

Notazioni asintotiche

$$O(g(n)) = \{f(n) \mid \exists c, n_0 . \forall n \geq n_0 . 0 \leq f(n) \leq cg(n)\}$$

$$\Omega(g(n)) = \{f(n) \mid \exists c, n_0 . \forall n \geq n_0 . 0 \leq cg(n) \leq f(n)\}$$

$$\begin{aligned}\Theta(g(n)) &= \{f(n) \mid \exists c_1, c_2, n_0 . \forall n \geq n_0 . 0 \leq c_1g(n) \leq f(n) \leq c_2g(n)\} \\ &= \{f(n) \mid f(n) = O(g(n)) \wedge f(n) = \Omega(g(n))\}\end{aligned}$$

$5n^3 - 6n^2 + 34 = O(n^3)$ ha un *tasso di crescita* cubico.