### Definition: Union of Sets

. This is read “ union .”

The set thus consists of all elements that occur in or in (or both sets). It should be noted that sets generally never contain duplicate elements. This means that even an element that occurs in both sets and is only contained once in . Let ∧ x ∈ N}M and N be sets. Then we define the intersection of M N M and N as M ∩ N := {x|x ∈ M