HARMONIC SEEDS: ERRATA

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A natural number n is harmonic if its positive divisors have integral harmonic mean H(n). In our paper [1], we gave an algorithm for determining all harmonic squarefree multiples of a given harmonic number, based on our concept of a harmonic seed, but our program to implement the algorithm was faulty.

Table 1 in [1] listed all harmonic seeds less than 10^{12} . The most prolific of these in producing harmonic squarefree multiples is 513480135168, as stated in [1], but there are 227 such multiples, not 216. The largest is N_1 , as given in [1].

We wrote also of the harmonic squarefree multiples of the largest known 4-perfect number,

 $N_2 = 2^{37} 3^{10} 7 \cdot 11 \cdot 23 \cdot 83 \cdot 107 \cdot 331 \cdot 3851 \cdot 43691 \cdot 174763 \cdot 524287.$

This has **320** harmonic squarefree multiples (not 169 as given in [1]), the largest of which (replacing the corresponding statement in [1]) is

 $N_3 = N_2 \cdot 31 \cdot 37 \cdot 43 \cdot 61 \cdot 487 \cdot 3181 \cdot 25447 \cdot 50893 \cdot 49569781 \cdot 99139561$ $\approx 1.93 \cdot 10^{82}.$

with $H(N_3) = 99139561$.

Reference

 G. L. Cohen & R. M. Sorli. "Harmonic Seeds." The Fibonacci Quarterly 36.5 (1998):386-90.

Author and Title Index

The TITLE, AUTHOR, ELEMENTARY PROBLEMS, ADVANCED PROBLEMS, and KEY-WORD indices for Volumes 1-38.3 (1963-July 2000) of *The Fibonacci Quarterly* have been completed by Dr. Charles K. Cook. It is planned that the indices will be available on The Fibonacci Web Page. Anyone wanting their own disc copy should send two 1.44 MB discs and a self-addressed stamped envelope with enough postage for two discs. PLEASE INDICATE WORDPERFECT 6.1 OR MS WORD 97.

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