



Addendum: The Factorization of the Ninth Fermat Number

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ADDENDUM

A. K. LENSTRA, H. W. LENSTRA, JR., M. S. MANASSE & J. M. POLLARD,
The factorization of the ninth Fermat number, *Math. Comp.* **61** (1993),
319–349.

In Section 1 of this article we questioned the wisdom of using numbers obtained from the digits of π as test numbers for factoring algorithms. In this context it is of interest to observe that Gauss uses the number $314159265 = [10^8\pi]$ to illustrate factoring methods (see [19, Art. 329]). This was pointed out by D. Shanks, who supplied the revised reference [44] as printed. Gauss uses also the number $43429448 = [10^8/\log 10]$ and its factors in his examples (see [19, Arts. 325, 328.I, 329]), as well as the numerator of a continued fraction approximation to π (see [19, Art. 328.II]). Any reader who wishes to follow in Gauss's footsteps will find a plentiful supply of digits of π in our original reference [44]:

D. Shanks and J. W. Wrench, Jr., *Calculation of π to 100,000 decimals*,
Math. Comp. **16** (1962), 76–99.

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