

t58_robins2

(TMH4dSUHwYfy9DfV4zUQjDyCPAJHCgLDY4X)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_robins1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v4_lattices : \iota \Rightarrow o$ be given. Let $v5_lattices : \iota \Rightarrow o$ be given. Let $v6_robins1 : \iota \Rightarrow o$ be given. Let $k4_robins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_robins1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_robins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_robins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_robins1 : \iota \Rightarrow \iota$ be given. Let $l2_lattices : \iota \Rightarrow o$ be given. Let $l1_robins1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v4_lattices X0) \wedge ((v5_lattices \\ &X0) \wedge ((v6_robins1 X0) \wedge (l2_robins1 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ &X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 \\ &X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (k5_robins1 \\ &X0 X1 (k6_robins1 X0 X2 X3) = k6_robins1 X0 (k5_robins1 X0 X1 X2) \\ &(k5_robins1 X0 X1 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v4_lattices X0) \wedge ((v5_lattices \\ &X0) \wedge ((v6_robins1 X0) \wedge (l2_robins1 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ &X1 (u1_struct_0 X0)) \Rightarrow (k6_robins1 X0 X1 (k3_robins1 X0 X1) = k7_robins1 \\ &X0)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v4_lattices X0) \wedge ((v5_lattices \\ &X0) \wedge ((v6_robins1 X0) \wedge (l2_robins1 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ &X1 (u1_struct_0 X0)) \Rightarrow (k5_robins1 X0 X1 (k7_robins1 X0) = X1)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (&((\neg v2_struct_0 X0) \wedge ((v4_lattices \\ &X0) \wedge ((v5_lattices X0) \wedge (l2_robins1 X0)))) \wedge ((m1_subset_1 X1 \\ &(u1_struct_0 X0)) \wedge (m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (k6_robins1 \\ &X0 X1 X2 = k4_robins1 X0 X1 X2) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0)\wedge((v4_lattices X0)\wedge(l2_robbins1 X0)))\wedge((m1_subset_1 X1 (u1_struct_0 X0))\wedge(m1_subset_1 X2 (u1_struct_0 X0))))\Rightarrow(k5_robbins1 X0 X1 X2 = k1_lattices X0 X1 X2) \quad (5)$$

Assume the following.

$$\forall X0.(l2_robbins1 X0)\Rightarrow((l2_lattices X0)\wedge(l1_robbins1 X0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2_struct_0 X0)\wedge(l1_robbins1 X0))\wedge(m1_subset_1 X1 (u1_struct_0 X0)))\Rightarrow(m1_subset_1 (k3_robbins1 X0 X1) (u1_struct_0 X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0)\wedge(l2_lattices X0))\wedge((m1_subset_1 X1 (u1_struct_0 X0))\wedge(m1_subset_1 X2 (u1_struct_0 X0))))\Rightarrow(m1_subset_1 (k1_lattices X0 X1 X2) (u1_struct_0 X0)) \quad (8)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l2_robbins1 X0))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow(((v4_lattices X0)\wedge((v5_lattices X0)\wedge(v6_robbins1 X0)))\Rightarrow(k4_robbins1 X0 (k1_lattices X0 X2 X1) (k1_lattices X0 X2 (k3_robbins1 X0 X1)) = X2))))$$