

## Definition: Closure of a Set

Given  $S \subseteq \mathbb{R}^n$  the closure of  $S$  is

$$\overline{S} \stackrel{\text{D}}{=} \{x \in \mathbb{R}^n : \forall \varepsilon \in \mathbb{R}^{>0}, B(x, \varepsilon) \cap S \neq \emptyset\}$$