

## Definition: Least Common Multiple

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

- $a \mid \text{lcm}(a, b)$
- $b \mid \text{lcm}(a, b)$
- And for any other  $k \in \mathbb{Z}$  where  $k < \text{lcm}(a, b)$ , then

$$(a \nmid k) \vee (b \nmid k)$$