

Sequence N235

2822

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March 26, 1984

Dr. Neil J.A. Sloane
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Dear Neil:

In your Handbook of Integer Sequences, the reference you give to #235 is to LeVeque's book on Number Theory, published in 1956. (The problem is the set of positive integers n not of the form $6ab+a+b$, and its relationship to the set of twin primes.) An earlier reference, and the earliest one I have been able to locate after years of searching to see if there is any earlier, is to the American Mathematical Monthly, vol. 58, no. 5, May, 1951, p. 338, Elementary Problem No. E 969, proposed by Solomon W. Golomb. This was my first mathematical "publication", based on a "discovery" I made in 1949 around the time of my seventeenth birthday, and submitted in 1950 at the suggestion of one of my instructors at Johns Hopkins (Albert B.J. Novikoff), who first told me of the existence of the Monthly. The Solution was published in January, 1952, p. 44. The published solution (the same as mine or anyone else's) is attributed to Azriel Rosenfeld, and at the end it says "Also solved by the proposer". No other solutions were submitted, and no one claimed it was a known result or had ever appeared anywhere else.

There are many subsequent appearances, the earliest being around 1954 in Riveon Le Matematika; then in LeVeque's 1956 book; and in a collection of Number Theory problems compiled by Sierpinski (A Selection of Problems in the Theory of Numbers, Pergamon Press and Polish Scientific Publishers, 1964, problem P₉₆² on page 120).

When I wrote to LeVeque around 1960 about giving proper credit for this problem, I got a very curt answer in reply that he couldn't spend the time tracking down the earliest appearance of each problem in his book. Even supplied with a reference, he was not willing to use it in subsequent editions. The net effect is the same as plagiarism, since he is credited with origination in such books as your Handbook.

For the past seven years, I have been offering a prize of \$100 to anyone who can produce an earlier published reference to the $n \neq 6ab+a+b$ formulation of the twin prime problem. There have been no takers. It's not a proof of the Riemann Hypothesis, but it is my earliest mathematical publication, and I believe I should get credit until or unless an earlier reference can be found.

Sincerely yours,



Solomon W. Golomb

SWG/ay



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April 27, 1984

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Dear Sol:

Thanks for your letter of March 26. Your comment
about Sequence 235 has been duly noted!

With best wishes,

NJAS:jb

N. J. A. Sloane