is odd. Thus half the members of GF*(p) which are quadratic residues mod p would be squares and the remaining half are not. If $p \equiv 1 \pmod 4$, it is well known that (-1) is a quadratic residue mod p and hence is a square. If $p \equiv 3 \pmod 4$, then (-1) is a quadratic non-residue mod p and therefore is not a square. In this case -1 is the sum of two squares, which easily follows from (3) or (4).

REFERENCES

1. G H. Hardy and E. M. Wright, An Introduction to the Theory of Numbers, Oxford University Press, London, 1965.
2. P. Chowla and S. Chowla, "Determination of the Stufe of Certain Cyclotomic Fields," Journal of Number Theory, Vol. 2 (1970), pp. 271-272.
3. Albert Pfister, "Zur Darstellung Von — I Als Summe Von Quadraten in einem Körper," Journal of London Math. Society, Vol. 40 (1965), pp. 159-165.
4. Sahib Singh, "Decomposition of Each Integer as Sum of Two Squares in a Finite Integral Domain," to appear in the Indian Journal of Pure and Applied Mathematics.
5. B. L. Van Der Waerden, Algebra, Vol. 1, Frederick Ungar Pub. Co., N. Y., 1970.

(Continued from page 79.)

(i) $$L_n = \prod_{k=1}^{[n/2]} (\omega^{2k-1} + 3 + \omega^{-2k+1})$$

(ii) $$F_n = \prod_{k=1}^{[n/2]} (\omega^{2k} + 3 + \omega^{-2k}) .$$

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FIBONACCI CURIOSITY

The THIRTEENTH PERFECT NUMBER is built on the prime $p = 521 = L_{13}$

$$2^{520}(2^{521} - 1) .$$

Brother Alfred Brousseau