## Definition

If $a$ and $b$ are integers, then $b$ divides $a$, if and only if there is an integer $c$ such that $\boldsymbol{a}=\boldsymbol{c b}$

There is a difference in $b \mid a$ and $b / a$
$b \mid a$ is a relation that is either true or false.
$b / a$ is an operation, it has a numerical value
$0 / 0$ is undefined
$0 \mid 0$ is a true statement because $0 a=0$ for all integers $a$

