

t1_lattice8

(TMSuRYbuAEdtRNqjkgXibnCEnv4Do7dzvha)

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Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $v1_yellow_0 : \iota \Rightarrow o$ 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 $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_lattice5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_lattice5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_lattice5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k7_lattice5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v3_orders_2 X1) \wedge \\
 & ((v4_orders_2 X1) \wedge ((v5_orders_2 X1) \wedge ((v1_lattice3 X1) \wedge ((v2_lattice3 \\
 & X1) \wedge ((v1_yellow_0 X1) \wedge (l1_orders_2 X1)))))) \Rightarrow (\forall X2. (\\
 & (v1_funct_1 X2) \wedge ((v1_funct_2 X2 (k2_zfmisc_1 X0 X0) (u1_struct_0 \\
 & X1)) \wedge ((v1_lattice5 X2 X0 X1) \wedge ((v2_lattice5 X2 X0 X1) \wedge ((v3_lattice5 \\
 & X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 \\
 & X0 X0) (u1_struct_0 X1)))))) \Rightarrow (r1_ordinal1 (k1_ordinal1 k1_xboole_0) \\
 & (k7_lattice5 X0 X1 X2))))))
 \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
 & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v3_orders_2 X1) \wedge \\
 & ((v4_orders_2 X1) \wedge ((v5_orders_2 X1) \wedge ((v1_yellow_0 X1) \wedge ((v1_lattice3 \\
 & X1) \wedge ((v2_lattice3 X1) \wedge (l1_orders_2 X1)))))) \Rightarrow (\forall X2. (\\
 & (v1_funct_1 X2) \wedge ((v1_funct_2 X2 (k2_zfmisc_1 X0 X0) (u1_struct_0 \\
 & X1)) \wedge ((v1_lattice5 X2 X0 X1) \wedge ((v2_lattice5 X2 X0 X1) \wedge ((v3_lattice5 \\
 & X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 \\
 & X0 X0) (u1_struct_0 X1)))))) \Rightarrow (r1_ordinal1 (k1_ordinal1 k1_xboole_0) \\
 & (k7_lattice5 X0 X1 X2))))))
 \end{aligned}$$