

t104\_xxreal\_1 (TM-  
LETr26Q2EH8NcZ52MtZcxm6VUYhcBzDmk)

October 27, 2020

Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xxreal\_0 X2) \Rightarrow (\forall X3.(v1\_xxreal\_0 X3) \Rightarrow (((r1\_xxreal\_0 \\ & X0 X1) \wedge (r1\_tarski (k1\_xxreal\_1 X0 X1) (k2\_xxreal\_1 X2 X3)))) \Rightarrow (( \\ & r1\_xxreal\_0 X2 X0) \wedge (\neg r1\_xxreal\_0 X3 X1)))))) \end{aligned} \quad (1)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xxreal\_0 X2) \Rightarrow (\forall X3.(v1\_xxreal\_0 X3) \Rightarrow (\neg (\neg r1\_xxreal\_0 \\ & X1 X0) \wedge ((r1\_xxreal\_0 X0 X2) \wedge (r1\_tarski (k1\_xxreal\_1 X0 X2) (k2\_xxreal\_1 \\ & X1 X3))))))) \end{aligned}$$