

t273_xxreal_1
(TMcube8a2yykrDeb14jPQZSThnoXcYotaC1)

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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 $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 X3) \Rightarrow ((r1_xxreal_0 \\ & X0 X1) \Rightarrow (r1_xboole_0 (k2_xxreal_1 X2 X0) (k2_xxreal_1 X1 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(r1_xboole_0 X0 X1) \Leftrightarrow (k4_xboole_0 X0 X1 = X0) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (r1_tarski (k4_xxreal_1 X0 X1) (k2_xxreal_1 X0 X1))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(r1_tarski X0 (k4_xboole_0 X1 X2)) \Rightarrow ((r1_tarski X0 X1) \wedge (r1_xboole_0 X0 X2)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(r1_xboole_0 X0 X1) \Rightarrow (r1_xboole_0 X1 X0) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 X3) \Rightarrow ((r1_xxreal_0 \\ & X0 X1) \Rightarrow (r1_xboole_0 (k2_xxreal_1 X2 X0) (k4_xxreal_1 X1 X3)))))) \end{aligned}$$