Title: The flatness of a class of ternary cyclotomic polynomials

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Recently, there has been much progress in our understanding of the flatness of ternary cyclotomic polynomials, but a complete classification is not known. Let $p < q < r$ be odd primes such that $q \equiv \pm 1 \pmod{p}$ and $zr \equiv \pm 1 \pmod{pq}$. The cases $1 \leq z \leq 6$ have been thoroughly investigated. In this paper, we concentrate on the case $z = 7$, giving a classification of the cases for which $A(pqr) = 1$. We also present some results about the coefficients of $\Phi_{pqr}(x)$ for the general cases of $z$.

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