

## **sorted-cons**<sup>11,40</sup>

$\forall T:\text{Type}.$

$\text{subtype\_rel}(T; \mathbb{Z})$

$\Rightarrow (\forall x:T, L:(T \text{ List}). \text{sorted}(\text{cons}(x; L)) \iff (\text{sorted}(L) \wedge \text{L.all}(L; T; z.(x \leq z))))$