

t23_weddwitt
(TMKU9EXMhedjpk3n2SNGuML6AeZiK6UBgcY)

October 27, 2020

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 $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_weddwitt : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l5_algstr_0 : \iota \Rightarrow o$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_algstr_0 : \iota \Rightarrow o$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_algstr_0 : \iota \Rightarrow \iota$ be given. Let $k1_realset1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2_algstr_0 : \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_struct_0 : \iota \Rightarrow \iota$ 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.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \quad (2)$$

Assume the following.

$$\forall X0. (l6_algstr_0 X0) \Rightarrow ((l2_algstr_0 X0) \wedge (l5_algstr_0 X0)) \quad (3)$$

Assume the following.

$$\forall X0. (l2_struct_0 X0) \Rightarrow (l1_struct_0 X0) \quad (4)$$

Assume the following.

$$\forall X0. (l2_algstr_0 X0) \Rightarrow ((l2_struct_0 X0) \wedge (l1_algstr_0 X0)) \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge (\neg v6_struct_0 X0) \wedge \\
& ((v13_algstr_0 X0) \wedge (v33_algstr_0 X0) \wedge (v2_rlvect_1 X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v3_group_1 X0) \wedge (v4_vectsp_1 X0) \wedge (v5_vectsp_1 X0) \wedge (l6_algstr_0 X0)))))) \wedge (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((\neg v2_struct_0 (k5_weddwitt X0 X1)) \wedge (\neg v6_struct_0 (k5_weddwitt X0 X1)) \wedge (v13_algstr_0 (k5_weddwitt X0 X1)) \wedge (v33_algstr_0 (k5_weddwitt X0 X1)) \wedge (v36_algstr_0 (k5_weddwitt X0 X1)) \wedge (v2_rlvect_1 (k5_weddwitt X0 X1)) \wedge (v3_rlvect_1 (k5_weddwitt X0 X1)) \wedge (v4_rlvect_1 (k5_weddwitt X0 X1)) \wedge (v3_group_1 (k5_weddwitt X0 X1)) \wedge (v4_vectsp_1 (k5_weddwitt X0 X1)) \wedge (v5_vectsp_1 (k5_weddwitt X0 X1)) \wedge (l6_algstr_0 (k5_weddwitt X0 X1))))))
\end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge (\neg v6_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge (v33_algstr_0 X0) \wedge (v2_rlvect_1 X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v3_group_1 X0) \wedge (v4_vectsp_1 X0) \wedge (v5_vectsp_1 X0) \wedge (l6_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. ((\neg v2_struct_0 X2) \wedge (\neg v6_struct_0 X2) \wedge (v13_algstr_0 X2) \wedge (v33_algstr_0 X2) \wedge (v36_algstr_0 X2) \wedge (v2_rlvect_1 X2) \wedge (v3_rlvect_1 X2) \wedge (v4_rlvect_1 X2) \wedge (v3_group_1 X2) \wedge (v4_vectsp_1 X2) \wedge (v5_vectsp_1 X2) \wedge (l6_algstr_0 X2)))))) \Rightarrow ((X2 = k5_weddwitt X0 X1) \Leftrightarrow ((u1_struct_0 X2 = ReplSep (toset (\lambda X3 : \iota. m1_subset_1 X3 (u1_struct_0 X0))) (\lambda X3 : \iota. k6_algstr_0 X0 X3 X1 = k6_algstr_0 X0 X1 X3) (\lambda X3 : \iota. X3)) \wedge ((u1_algstr_0 X2 = k1_realset1 (u1_algstr_0 X0) (u1_struct_0 X2)) \wedge ((u2_algstr_0 X2 = k1_realset1 (u2_algstr_0 X0) (u1_struct_0 X2)) \wedge ((k4_struct_0 X2 = k4_struct_0 X0) \wedge (k5_struct_0 X2 = k5_struct_0 X0))))))
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \tag{8}$$

Theorem 1

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge (\neg v6_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge (v33_algstr_0 X0) \wedge (v2_rlvect_1 X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v3_group_1 X0) \wedge (v4_vectsp_1 X0) \wedge (v5_vectsp_1 X0) \wedge (l6_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (r1_tarski (u1_struct_0 (k5_weddwitt X0 X1)) (u1_struct_0 X0)))
\end{aligned}$$