

t17_waybel_7

(TMV7rT8s91gidzN1UFxHxewGBiD2y5mqWda)

October 27, 2020

Let $v3_orders_2 : \iota \Rightarrow o$ be given. Let $v4_orders_2 : \iota \Rightarrow o$ be given. Let $v5_orders_2 : \iota \Rightarrow o$ be given. Let $v1_lattice3 : \iota \Rightarrow o$ be given. Let $v2_lattice3 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v13_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_waybel_7 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_lattice3 : \iota \Rightarrow \iota$ be given. Let $v12_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_waybel_7 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $v1_orders_2 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow (k7_lattice3 (k7_lattice3 X0) = g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\ & (\forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_waybel_0 X1 X0) \wedge ((v12_waybel_0 X1 X0) \wedge ((v1_waybel_7 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))))))) \Leftrightarrow ((\neg v1_xboole_0 X1) \wedge ((v2_waybel_0 X1 (k7_lattice3 X0)) \wedge ((v13_waybel_0 X1 (k7_lattice3 X0)) \wedge ((v2_waybel_7 X1 (k7_lattice3 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k7_lattice3 X0)))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\
& X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\
& (\forall X1.((v3_orders_2 X1) \wedge ((v4_orders_2 X1) \wedge ((v5_orders_2 \\
& X1) \wedge ((v1_lattice3 X1) \wedge ((v2_lattice3 X1) \wedge (l1_orders_2 X1)))))) \Rightarrow \\
& ((g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 \\
& (u1_struct_0 X1) (u1_orders_2 X1)) \Rightarrow (\forall X2.((\neg v1_xboole_0 \\
& X2) \wedge ((v2_waybel_0 X2 X0) \wedge ((v13_waybel_0 X2 X0) \wedge ((v2_waybel_7 \\
& X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0)))))) \Rightarrow (\\
& (\neg v1_xboole_0 X2) \wedge ((v2_waybel_0 X2 X1) \wedge ((v13_waybel_0 X2 X1) \wedge \\
& ((v2_waybel_7 X2 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\
& X1))))))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.((v1_lattice3 X0) \wedge (l1_orders_2 X0)) \Rightarrow ((v1_orders_2 (k7_lattice3 X0)) \wedge (v2_lattice3 (k7_lattice3 X0))) \tag{4}$$

Assume the following.

$$\forall X0.((v2_lattice3 X0) \wedge (l1_orders_2 X0)) \Rightarrow ((v1_orders_2 (k7_lattice3 X0)) \wedge (v1_lattice3 (k7_lattice3 X0))) \tag{5}$$

Assume the following.

$$\forall X0.((v5_orders_2 X0) \wedge (l1_orders_2 X0)) \Rightarrow ((v1_orders_2 (k7_lattice3 X0)) \wedge (v5_orders_2 (k7_lattice3 X0))) \tag{6}$$

Assume the following.

$$\forall X0.((v4_orders_2 X0) \wedge (l1_orders_2 X0)) \Rightarrow ((v1_orders_2 (k7_lattice3 X0)) \wedge (v4_orders_2 (k7_lattice3 X0))) \tag{7}$$

Assume the following.

$$\forall X0.((v3_orders_2 X0) \wedge (l1_orders_2 X0)) \Rightarrow ((v1_orders_2 (k7_lattice3 X0)) \wedge (v3_orders_2 (k7_lattice3 X0))) \tag{8}$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v1_orders_2 (k7_lattice3 X0)) \wedge (l1_orders_2 (k7_lattice3 X0))) \tag{9}$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v1_orders_2 X0) \Rightarrow (X0 = g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0))) \tag{10}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\ & (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v2_waybel_0 X1 X0) \wedge ((v13_waybel_0 \\ X1 X0) \wedge ((v2_waybel_7 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0))))))) \Leftrightarrow ((\neg v1_xboole_0 X1) \wedge ((v1_waybel_0 X1 (k7_lattice3 \\ X0) \wedge ((v12_waybel_0 X1 (k7_lattice3 X0)) \wedge ((v1_waybel_7 X1 (k7_lattice3 \\ X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k7_lattice3 \\ X0)))))))))) \end{aligned}$$