

t270_xxreal_1

(TMXBfLX5kswny5prVqJYNFwKCAnkiaspPCw)

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Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\neg(X0 \in k1_numbers) \wedge (r1_xxreal_0 k1_xxreal_0 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (r1_xxreal_0 k2_xxreal_0 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ (v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 X3) \Rightarrow ((r1_xxreal_0 \\ X1 X0) \Rightarrow ((r1_xxreal_0 X2 X3) \vee (k3_xboole_0 (k4_xxreal_1 X0 X2) (\\ k3_xxreal_1 X1 X3) = k3_xxreal_1 X0 X3)))))) \quad (3) \end{aligned}$$

Assume the following.

$$v1_xxreal_0 k2_xxreal_0 \quad (4)$$

Assume the following.

$$v1_xxreal_0 k1_xxreal_0 \quad (5)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Leftrightarrow (X0 \in k1_numbers) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (7)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (8)$$

Theorem 1

$$\forall X0.(v1_{xxreal_0} X0) \Rightarrow (\forall X1.(v1_{xreal_0} X1) \Rightarrow (k3_{xboole_0} (k3_{xxreal_1} k2_{xxreal_0} X1) (k4_{xxreal_1} X0 k1_{xxreal_0}) = k3_{xxreal_1} X0 X1))$$