

## **linorder\_lt\_neg**<sup>13,42</sup>

$\forall T:\text{Type}, R:(T \rightarrow T \rightarrow \mathbb{P}).$   
 $(\forall x, y:T. \text{Dec}(R(x,y)))$   
 $\Rightarrow \text{Linorder}(T;x,y.R(x,y))$   
 $\Rightarrow (\forall a, b:T. (\neg \text{strict\_part}(x,y.R(x,y);a;b)) \iff R(b,a))$