

t63_xxreal_2
(TMJ3HN5cqfAanyexd3sJB9i3XyoCu2dML2e)

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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 $k1_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $m1_xxreal_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\\ \exists X2.(v1_xxreal_0 X2) \wedge ((X2 \in X0) \wedge (r1_xxreal_0 X1 X2)))) \Rightarrow \quad (1) \\ (r1_xxreal_0 X1 (k1_xxreal_2 X0)))) \end{aligned}$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow (v1_xxreal_0 (k1_xxreal_2 X0)) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\\ X1 = k1_xxreal_2 X0) \Leftrightarrow ((m1_xxreal_2 X1 X0) \wedge (\forall X2.(m1_xxreal_2 \quad (3) \\ X2 X0) \Rightarrow (r1_xxreal_0 X1 X2)))))) \end{aligned}$$

Assume the following.

$$\begin{aligned} \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\\ m1_xxreal_2 X1 X0) \Leftrightarrow (\forall X2.(v1_xxreal_0 X2) \Rightarrow ((X2 \in X0) \Rightarrow (r1_xxreal_0 \\ X2 X1)))))) \quad (4) \end{aligned}$$

Theorem 1

$$\begin{aligned} \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v2_membered X1) \Rightarrow ((\\ \forall X2.(v1_xxreal_0 X2) \Rightarrow (\neg(X2 \in X0) \wedge (\forall X3.(v1_xxreal_0 \\ X3) \Rightarrow (\neg(X3 \in X1) \wedge (r1_xxreal_0 X2 X3)))))) \Rightarrow (r1_xxreal_0 (k1_xxreal_2 \\ X0) (k1_xxreal_2 X1)))) \end{aligned}$$