

ABSTRACT. We consider the Diophantine equation of the form $x^2 - Dy^2 = \pm 4$, where D is a positive integer that is not a perfect square, and provide a generalization of results of Lagrange with elementary proofs using only basic properties of simple continued fractions. As a consequence, we achieve a completely general, simple criterion for the central norm to be 4 associated with principal norm 8 in the simple continued fraction expansion of \sqrt{D} .