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**Title:** On binomial Thue equations and ternary equations with  $S$ -unit coefficients

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In this paper we obtain some new results for a collection of equations of the form (2)  $Ax^n - By^n = \pm 1$  resp. (3)  $Ax^n - By^n = z^m$  with  $m \in \{3, n\}$ , where  $x, y, z, A, B, n$  are unknown nonzero integers such that  $n \geq 3$  is a prime and  $AB$  is composed of two fixed primes. We prove among other things that under certain conditions formulated in Section 2, equations (3) have no solutions with  $|xy| > 1$ ,  $Ax, By$  and  $z$  coprime and  $n > 13$  (cf. Theorems 2 to 4). Combining this with some other results and techniques, we establish a similar result for equations (2) (cf. Theorem 1).

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