

**member-ite**<sup>11,40</sup>

$\forall b:\mathbb{B}, T:\text{Type}, A, B:(T \text{ List}), x:T.$

$(x \in \text{if } b \text{ then } A \text{ else } B \text{ fi}) \iff (((\uparrow b) \ \& \ (x \in A)) \vee ((\neg(\uparrow b)) \ \& \ (x \in B)))$