

**Exercise 3.1-8:**

$$\Omega(n, m) = \{f(n, m) : \exists c, n_0, m_0 > 0, \text{ s.t. } \forall n \geq n_0 \text{ or } m \geq m_0,$$

$$f(n, m) \geq cg(n, m)\}$$

$$\Theta(n, m) = \{f(n, m) : \exists c_1, c_2, n_0, m_0 > 0, \text{ s.t. } \forall n \geq n_0 \text{ or } m \geq m_0,$$

$$c_1g(n, m) \leq f(n, m) \leq c_2g(n, m)\}$$