

t2_c0sp2

(TMSbdHufe3QouCidweogzbPmuRrirsyxsCh)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m2_c0sp1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_c0sp2 : \iota \Rightarrow \iota$ be given. Let $k12_funcsdom : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v2_funcsdom : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v5_group_1 : \iota \Rightarrow o$ be given. Let $v1_vectsp_1 : \iota \Rightarrow o$ be given. Let $v3_vectsp_1 : \iota \Rightarrow o$ be given. Let $l1_funcsdom : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v4_c0sp1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_c0sp1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $g1_funcsdom : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_c0sp1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_c0sp1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_c0sp1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_c0sp1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_c0sp1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funcsdom : \iota \Rightarrow o$ be given. Let $k2_c0sp2 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v2_funcsdom X0) \wedge ((v3_group_1 \\
& X0) \wedge ((v5_group_1 X0) \wedge ((v1_vectsp_1 X0) \wedge ((v3_vectsp_1 X0) \wedge (\\
& l1_funcsdom X0)))))))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\
& (u1_struct_0 X0))) \Rightarrow (((v4_c0sp1 X1 X0) \wedge (v3_c0sp1 X1 X0)) \Rightarrow ((v1_xboole_0 \\
& X1) \vee (m2_c0sp1 (g1_funcsdom X1 (k2_c0sp1 X0 X1) (k1_c0sp1 X0 X1) \\
& (k5_c0sp1 X0 X1) (k4_c0sp1 X0 X1) (k3_c0sp1 X0 X1)) X0))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v13_algstr_0 (k12_funcsdom X0)) \wedge ((v3_group_1 (k12_funcsdom X0)) \wedge ((v5_group_1 (k12_funcsdom X0)) \wedge ((v1_vectsp_1 (k12_funcsdom X0)) \wedge ((v3_vectsp_1 (k12_funcsdom X0)) \wedge ((v2_rlvect_1 (k12_funcsdom X0)) \wedge ((v3_rlvect_1 (k12_funcsdom X0)) \wedge ((v4_rlvect_1 (k12_funcsdom X0)) \wedge ((v5_rlvect_1 (k12_funcsdom X0)) \wedge ((v6_rlvect_1 (k12_funcsdom X0)) \wedge ((v7_rlvect_1 (k12_funcsdom X0)) \wedge ((v1_funcsdom (k12_funcsdom X0)) \wedge (v2_funcsdom (k12_funcsdom X0))))))))))))))))) \quad (2)$$

Assume the following.

$$\forall X0.(\neg v2_struct_0 (k12_funcsdom X0)) \wedge (v1_funcsdom (k12_funcsdom X0)) \quad (3)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow ((v3_c0sp1 (k2_c0sp2 X0) (k12_funcsdom (u1_struct_0 X0))) \wedge (v4_c0sp1 (k2_c0sp2 X0) (k12_funcsdom (u1_struct_0 X0)))) \quad (4)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (\neg v1_xboole_0 (k2_c0sp2 X0)) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (m1_subset_1 (k2_c0sp2 X0) (k1_zfmisc_1 (u1_struct_0 (k12_funcsdom (u1_struct_0 X0)))))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_funcsdom (k12_funcsdom X0)) \wedge (l1_funcsdom (k12_funcsdom X0)) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (k3_c0sp2 X0 = g1_funcsdom (k2_c0sp2 X0) (k2_c0sp1 (k12_funcsdom (u1_struct_0 X0) (k2_c0sp2 X0)) (k1_c0sp1 (k12_funcsdom (u1_struct_0 X0) (k2_c0sp2 X0)) (k5_c0sp1 (k12_funcsdom (u1_struct_0 X0) (k2_c0sp2 X0)) (k4_c0sp1 (k12_funcsdom (u1_struct_0 X0) (k2_c0sp2 X0)) (k3_c0sp1 (k12_funcsdom (u1_struct_0 X0) (k2_c0sp2 X0)))))))))) \quad (8)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (m2_c0sp1 (k3_c0sp2 X0) (k12_funcsdom (u1_struct_0 X0)))$$