

No general formula for the n^{th} difference series seems to exist.

REFERENCE

1. Joseph S. Madachy, "Recreational Mathematics — 'Difference Series' Resulting from Sieving Primes," Fibonacci Quarterly, 7 (1969), pp. 315-318.



[Continued from p. 346.]

If n is not divisible by 11, 13, or 17, then $p_2 < 19 \leq p_3$. Taking $q = 19$ in (3.0), we have

$$\sum_{p|n} \frac{1}{p} > \frac{1}{3} + \frac{1}{5} + \frac{\log(16/15)}{19 \log(19/18)} > \frac{1}{3} + \frac{1}{5} + \frac{1}{17} + \frac{\log(256/255)}{257 \log(257/256)}.$$

This completes the proof of the lower bound for (C) and also that of the new parts of Theorem 1.

REFERENCES

1. L. E. Dickson, History of the Theory of Numbers, Vol. 1, New York, 1934.
2. U. Kühnel, "Verschärfung der notwendigen Bedingungen für die Existenz von ungeraden vollkommenen Zahlen," Math. Zeit. 52 (1949), 202-211.
3. M. Perisastry, "A Note on Odd Perfect Numbers," Math. Student, 26 (1958), 179-181.
4. D. Suryanarayana and N. Venkateswara Rao, "On Odd Perfect Numbers," Math. Student, 29 (1961), 133-137.
5. D. Suryanarayana, "On Odd Perfect Numbers, II," Proc. Am. Math. Soc., 14 (1963), 896-904.
6. J. Touchard, "On Prime Numbers and Perfect Numbers," Scripta Math., 19 (1953), 35-39.

