We will say that sets *A* and *B* are equal, written as *A* = *B* if they have the same elements. That is, if, and only if, every elements of *A* is contained also in *B* and every elements is *A*. in symbols :

$$x \in A \Leftrightarrow x \in B$$

We say that a set *A* is a subset of another set *B*, if every elements of *A* is also an element of *B*, that is, when the following is verified :

$$x \in A \Rightarrow x \in B$$

Whatever the elements x is. In this case, it is written

$$A \subseteq B$$

Note that by definition, the possibility that if *A*, *B* then *A* = *B* is not excluded. If *B* has at least one elements not belonging to *A*, but if every element of d *A* is an element of *B*, then we say that *A* is a proper subset of *B*.