Corollary 6.25. *[20M](Proposed on 2022-11-24) Having fixed $A \subseteq \mathbb{R}$ not empty, then $\inf A$ is the only number $\alpha \in \mathbb{R} \cup \{-\infty\}$ which satisfies these two properties*

$$\forall x \in A, x \geq \alpha$$
$$\forall h > \alpha, \exists x \in A, x < h$$