Computation Laboratory of Harvard University has prepared these tables of certain Bessel functions. The functions here given are $J_n(x)$, $n=0$, 1, 2, and 3. It is hoped to publish, during the coming years, tables for integral values of n ranging up to 100. In the present volumes the functions are given to 18 figures. For the range $0<x<25$, tabulation was carried out with the interval of the argument equal to 0.001. For $25<x<100$ the argument interval is 0.01. The computer originally gave the results to 23 places which were then rounded off to 18 for publication. Various checks such as differencing devices and comparison with older tables suggest that the probability of correctness of these values to 3 units in the 23rd place is very high.

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Table des solutions de la congruence $x^4+1\equiv 0$ (mod. p) *pour* 350.000 $<p<$ 500.000. By A. Gloden. Luxembourg, 1946. 40 pp. 50 fr.

The congruence $x^4+1\equiv 0(p)$ has solutions only for primes of the form $p=8k+1$. For such primes one solves the two congruences $l^2+1\equiv 0(p)$ and $2m^2+1\equiv 0(p)$ and then the four roots of the original congruence are $m(l\pm 1)$, $-m(l\pm 1)$. The author tabulates here the two smaller of these roots for primes ranging from 350,000 to 500,000. For $p<350{,}000$ the results have been compiled by other computers. One of the applications of these tables is to the factorization of numbers of the form x^4+1.

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Tables of spherical Bessel functions. Vol. 1. Prepared by the Mathematical Tables Project, National Bureau of Standards. New York, Columbia University Press, 1947. 28+379 pp. $7.50.

The Mathematical Tables Project presents here tables of the Bessel functions of order $n+1/2$ where n is an integer. More precisely, it is the functions $(\pi/2x)^{1/2}J_{n+1/2}(x)$ which are tabulated. These functions arise in the separation of the wave equation for certain types of coordinate systems. Strangely enough, no adequate tables had been available previous to this publication. We have here 28 tables corresponding to $n+1/2=\pm 1/2, \pm 3/2, \cdots, \pm 27/2$. The entries are given to 8, 9, or 10 significant figures for $x\leqq 10$ and to 7 figures for $x>10$. The argument range is $0<x<10$ in intervals of 0.01 and $10<x<25$ in intervals of 0.1. Second central differences are also tabulated except near $x=0$.

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