

Correction to: Good integers and some applications in coding theory

Somphong Jitman¹

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Proposition 2.1 and Proposition 2.3 in the original publication are incorrectly worded and they should be as follows.

Proposition 2.1 *Let a and b be coprime odd integers and let $\beta \geq 1$ be an integer. Then the following statements are equivalents.*

- i) $2^\beta \in G_{(a,b)}$.
- ii) $2^\beta | (a + b)$.
- iii) $ab^{-1} \equiv -1 \pmod{2^\beta}$.

Proposition 2.3 *Let a, b and $d > 1$ be pairwise coprime odd positive integers and let $\beta \geq 2$ be an integer. Then $2^\beta d \in G_{(a,b)}$ if and only if $2^\beta | (a + b)$ and $d \in G_{(a,b)}$ is such that $2 || \text{ord}_d(\frac{a}{b})$. In this case, $\text{ord}_{2^\beta}(\frac{a}{b}) = 2$ and $2 || \text{ord}_{2^\beta d}(\frac{a}{b})$.*

As a consequence of the above corrections, the bullets (c) and (d) of Theorem 2.1 and Theorem 3.1 in the original paper should be rewritten as follows.

- (c) $\beta \geq 2, d = 1$ and $2^\beta | (a + b)$.
- (d) $\beta \geq 2, d \geq 3, 2^\beta | (a + b)$ and $d \in G_{(a,b)}$ is such that $2 || \text{ord}_d(\frac{a}{b})$.

The above rewordings do not affect any other result given in the paper.

The readers may refer to <http://www.math.sc.su.ac.th/web3/files/somphong/J-Correction-GoodIntegers.pdf> for a full discussion.

The online version of the original article can be found under <https://doi.org/10.1007/s12095-017-0255-4>

✉ Somphong Jitman
sjitman@gmail.com

¹ Department of Mathematics, Faculty of Science, Silpakorn University, Nakhon Pathom 73000, Thailand