Logic questions

Which of the sets S below satisfy the property that $\exists x \in S$ s.t.
$\forall y \in S, x \neq y \rightarrow x < y$

- $S = \mathbb{Z}$
- $S = \mathbb{R}^+$
- $S = \mathbb{Z}^+$
- $S = \{-3, 4, 5\}$