

Asymptotická složitost:

$f \in \Omega(g) \rightarrow$ algoritmus lze zdola odhadnout funkcí g

$f \in O(g) \rightarrow$ algoritmus lze shora odhadnout funkcí g



musíme provést, řešení musí být O

$$f \in O(g) \Leftrightarrow \exists c > 0, \exists n_0, \forall n > n_0: 0 \leq f(n) \leq c \cdot g(n)$$

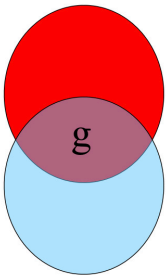
$$f \in \Theta(g) \Leftrightarrow f \in O(g) \wedge f \in \Omega(g)$$

Theta

O

Omega

- The Sets big oh $O(g)$, big theta $\Theta(g)$, big omega $\Omega(g)$



$\Omega(g)$: functions that grow **at least as fast** as g

$\Theta(g)$: functions that grow **at the same rate** as g

$O(g)$: functions that grow **no faster** than g

$$f \in \Omega(g) \Leftrightarrow \exists c > 0, \exists n_0 \in \mathbb{N}: \forall n > n_0: 0 < c \cdot g(n) \leq f(n)$$