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~~Wagner Dymacek~~

Wagno Dymacek
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VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Blacksburg, Virginia 24061

DEPARTMENT OF MATHEMATICS

June 15, 1978

N. J. A. Sloane
Mathematics Research Center
Bell Telephone Laboratories, Inc.
Murray Hill, New Jersey   07974

Dear Mr. Sloane:

Your Handbook of Integer Sequences is unique and
very interesting. I enjoyed it.

One sequence that I could not find in it, is the
sequence of practical numbers. A natural number n is
practical if an only if for all $k \leq n$, k is a sum of
distinct divisors of n. These numbers were first defined
by A. K. Srinivasan, Practical Numbers, Current Science,
17, (1948), 179-180. Necessary and sufficient conditions
were given by B. M. Stewart, Sums of Distinct Divisors,
Am. J. Math., 76,(1954),779-785. Another reference is
Ross Honsberger's Mathematical Gems.

There is no list of these numbers in Stewart or
Hanberger papers and I have not been able to find
Srinivasan's paper. The first few practical numbers
are
    1,2,4,6,8,12,16,18,20,24,28,30,32,36,40,42,48,54,
56,60,64,66,72,78,80,84,88,90,96,100 . . .

Sincerely,

Wayne M. Dymacek

Dr   Wayne M. Dymacek

WMD/rjr