

t8_jordan20
(TMJrrxatd2ZdGo7GtDMYyJNgBKvNRE1y8jx)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k1_numbers : \iota$ be given. Let $r1_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_jordan6 : \iota \Rightarrow \iota$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(v1_xboole_0 X0) \wedge ((X0 \neq X1) \wedge (v1_xboole_0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \neg(X0 \in X1) \wedge (v1_xboole_0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ np_2)))) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow (\forall X2. (m1_subset_1 \\ X2 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (\forall X3. (m1_subset_1 \\ X3 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (((r1_xxreal_0 (k17_euclid \\ X2) X1) \wedge ((r1_xxreal_0 X1 (k17_euclid X3)) \wedge (r1_topreal1 (k15_euclid \\ np_2) X2 X3 X0))) \Rightarrow ((\neg r1_xboole_0 X0 (k6_jordan6 X1)) \wedge (v4_pre_topc \\ (k9_subset_1 (u1_struct_0 (k15_euclid np_2)) X0 (k6_jordan6 \\ X1) (k15_euclid np_2)))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\exists X0. v1_xboole_0 X0 \quad (4)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (r1_xboole_0 X0 X1) \Leftrightarrow (k3_xboole_0 X0 X1 = k1_xboole_0) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k6_jordan6 X0 = ReplSep (toset (\lambda X1 : \iota.m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2)))) (\lambda X1 : \iota.k17_euclid X1 = X0) (\lambda X1 : \iota.X1))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k3_xboole_0 X0 X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (X3 \in X1))) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & \quad np_2)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid \\ & \quad np_2)))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid \\ & \quad np_2)))) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 (k15_euclid \\ & \quad np_2)))) \Rightarrow (\forall X4.(m1_subset_1 X4 k1_numbers) \Rightarrow (\neg (r1_topreal1 \\ & (k15_euclid np_2) X1 X2 X0) \wedge ((r1_xxreal_0 (k17_euclid X1) X4) \wedge \\ & ((r1_xxreal_0 X4 (k17_euclid X2)) \wedge (\forall X5.(m1_subset_1 X5 \\ & (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (\neg (X5 \in X0) \wedge (k17_euclid X5 = \\ & \quad X4)))))))))) \end{aligned}$$