

t9_robbins1 (TMVPVwCtgMARXkbriGJfX- eHMQqCxomgNT8N)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v4_lattices : \iota \Rightarrow o$ be given. Let $v5_lattices : \iota \Rightarrow o$ be given. Let $v6_robbins1 : \iota \Rightarrow o$ be given. Let $v7_robbins1 : \iota \Rightarrow o$ be given. Let $l2_robbins1 : \iota \Rightarrow o$ be given. Let $k3_robbins1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_lattices : \iota \Rightarrow \iota$ be given. Let $k7_robbins1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_robbins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_lattices : \iota \Rightarrow o$ be given. Let $l1_robbins1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v4_lattices X0) \wedge ((v5_lattices \\ & X0) \wedge ((v6_robbins1 X0) \wedge ((v7_robbins1 X0) \wedge (l2_robbins1 X0)))))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (k7_robbins1 X0 = \\ & k3_robbins1 X0 (k5_robbins1 X0 X1 (k3_robbins1 X0 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v4_lattices X0) \wedge ((v5_lattices \\ & X0) \wedge ((v6_robbins1 X0) \wedge (l2_robbins1 X0)))))) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 (u1_struct_0 X0)) \Rightarrow (k3_robbins1 X0 (k3_robbins1 X0 X1) = X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(l2_robbins1 X0) \Rightarrow ((l2_lattices X0) \wedge (l1_robbins1 X0)) \quad (3)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l2_lattices X0)) \Rightarrow (m1_subset_1 \\ (k6_lattices X0) (u1_struct_0 X0)) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v4_lattices X0) \wedge ((v5_lattices \\ & X0) \wedge ((v6_robbins1 X0) \wedge ((v7_robbins1 X0) \wedge (l2_robbins1 X0)))))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((X1 = k6_lattices \\ & X0) \Leftrightarrow (\exists X2.(m1_subset_1 X2 (u1_struct_0 X0)) \wedge (X1 = k5_robbins1 \\ & X0 X2 (k3_robbins1 X0 X2)))))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (v4_lattices X0) \wedge (v5_lattices \\ & X0) \wedge (v6_robbins1 X0) \wedge (v7_robbins1 X0) \wedge (l2_robbins1 X0))) \Rightarrow \\ & ((k3_robbins1 X0 (k6_lattices X0) = k7_robbins1 X0) \wedge (k6_lattices \\ & X0 = k3_robbins1 X0 (k7_robbins1 X0))) \end{aligned}$$