

t15\_xxreal\_0  
(TMQVfc5jpXdmgeSYHjR46RukZRuWtwKFDFX)

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Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k3\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (( \\ (r1\_xxreal\_0 X0 X1) \Rightarrow (k3\_xxreal\_0 X0 X1 = X0)) \wedge ((\neg r1\_xxreal\_0 X0 \\ X1) \Rightarrow (k3\_xxreal\_0 X0 X1 = X1)))) \end{aligned} \tag{1}$$

**Theorem 1**

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (( \\ k3\_xxreal\_0 X0 X1 = X0) \vee (k3\_xxreal\_0 X0 X1 = X1)))$$