

l13_gobrd11 (TMP- pjTiWV82jstqtwCD8DmMtW9cCggrL1Sh)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$u1_struct_0 (k15_euclid np_2) = k1_euclid np_2 \quad (5)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow (\neg v1_xboole_0 (k1_euclid X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(v1_xreal_0 X1))\Rightarrow(m1_subset_1 (k19_euclid X0 X1) (u1_struct_0 (k15_euclid np_2))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (10)$$

Assume the following.

$$\forall X0.(v6_membered X0)\Rightarrow(\forall X1.(m1_subset_1 X1 X0)\Rightarrow (v7_ordinal1 X1)) \quad (11)$$

Theorem 1

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(m1_subset_1 (ReplSep2 (toset (\lambda X1 : \iota.m1_subset_1 X1 k1_numbers)) (\lambda X1 : \iota.toset (\lambda X2 : \iota.m1_subset_1 X2 k1_numbers)) (\lambda X1 : \iota.\lambda X2 : \iota.\neg r1_xxreal_0 X0 X2) (\lambda X1 : \iota.\lambda X2 : \iota.k19_euclid X1 X2)) (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2))))$$