

Title: On the number of solutions of binomial Thue inequalities

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Let a , b and n be positive integers with $n \geq 3$ and consider the binomial Thue inequality $|ax^n - by^n| \leq 3$. In this paper, we extend a result of the first author [?] and prove that, apart from finitely many explicitly given exceptions, this inequality has at most a single solution in positive integers x and y . In the proof, we combine lower bounds for linear forms in logarithms of algebraic numbers with the hypergeometric method of Thue–Siegel and an assortment of techniques from computational Diophantine approximation.

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