**The Primitive Recursive Functions:**

1) The *initial functions* are primitive recursive:
   
   (a) The *zero function* defined by
   \[ 0(n) = 0, \quad \forall n \in \mathbb{N}, \]

   (b) The *successor function* defined by
   \[ n' = n + 1, \quad \forall n \in \mathbb{N}, \]

   (c) The *projection functions* \( U_i^k \) defined by
   \[ U_i^k(\overrightarrow{m}) = m_i, \quad \text{each } i = 1, \ldots, k, \]
   
   (where \( \overrightarrow{m} = m_1, \ldots, m_k \)).

2) If \( g, h, h_0, \ldots, h_l \) are primitive recursive, then so is \( f \) obtained from \( g, h, h_0, \ldots, h_l \) by one of the rules:

   (d) *Substitution*, given by:
   \[ f(\overrightarrow{m}) = g(h_0(\overrightarrow{m}), \ldots, h_l(\overrightarrow{m})), \]

   (e) *Primitive recursion*, given by:
   \[ f(\overrightarrow{m}, 0) = g(\overrightarrow{m}), \]
   \[ f(\overrightarrow{m}, n + 1) = h(\overrightarrow{m}, n, f(\overrightarrow{m}, n)). \]