

## preserved\_by2<sup>4,23</sup>

(ternary)  $R$  preserves  $P \equiv_{\text{def}} \forall x, y, z:T. P(x) \Rightarrow P(y) \Rightarrow R(x,y,z) \Rightarrow P(z)$

*clarification:*

$\text{preserved\_by2}(T;R;P) \equiv_{\text{def}} \forall x:T. \forall y:T, z:T. P(x) \Rightarrow P(y) \Rightarrow R(x,y,z) \Rightarrow P(z)$