

**ERRATA TO “ON SECOND 2-DESCENT AND
NON-CONGRUENT NUMBERS” (ACTA ARITH. 170.4 (2015),
343–360)**

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The “In particular” part of Corollary 2.9 is not true. In the proof of this corollary, the statement on page 356, line 7, is not correct. The image space of \mathbf{A} may be not a subspace of $x_1 + \cdots + x_k = 0$, since this is equivalent to $\mathbf{A}^T \vec{\mathbf{1}} = \vec{\mathbf{0}}$ but we only have $\mathbf{A} \vec{\mathbf{1}} = \vec{\mathbf{0}}$. The above statement does hold if each odd prime factor of n is congruent to 1 modulo 8.

This error requires the following corrections:

- Theorem 1.1(2): Assume $m \equiv 1 \pmod{8}, p_i \equiv 1 \pmod{8}$.
- Example 1.3(2) should be removed.
- Page 356 line 2, $p \equiv 1 \pmod{8}$.

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