**Θ-notation**

Θ(*g*(*n*)) = {*f*(*n*) : there exist positive constants *c*1, *c*2, and *n*0 such that 0 ≤ *c*1*g*(*n*) ≤ *f*(*n*) ≤ *c*2*g*(*n*) for all *n* ≥ *n*0}

#### *O*-notation

*O*(*g*(*n*)) = {*f*(*n*): there exist positive constants *c* and *n*0 such that 0 ≤ *f*(*n*) ≤ *cg*(*n*) for all *n* ≥ *n*0}

**Ω-notation**

Ω(*g*(*n*)) = {*f*(*n*): there exist positive constants *c* and *n*0 such that 0 ≤ *cg*(*n*) ≤ *f*(*n*) for all *n* ≥ *n*0}

***o*-notation**

*o*(*g*(*n*)) = {*f*(*n*) : for any positive constant *c* > 0, there exists a constant *n*0 > 0 such that 0 ≤ *f*(*n*) < *cg*(*n*) for all *n* ≥ *n*0}

***ω*-notation**

*ω*(*g*(*n*)) = {*f*(*n*): for any positive constant *c* > 0, there exists a constant *n*0 > 0 such that 0 ≤ *cg*(*n*) < *f*(*n*) for all *n* ≥ *n*0}

