

t8_weddwitt
(TMLKtyyzoaF8BtsanLcXyqZfvRamVJH56wW)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_group_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_weddwitt : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v15_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_group_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

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

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.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge \\ ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))) \wedge (m1_subset_1 X1 (u1_struct_0 \\ X0))) \Rightarrow ((v15_algstr_0 (k1_weddwitt X0 X1)) \wedge (m1_group_2 (k1_weddwitt \\ X0 X1) X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. (l3_algstr_0 X0) \Rightarrow ((v2_group_1 X0) \Leftrightarrow (\exists X1. (m1_subset_1 \\ X1 (u1_struct_0 X0)) \wedge (\forall X2. (m1_subset_1 X2 (u1_struct_0 \\ X0)) \Rightarrow ((k6_algstr_0 X0 X2 X1 = X2) \wedge ((k6_algstr_0 X0 X1 X2 = X2) \wedge (\exists X3. \\ (m1_subset_1 X3 (u1_struct_0 X0)) \wedge ((k6_algstr_0 X0 X2 X3 = X1) \wedge \\ (k6_algstr_0 X0 X3 X2 = X1)))))))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\
& X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X2.((v15_algstr_0 X2) \wedge (m1_group_2 X2 X0)) \Rightarrow ((X2 = \\
& k1_weddwitt X0 X1) \Leftrightarrow (u1_struct_0 X2 = ReplSep (toset (\lambda X3 : \iota. \\
& m1_subset_1 X3 (u1_struct_0 X0))) (\lambda X3 : \iota. k6_algstr_0 X0 \\
& X1 X3 = k6_algstr_0 X0 X3 X1) (\lambda X3 : \iota. X3)))))) \quad (6)
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\
& X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((k6_algstr_0 \\
& X0 X1 X2 = k6_algstr_0 X0 X2 X1) \Leftrightarrow (m1_subset_1 X2 (u1_struct_0 (k1_weddwitt \\
& X0 X1))))))
\end{aligned}$$