

t14_robbins1

(TMMSny5RFtrPPFU1vXBsehCy7qgU99Affko)

October 27, 2020

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 $l2_robbins1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_robbins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_lattices : \iota \Rightarrow \iota$ be given. Let $k3_robbins1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_robbins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_robbins1 : \iota \Rightarrow \iota$ be given. Let $k4_robbins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_lattices : \iota \Rightarrow o$ be given. Let $l1_robbins1 : \iota \Rightarrow o$ be given. Let $v7_robbins1 : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v4_lattices X0) \wedge ((v5_lattices \\ & X0) \wedge ((v6_robbins1 X0) \wedge (l2_robbins1 X0)))))) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 (u1_struct_0 X0)) \Rightarrow (k5_robbins1 X0 X1 (k7_robbins1 X0) = X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge ((v4_lattices \\ & X0) \wedge ((v5_lattices X0) \wedge (l2_robbins1 X0)))) \wedge ((m1_subset_1 X1 \\ & (u1_struct_0 X0)) \wedge (m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (k6_robbins1 \\ & X0 X1 X2 = k4_robbins1 X0 X1 X2) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge ((v4_lattices \\ & X0) \wedge (l2_robbins1 X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge \\ & m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (k5_robbins1 X0 X1 X2 = k1_lattices \\ & X0 X1 X2) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(l2_robbins1\ X0)\Rightarrow((l2_lattices\ X0)\wedge(l1_robbins1\ X0)) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge((v4_lattices\ X0)\wedge((v5_lattices \\ X0)\wedge((v6_robbins1\ X0)\wedge((v7_robbins1\ X0)\wedge(l2_robbins1\ X0))))))\Rightarrow \\ (m1_subset_1\ (k7_robbins1\ X0)\ (u1_struct_0\ X0)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((\neg v2_struct_0\ X0)\wedge(l1_robbins1\ X0))\wedge \\ (m1_subset_1\ X1\ (u1_struct_0\ X0)))\Rightarrow(m1_subset_1\ (k3_robbins1 \\ X0\ X1)\ (u1_struct_0\ X0)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge((v4_lattices\ X0)\wedge((v5_lattices \\ X0)\wedge((v6_robbins1\ X0)\wedge((v7_robbins1\ X0)\wedge(l2_robbins1\ X0))))))\Rightarrow \\ (\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ X0))\Rightarrow((X1 = k6_lattices \\ X0)\Leftrightarrow(\exists X2.(m1_subset_1\ X2\ (u1_struct_0\ X0))\wedge(X1 = k5_robbins1 \\ X0\ X2\ (k3_robbins1\ X0\ X2)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge(l2_robbins1\ X0))\Rightarrow(\forall X1. \\ (m1_subset_1\ X1\ (u1_struct_0\ X0))\Rightarrow(\forall X2.(m1_subset_1\ X2 \\ (u1_struct_0\ X0))\Rightarrow(k4_robbins1\ X0\ X1\ X2 = k3_robbins1\ X0\ (k1_lattices \\ X0\ (k3_robbins1\ X0\ X1)\ (k3_robbins1\ X0\ X2)))))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.(l2_robbins1\ X0)\Rightarrow(((\neg v2_struct_0\ X0)\wedge((v4_lattices \\ X0)\wedge((v5_lattices\ X0)\wedge(v6_robbins1\ X0))))\Rightarrow((\neg v2_struct_0\ X0)\wedge \\ (v7_robbins1\ X0))) \end{aligned} \quad (10)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge((v4_lattices\ X0)\wedge((v5_lattices \\ X0)\wedge((v6_robbins1\ X0)\wedge(l2_robbins1\ X0))))\Rightarrow(\forall X1.(m1_subset_1 \\ X1\ (u1_struct_0\ X0))\Rightarrow(k6_robbins1\ X0\ X1\ (k6_lattices\ X0) = X1)) \end{aligned}$$