

t27\_xxreal\_3 (TMQLkA-  
mXYL3omXVWGaJBF46MPMYnbuQYRpb)

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Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k2\_xxreal\_3 : \iota \Rightarrow \iota$  be given. Let  $k1\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (( \\ k2\_xxreal\_3 (k3\_xxreal\_3 X0 X1) = k1\_xxreal\_3 (k2\_xxreal\_3 X0) \\ X1) \wedge (k2\_xxreal\_3 (k3\_xxreal\_3 X0 X1) = k3\_xxreal\_3 X1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (k3\_xxreal\_3 X0 X1 = k1\_xxreal\_3 X0 (k2\_xxreal\_3 X1))) \quad (2)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (( \\ k2\_xxreal\_3 (k1\_xxreal\_3 (k2\_xxreal\_3 X0) X1) = k3\_xxreal\_3 X0 \\ X1) \wedge (k2\_xxreal\_3 (k1\_xxreal\_3 (k2\_xxreal\_3 X0) X1) = k1\_xxreal\_3 \\ X0 (k2\_xxreal\_3 X1)))) \end{aligned}$$