# Ω-notation (lower bounds)

*O*-notation is an *upper-bound* notation. It makes no sense to say $f(n)$ is at least $O(n^2)$.

$$\Omega(g(n)) = \{\, f(n) : \text{there exist constants } c > 0, n_0 > 0 \text{ such that } 0 \le cg(n) \le f(n) \text{ for all } n \ge n_0 \,\}$$