



### Definition

Given a set  $A$  of a topological space, a point  $x$  is said to be *in the closure of  $A$*  if, for each neighborhood  $N$  of  $x$ ,  $N \cap A \neq \emptyset$ . The *closure* of  $A$  is the set of such points.

### Notation

The closure of a set  $A$  of a topological space is denoted  $\bar{A}$ .



