1086-VO-2911 **David B. Erf*** (david.erf@pomona.edu) and **Jody Ryker**. *Torsion of Elliptic Curves over Quadratic Fields.*

We present strategies for determining the structure of the torsion subgroup of the Mordell-Weil group of an elliptic curve, E, over quadratic fields. We will use generalizations of the Nagel-Lutz theorem and Mazur's theorem on curves defined over quadratic fields to demonstrate strategies for determining the full torsion subgroup of $E(K)$ for quadratic fields K. Finally, we present an original result describing the possible torsion structures over any quadratic field, K, for the family of elliptic curves given by $E : y^2 = x^3 + a$, for integer a.

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