Definition: Least Common Multiple

Given two numbers $a, b \in \mathbb{Z}$ the least common multiple of them is a number $\operatorname{lcm}(a, b)$ such that

- $a \mid \operatorname{lcm}(a, b)$

- $b \mid \operatorname{lcm}(a, b)$

- *And for any other $k \in \mathbb{Z}$ where $k < \operatorname{lcm}(a, b)$, then*
$$(a \nmid k) \vee (b \nmid k)$$

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