

**Definition** The function  $append : L \times \mathbb{N} \rightarrow L$  that adds an element at the end of a linked list is defined by

Basis Step: If  $m \in \mathbb{N}$  then

Recursive Step: If  $l \in L$  and  $n \in \mathbb{N}$  and  $m \in \mathbb{N}$ , then