

t51_topreal9

(TMb4D1R3gFVLmyqGCnieRuVE29LbneWVevy)

October 27, 2020

Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k2_topreal9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_jgraph_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k14_euclid : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_metric_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (u1_struct_0 (k15_euclid X0) = u1_struct_0 (k14_euclid X0)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 (k14_euclid \\ & np_2)))) \Rightarrow ((X3 = k19_euclid X0 X1) \Rightarrow (k10_metric_1 (k14_euclid np_2) \\ & X3 X2 = k7_jgraph_6 X0 X1 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(v1_xreal_0 \\ & X1) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid X0))) \Rightarrow \\ & (\forall X3.(m1_subset_1 X3 (u1_struct_0 (k14_euclid X0))) \Rightarrow (\\ & (X2 = X3) \Rightarrow (k10_metric_1 (k14_euclid X0) X3 X1 = k2_topreal9 X0 X2 \\ & X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$v6_membered\ k4_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0\ X0)\wedge(v1_xreal_0\ X1))\Rightarrow(m1_subset_1\ (k19_euclid\ X0\ X1)\ (u1_struct_0\ (k15_euclid\ np_2))) \quad (7)$$

Assume the following.

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

Theorem 1

$$\forall X0.(v1_xreal_0\ X0)\Rightarrow(\forall X1.(v1_xreal_0\ X1)\Rightarrow(\forall X2.(v1_xreal_0\ X2)\Rightarrow(k2_topreal9\ np_2\ (k19_euclid\ X0\ X1)\ X2 = k7_jgraph.6\ X0\ X1\ X2)))$$