

t64\_xxreal\_2  
(TMFnLRhpDC21krTHJeuw4L2VB2hk137juae)

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Let  $v2\_membered : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_xxreal\_2 : \iota \Rightarrow \iota$  be given. Let  $m2\_xxreal\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v2\_membered X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (( \\ \exists X2.(v1\_xxreal\_0 X2) \wedge ((X2 \in X0) \wedge (r1\_xxreal\_0 X2 X1)))) \Rightarrow \\ (r1\_xxreal\_0 (k2\_xxreal\_2 X0) X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v2\_membered X0) \Rightarrow (v1\_xxreal\_0 (k2\_xxreal\_2 X0)) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v2\_membered X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (( \\ X1 = k2\_xxreal\_2 X0) \Leftrightarrow ((m2\_xxreal\_2 X1 X0) \wedge (\forall X2.(m2\_xxreal\_2 \\ X2 X0) \Rightarrow (r1\_xxreal\_0 X2 X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v2\_membered X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (( \\ m2\_xxreal\_2 X1 X0) \Leftrightarrow (\forall X2.(v1\_xxreal\_0 X2) \Rightarrow ((X2 \in X0) \Rightarrow (r1\_xxreal\_0 \\ X1 X2)))))) \end{aligned} \quad (4)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(v2\_membered X0) \Rightarrow (\forall X1.(v2\_membered X1) \Rightarrow (( \\ \forall X2.(v1\_xxreal\_0 X2) \Rightarrow (\neg(X2 \in X1) \wedge (\forall X3.(v1\_xxreal\_0 \\ X3) \Rightarrow (\neg(X3 \in X0) \wedge (r1\_xxreal\_0 X3 X2)))))) \Rightarrow (r1\_xxreal\_0 (k2\_xxreal\_2 \\ X0) (k2\_xxreal\_2 X1)))) \end{aligned}$$