

t386_xxreal_1

(TMRvUk2o2Nt7R6bnh3FeEjM2rvpbBeHoopH)

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Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $k1_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (r1_xxreal_0 X0 k1_xxreal_0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow ((r1_xxreal_0 X0 X1) \Rightarrow (k6_subset_1 (k3_xxreal_1 \\ & k2_xxreal_0 X1) (k1_xxreal_1 X0 X2) = k2_xboole_0 (k4_xxreal_1 \\ & k2_xxreal_0 X0) (k3_xxreal_1 X2 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$v1_xxreal_0 k1_xxreal_0 \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (k6_subset_1 \\ & (k3_xxreal_1 k2_xxreal_0 k1_xxreal_0) (k1_xxreal_1 X0 X1) = k2_xboole_0 \\ & (k4_xxreal_1 k2_xxreal_0 X0) (k3_xxreal_1 X1 k1_xxreal_0))) \end{aligned}$$