where

$$(10)\qquad \begin{cases} M_2 = -\mu_2'/\sqrt{(\sigma_2')^2 + 1} \\ M_3 = -\mu_3'/\sqrt{(\sigma_3')^2 + 1} \\ \dfrac{1}{r} = \sqrt{(\sigma_3')^2 + 1} \quad \sqrt{(\sigma_2')^2 + 1}\,. \end{cases}$$

Equation (10) gives the volume under the bivariate normal probability surface with correlation coefficient r. These volumes are tabulated in [1].

AVCO Research and Advanced Development
Wilmington, Massachusetts

1. NBS Applied Mathematics Series, No. 50, *Tables of the Bivariate Normal Distribution Function and Related Functions*, U. S. Government Printing Office, Washington, D. C. 1959.

The Congruence $2^{p-1} \equiv 1 \pmod{p^2}$ for $p < 100{,}000$

By Sidney Kravitz

Fröberg has previously announced [1] the computation of the Fermat remainders corresponding to all odd primes less than 50,000. His results show that $p = 1093$ and $p = 3511$ are the only solutions of the congruence $2^{p-1} \equiv 1 \pmod{p^2}$ in that range.

The residues of $2^{p-1} \pmod{p^2}$ have been computed for $50{,}000 < p < 100{,}000$ on an IBM 650 system at Picatinny Arsenal. No residue congruent to 1 was found corresponding to a prime in this range.

A copy of the table of residues has been deposited in the Unpublished Mathematical Tables file.

Picatinny Arsenal
Dover, New Jersey

1. C. E. Fröberg, "Some Computations of Wilson and Fermat Remainders," *MTAC*, v. 12, 1958, p. 281.

Editorial Note: Reference should also be made to:

1. W. Meissner, "Uber die Teilbarkeit von $2^p - 2$ durch das Quadrat der Primzahl $p = 1093$," Akad. d. Wiss, Berlin, *Sitzungsb.*, v. 35, 1913, p. 663–667
2. N. G. W. H. Beeger, "On a new case of the congruence $2^{p-1} \equiv 1 \pmod{p^2}$," *Messenger Math.*, v. 51, 1922, p. 149–150.

Received April 14, 1960.