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CORRECTION TO THE PAPER "A THEOREM IN ADDITIVE NUMBER THEORY"

(Colloquium Mathematicum 20 (1969), p. 53-56)

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The author has himself found some errors in the paper. Here is a list of them.

Page 54, line 4 from bottom: For $k = 5$, 16 is not a k^{th}-power residue of 31. 16 may, however, be replaced by 0 giving $t \equiv 0 \pmod{31}$. This correction is not needed for $k > 5$.

Page 54, line 1 from bottom: 37 should be 39. Also the congruences 15 (mod 16) and 71 (mod 80) should be added. The resulting additions and alteration can easily be made by the reader.

The "overlapping" congruence system 0 (mod 2), 1 (mod 4), 3 (mod 8), 7 (mod 16), 15 (mod 32), 31 (mod 64), 63 (mod 64) will suffice for any particular (prime) $k \geqslant 3$; the details are easily carried out by the methods used.

Page 55, footnote ([2]): Quite valid but to remove any possible misunderstanding, the emphasis in the second line is entirely on *not necessary*. It is, of course, this fact that, to preserve uniformity of argument, is not used.

Page 55, lines 18 and 19 together with footnote ([3]) imply that 2 is a quadratic residue of 3. While this is false, 2^{a_i} $(= 1)$ is a quadratic residue of 3, which, strictly speaking, is all that is needed here. (That is, the supposition in the first line of page 54 may be relaxed slightly; the end of the second line and the rest of the first section on this page, as well as footnote ([2]), imply and were meant to imply this. The same relaxation, of course, applies to the word "must" in the second line of section 2 on page 54.)

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