^\infty e^{-t^2}dt/t^{2n}$. Are there published tables of these functions? MELVIN MOONEY

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EDITORIAL NOTE: Among many tables of $\int_x^\infty e^{-t}dt/t = -Ei(-x)$ reference may be given to NYMTP, *Tables of Sine, Cosine and Exponential Integrals*, 2v., 1940, for x = [0(.0001)1.9999; 9D], [0(.001)10; 9S], [10(.1)15; 14D]. There are useful Bibliographies in the volumes. When n is a positive integer $\int_x^\infty e^{-t}dt/t^n$ may be made to depend upon $Ei(-x)$. For the cases $n = +2(-1) - 2$ tables were published by W. L. Miller & T. R. Rosebrugh, R. So. Canada, *Proc. and Trans.*, series 2, section III, v. 9, 1903, p. 80–101, for x = [.1(.001)1(.01)2; 9D]. There are also tables (p. 80–81) of $-\int_x^\infty e^{-t}dt/t^2 + 1/x + \ln x$, and $-\int_x^\infty e^{-t}dt/t - \ln x$, for x = [0(.001).1; 9D]. In the case of the second integral, when $n = 0$ we have the error function of which the most extensive table is that of A. A. MARKOV, *Table des Valeurs de l'Intégrale* $\int_x^\infty e^{-t^2}dt$, St. Petersburg, 1888, for x = [0(.001)3(.01)4.8; 11D] with Δ^3; see *MTAC*, p. 136. However a more extensive table of the closely related function $H(x) = \frac{2}{\sqrt{\pi}}\int_0^x e^{-t^2}dt$ has been published in NYMTP, *Tables of Probability Functions*, v. 1, 1941, x = [0(.0001)1(.001)5.6; 15D]. This table can be used to evaluate the above integral by means of the relation $\int_x^\infty e^{-t^2}dt = \frac{\sqrt{\pi}}{2}[1 - H(x)]$. Are there other tables of the first function than for $-2 > n > 2$, and of the second for $n \neq 0$?

QUERIES—REPLIES

14. TABLES OF $N^{3/2}$ (Q **5**, p. 131; QR **8**, p. 204; **11**, p. 336; **13**, p. 375).—We have ms. tables, to 10S, as follows for:

N = 100(1)1000, 1000(10)10 000, 1005(10)1565, and also
N = [1.0001(.0001)1.0099; 9D].