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J. Larry Lehman* (llehman@umw.edu), Department of Mathematics, University of Mary Washington, 1301 College Avenue, Fredericksburg, VA 22401. *A Formula for the Number of Solutions of an Arbitrary Quadratic Congruence.*

Let $f(x) = ax^2 + bx + c$ be a primitive polynomial and let m be a positive integer. We establish a formula for the number of solutions of the quadratic congruence $f(x) \equiv 0 \pmod{m}$ that depends only on $\Delta(f) = b^2 - 4ac$ and on the prime factorization of m . The proof of this formula is a straightforward inductive argument, using the concept of a *p-seeding polynomial* for $f(x)$, in cases where p^2 divides $\Delta(f)$. (Received September 19, 2016)