

t6_lattice6

(TMYN7BZ3H1DTL6pAtnzhSHtFkmhZfeopSBL)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v10_lattices : \iota \Rightarrow o$ be given. Let $v14_lattices : \iota \Rightarrow o$ be given. Let $v1_lattice6 : \iota \Rightarrow o$ be given. Let $l3_lattices : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_lattices : \iota \Rightarrow \iota$ be given. Let $r1_lattice6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r3_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_lattices : \iota \Rightarrow o$ be given. Let $l2_lattices : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v14_lattices \\ X0) \wedge (l3_lattices X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\neg r1_lattice6 X0 X1 (k6_lattices X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v1_lattice6 \\ X0) \wedge (l3_lattices X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\neg (r3_lattices \\ X0 X1 X2) \wedge ((X1 \neq X2) \wedge (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow \\ (\neg (r3_lattices X0 X3 X2) \wedge (r1_lattice6 X0 X3 X1))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v14_lattices \\ X0) \wedge (l3_lattices X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (r3_lattices X0 X1 (k6_lattices X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(l3_lattices X0) \Rightarrow ((l1_lattices X0) \wedge (l2_lattices X0)) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge (l2_lattices X0)) \Rightarrow (m1_subset_1 \\ (k6_lattices X0) (u1_struct_0 X0)) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v14_lattices \\ & X0) \wedge ((v1_lattice6 X0) \wedge (l3_lattices X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ & X1 (u1_struct_0 X0)) \Rightarrow ((X1 = k6_lattices X0) \Leftrightarrow (\forall X2. (m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\neg r1_lattice6 X0 X2 X1)))) \end{aligned}$$