Pell Equations: Non-Principal Lagrange Criteria and Central Norms

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Abstract. We provide a criterion for the central norm to be any value in the simple continued fraction expansion of $\sqrt{D}$ for any non-square integer $D > 1$. We also provide a simple criterion for the solvability of the Pell equation $x^2 - Dy^2 = -1$ in terms of congruence conditions modulo $D$. 

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