

t44_xxreal_3 (TMaHSBTM- rkFHUd1xMNPmGJUhfK3RzkV4AzP)

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Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (\neg(\neg(X0 = k1_xxreal_0) \wedge (X1 = k2_xxreal_0)) \wedge \\ & ((\neg(X0 = k2_xxreal_0) \wedge (X1 = k1_xxreal_0)) \wedge (\neg(X1 = k1_xxreal_0) \wedge \\ & (X2 = k2_xxreal_0)) \wedge (\neg(X1 = k2_xxreal_0) \wedge (X2 = k1_xxreal_0)) \wedge \\ & ((\neg(X0 = k1_xxreal_0) \wedge (X2 = k2_xxreal_0)) \wedge (\neg(X0 = k2_xxreal_0) \wedge \\ & (X2 = k1_xxreal_0)) \wedge (k1_xxreal_3 (k1_xxreal_3 X0 X1) X2 \neq k1_xxreal_3 \\ & X0 (k1_xxreal_3 X1 X2)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$v3_xxreal_0 k2_xxreal_0 \tag{2}$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow ((v3_xxreal_0 X0) \Leftrightarrow (\neg r1_xxreal_0 k6_numbers X0)) \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (((r1_xxreal_0 k6_numbers X0) \wedge ((r1_xxreal_0 \\ & k6_numbers X1) \wedge (r1_xxreal_0 k6_numbers X2))) \Rightarrow (k1_xxreal_3 (\\ & k1_xxreal_3 X0 X1) X2 = k1_xxreal_3 X0 (k1_xxreal_3 X1 X2)))))) \end{aligned}$$