

t73_xxreal_1

(TMH3JTec9peQEgGrMLABnBbjwNk6tqBGA2P)

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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 $k2_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 X3) \Rightarrow (\neg(r1_xxreal_0 \\ & X0 X1) \wedge (k1_xxreal_1 X0 X1 = k2_xxreal_1 X2 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\neg \\ & (\neg r1_xxreal_0 X1 X0) \wedge (v1_xboole_0 (k2_xxreal_1 X0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\\ & \neg r1_xxreal_0 X1 X0) \Rightarrow (k1_xxreal_1 X1 X0 = k1_xboole_0))) \end{aligned} \quad (3)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 X3) \Rightarrow (\neg(\neg r1_xxreal_0 \\ & X1 X0) \wedge (k2_xxreal_1 X0 X1 = k1_xxreal_1 X2 X3)))))) \end{aligned}$$