

$$f \sim g \Rightarrow \lim_{n \rightarrow \infty} \frac{f}{g} = 1 \Rightarrow f = O(g)$$

$$f = o(g) \Rightarrow \lim_{n \rightarrow \infty} \frac{f}{g} = 0 \Rightarrow f = O(g)$$

$$f = O(g) \Rightarrow \text{sic } \exists c \in \mathbb{R}_{>0} \text{ e } \exists N \in \mathbb{N} \text{ tali che}$$

$$|f(n)| \leq c \cdot g(n)$$

$$f = \Omega(g) \Rightarrow \text{sic } \exists c \in \mathbb{R} \text{ e } \exists N \in \mathbb{N} \text{ tali che}$$

$$g(n) \leq c \cdot f(n)$$

$$f = O(g) \iff g = \Omega(f)$$

$$f = \Theta(g) \text{ sic } f = O(g) \text{ e } f = \Omega(g)$$

