

t14_lattice7

(TMSW6tx9rvJbpriYCgLTqTThXQQfKKG6yJo)

October 27, 2020

Let $v8_struct_0 : \iota \Rightarrow o$ be given. 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 $v2_waybel_1 : \iota \Rightarrow o$ 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 $r5_waybel_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_yellow_1 : \iota \Rightarrow \iota$ be given. Let $k4_lattice7 : \iota \Rightarrow \iota$ be given. Let $k5_yellow_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_lattice7 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v23_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_orders_2 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((v8_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v4_orders_2 \\
 & X0) \wedge ((v5_orders_2 X0) \wedge ((v2_waybel_1 X0) \wedge ((v1_lattice3 X0) \wedge \\
 & ((v2_lattice3 X0) \wedge (l1_orders_2 X0))))))) \Rightarrow (\exists X1. ((v1_funct_1 \\
 & X1) \wedge ((v1_funct_2 X1 (u1_struct_0 X0) (u1_struct_0 (k2_yellow_1 \\
 & (k4_lattice7 (k5_yellow_0 X0 (k3_lattice7 X0)))))) \wedge (m1_subset_1 \\
 & X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 (k2_yellow_1 \\
 & (k4_lattice7 (k5_yellow_0 X0 (k3_lattice7 X0)))))))) \wedge ((v23_waybel_0 \\
 & X1 X0 (k2_yellow_1 (k4_lattice7 (k5_yellow_0 X0 (k3_lattice7 X0)))))) \wedge \\
 & (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (k3_funct_2 (u1_struct_0 \\
 & X0) (u1_struct_0 (k2_yellow_1 (k4_lattice7 (k5_yellow_0 X0 (k3_lattice7 \\
 & X0)))))) X1 X2 = k9_subset_1 (u1_struct_0 X0) (k5_waybel_0 X0 X2) \\
 & (k3_lattice7 X0))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. (v1_orders_2 (k2_yellow_1 X0)) \wedge (l1_orders_2 (k2_yellow_1 X0)) \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(l1_orders_2 X1) \Rightarrow ((\\
& \quad r5_waybel_1 X0 X1) \Leftrightarrow (\exists X2.((v1_funct_1 X2) \wedge ((v1_funct_2 \\
& X2 (u1_struct_0 X0) (u1_struct_0 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\
& (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X1)))))) \wedge (v23_waybel_0 \\
& \quad X2 X0 X1))))
\end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v8_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v4_orders_2 \\
& X0) \wedge ((v5_orders_2 X0) \wedge ((v2_waybel_1 X0) \wedge ((v1_lattice3 X0) \wedge \\
& ((v2_lattice3 X0) \wedge (l1_orders_2 X0))))))) \Rightarrow (r5_waybel_1 X0 (\\
& \quad k2_yellow_1 (k4_lattice7 (k5_yellow_0 X0 (k3_lattice7 X0))))
\end{aligned}$$