

t36_lopclset
(TMXiN7hpazpRW8FD7s4hpM99arefHodAJix)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v10_lattices : \iota \Rightarrow o$ be given. Let $v17_lattices : \iota \Rightarrow o$ be given. Let $l3_lattices : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $r1_filter_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_lopclset : \iota \Rightarrow \iota$ be given. Let $k12_lopclset : \iota \Rightarrow \iota$ be given. Let $k11_lopclset : \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v17_lattices X0) \wedge (l3_lattices X0))))) \Rightarrow (r1_filter_1 X0 (k12_lopclset X0)) \quad (1)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v17_lattices X0) \wedge (l3_lattices X0))))) \Rightarrow ((\neg v2_struct_0 (k11_lopclset X0)) \wedge ((v1_pre_topc (k11_lopclset X0)) \wedge (v2_pre_topc (k11_lopclset X0)))) \quad (2)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v17_lattices X0) \wedge (l3_lattices X0))))) \Rightarrow ((v1_pre_topc (k11_lopclset X0)) \wedge ((v2_pre_topc (k11_lopclset X0)) \wedge (l1_pre_topc (k11_lopclset X0)))) \quad (3)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v17_lattices X0) \wedge (l3_lattices X0))))) \Rightarrow (k12_lopclset X0 = k6_lopclset (k11_lopclset X0)) \quad (4)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v10_lattices X0) \wedge ((v17_lattices X0) \wedge (l3_lattices X0))))) \Rightarrow (\exists X1.((\neg v2_struct_0 X1) \wedge ((v2_pre_topc X1) \wedge (l1_pre_topc X1))) \wedge (r1_filter_1 X0 (k6_lopclset X1)))$$