

## Exercises

E4.31 [277] Prerequisites: [276], [26H]. Using the properties in [26H] and assuming that  $\leq$  is a total order relation (as will be proven), prove that

$$\forall n, m \in \mathbb{N}, (n < m) \Rightarrow (Sn < Sm) \quad .$$

**Solution 1.** [278]