

t349_xxreal_1

(TMLFM5NNDEeJL2LgS8xc5yK5YUtZj2hMv5M)

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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 $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 X1) \Rightarrow (k6_subset_1 (k4_xxreal_1 \\ & k2_xxreal_0 X1) (k1_xxreal_1 X0 X2) = k2_xboole_0 (k4_xxreal_1 \\ & k2_xxreal_0 X0) (k4_xxreal_1 X2 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (k1_xxreal_1 X0 X0 = k1_tarski X0) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\\ & r1_xxreal_0 X0 X1) \Rightarrow (k6_subset_1 (k4_xxreal_1 k2_xxreal_0 X1) \\ & (k1_tarski X0) = k2_xboole_0 (k4_xxreal_1 k2_xxreal_0 X0) (k4_xxreal_1 \\ & X0 X1)))) \end{aligned}$$