Definitions of Asymptotic Measures

\[ g(n) = O(f(n)) \] iff we can find constants \( c \) and \( n_0 \) such that \( g(n) \leq c \cdot f(n) \), for all \( n > n_0 \)

\[ g(n) = \Omega(f(n)) \] iff we can find constants \( c \) and \( n_0 \) such that \( g(n) \geq c \cdot f(n) \), for all \( n > n_0 \)

\[ g(n) = \Theta(f(n)) \] iff we can find constants \( c_1, c_2 \) and \( n_0 \) such that \( g(n) \geq c_1 \cdot f(n) \), for all \( n > n_0 \) and \( g(n) \leq c_2 \cdot f(n) \), for all \( n > n_0 \)