1014-11-746   **Edward B Burger*** (`eburger@williams.edu`), Department of Mathematics, Williams College, Williamstown, MA 01267. *Expressing real quadratic irrationals as period-two continued fractions and their connections with diophantine approximation.*

Here we show that every real quadratic irrational number can be expressed as a continued fraction expansion having period one or two. We also compare the rational approximations generated by trunction of this continued fraction to the best rational approximates associated with the quadratic. (Received September 23, 2005)