

t39_topreal9
(TMcHEndYH4uLuicom79syPHxHbwe5fJwhKC)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k3_topreal9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$k6_numbers = k1_xboole_0 \tag{1}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{2}$$

Assume the following.

$$v6_membered\ k4_ordinal1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1\ X0)\wedge((m1_subset_1\ X1\ (u1_struct_0\ (k15_euclid\ X0))))\wedge((v1_xreal_0\ X2)\wedge(v3_xxreal_0\ X2))))\Rightarrow(v1_xboole_0\ (k3_topreal9\ X0\ X1\ X2)) \tag{4}$$

Assume the following.

$$\forall X0.(v1_xxreal_0\ X0)\Rightarrow((v3_xxreal_0\ X0)\Leftrightarrow(\neg r1_xxreal_0\ k6_numbers\ X0)) \tag{5}$$

Assume the following.

$$k1_xboole_0 = the\ (\lambda X0 : \iota.v1_xboole_0\ X0) \tag{6}$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0)\Rightarrow(v1_xxreal_0\ X0) \tag{7}$$

Assume the following.

$$\forall X0.(v6_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v7_ordinal1\ X1)) \quad (8)$$

Theorem 1

$$\begin{aligned} &\forall X0.(m1_subset_1\ X0\ k5_numbers)\Rightarrow(\forall X1.(v1_xreal_0 \\ &X1)\Rightarrow(\forall X2.(m1_subset_1\ X2\ (u1_struct_0\ (k15_euclid\ X0)))\Rightarrow \\ &((\neg v1_xboole_0\ (k3_topreal9\ X0\ X2\ X1))\Rightarrow(r1_xxreal_0\ k6_numbers \\ &X1)))) \end{aligned}$$