Correction to the paper "On a conjecture of D. H. Lehmer", Acta Arith. 42 (1982), pp. 97-100

by

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John Dixon has pointed out to us that our statement "If \( p_1 = p_2 = p \), then \( \theta_1 \theta_2 \) is a \( p \)th root of unity and \( M(\theta) = M(\theta^p) \) where \( \theta^p \) is an algebraic integer of degree \( \frac{d}{p} \)" is incorrect.

This in no way invalidates our theorem or its proof. However we have to resort to Lemma 3 of Dobrowolski's paper (Acta Arithmetica, 34 (1979), p. 385) which implies that the number of primes \( p \) for which there exist distinct conjugates \( \theta_1, \theta_2 \) with \( \theta_1^p = \theta_2^p \) cannot exceed \( \log d / \log 2 \).

Since the number of primes in our estimation is \( \sim \frac{1}{2} (\log d / \log \log d) \), the omission of \( \log d / \log 2 \) of these primes will not affect the estimates of the norm of the generalized Vandermonde or the magnitude of its divisor.

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