

t11_parsp_1
(TMHgUVW24zaFPVDPwyX82eMqvqpa6MtJ27M)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v33_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v5_group_1 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ 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 $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k9_parsp_1 : \iota \Rightarrow \iota$ be given. Let $k5_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_parsp_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_parsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g1_parsp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_parsp_1 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $l1_parsp_1 : \iota \Rightarrow o$ be given. Let $k8_parsp_1 : \iota \Rightarrow \iota$ be given. Let $k5_parsp_1 : \iota \Rightarrow \iota$ be given. Let $k4_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_parsp_1 : \iota \Rightarrow \iota$ be given. Let $u1_parsp_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_parsp_1 X1 X0) \Rightarrow (\forall X2. \forall X3. (g1_parsp_1 X0 X1 = g1_parsp_1 X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (2)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge ((v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow ((\neg v2_struct_0 (k9_parsp_1 X0)) \wedge (v1_parsp_1 (k9_parsp_1 X0))) \quad (3)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge \\ &(v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (\neg v1_xboole_0 \\ &(k6_parsp_1 X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. (l1_parsp_1 X0) \Rightarrow (l1_struct_0 X0) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge \\ &(v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (l1_parsp_1 \\ &(k9_parsp_1 X0)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge \\ &(v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (m1_parsp_1 \\ &(k8_parsp_1 X0) (k5_parsp_1 X0)) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} &\forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ &\forall X6. \forall X7. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ &((\neg v1_xboole_0 X2) \wedge ((\neg v1_xboole_0 X3) \wedge ((m1_subset_1 X4 X0) \wedge \\ &((m1_subset_1 X5 X1) \wedge ((m1_subset_1 X6 X2) \wedge (m1_subset_1 X7 X3))))))) \Rightarrow \\ &(m1_subset_1 (k5_domain_1 X0 X1 X2 X3 X4 X5 X6 X7) (k4_zfmisc_1 X0 \\ &X1 X2 X3)) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge \\ &(v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (k6_parsp_1 \\ &X0 = k4_zfmisc_1 (k5_parsp_1 X0) (k5_parsp_1 X0) (k5_parsp_1 X0) \\ &(k5_parsp_1 X0)) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge \\ &(v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (k5_parsp_1 \\ &X0 = k3_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0) (u1_struct_0 \\ &X0)) \end{aligned} \tag{11}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge \\ &(v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (k9_parsp_1 \\ &X0 = g1_parsp_1 (k5_parsp_1 X0) (k8_parsp_1 X0)) \end{aligned} \tag{12}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge \\ &(v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (k8_parsp_1 \\ &X0 = k7_parsp_1 X0) \end{aligned} \tag{13}$$

Assume the following.

$$\forall X0. (l1_parsp_1 X0) \Rightarrow ((v1_parsp_1 X0) \Rightarrow (X0 = g1_parsp_1 (u1_struct_0 X0) (u1_parsp_1 X0))) \tag{14}$$

Theorem 1

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ &X0) \wedge ((v33_algstr_0 X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge \\ &(v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 \\ &X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow (\forall X1. \\ &(m1_subset_1 X1 (u1_struct_0 (k9_parsp_1 X0))) \Rightarrow (\forall X2. (\\ &m1_subset_1 X2 (u1_struct_0 (k9_parsp_1 X0))) \Rightarrow (\forall X3. (m1_subset_1 \\ &X3 (u1_struct_0 (k9_parsp_1 X0))) \Rightarrow (\forall X4. (m1_subset_1 X4 \\ &(u1_struct_0 (k9_parsp_1 X0))) \Rightarrow (k5_domain_1 (u1_struct_0 (k9_parsp_1 \\ &X0)) (u1_struct_0 (k9_parsp_1 X0)) (u1_struct_0 (k9_parsp_1 X0)) \\ &(u1_struct_0 (k9_parsp_1 X0)) X1 X2 X3 X4 \in k6_parsp_1 X0)))))) \end{aligned}$$