

# t61\_robbsins1 (TMKLXBnieTJG- TyJU4B5emk8Se3SMSbjVAS)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v10\_lattices : \iota \Rightarrow o$  be given. Let  $v6\_robbsins1 : \iota \Rightarrow o$  be given. Let  $v10\_robbsins1 : \iota \Rightarrow o$  be given. Let  $l4\_robbsins1 : \iota \Rightarrow o$  be given. Let  $k7\_robbsins1 : \iota \Rightarrow \iota$  be given. Let  $k5\_lattices : \iota \Rightarrow \iota$  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  $k3\_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v4\_lattices : \iota \Rightarrow o$  be given. Let  $v5\_lattices : \iota \Rightarrow o$  be given. Let  $l2\_robbsins1 : \iota \Rightarrow o$  be given. Let  $k5\_robbsins1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $l2\_lattices : \iota \Rightarrow o$  be given. Let  $l1\_lattices : \iota \Rightarrow o$  be given. Let  $v7\_robbsins1 : \iota \Rightarrow o$  be given. Let  $v6\_lattices : \iota \Rightarrow o$  be given. Let  $v7\_lattices : \iota \Rightarrow o$  be given. Let  $v8\_lattices : \iota \Rightarrow o$  be given. Let  $v9\_lattices : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v10\_lattices X0) \wedge (l3\_lattices \\ & X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow ((\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (k3\_lattices X0 X1 X2 = X2)) \Rightarrow \\ & (X1 = k5\_lattices X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v4\_lattices X0) \wedge ((v5\_lattices \\ & X0) \wedge ((v6\_robbsins1 X0) \wedge (l2\_robbsins1 X0))))) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 (u1\_struct\_0 X0)) \Rightarrow (k5\_robbsins1 X0 X1 (k7\_robbsins1 X0) = X1)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0 X0) \wedge ((v4\_lattices \\ & X0) \wedge (l2\_robbsins1 X0))) \wedge ((m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge \\ & m1\_subset\_1 X2 (u1\_struct\_0 X0))) \Rightarrow (k5\_robbsins1 X0 X1 X2 = k1\_lattices \\ & X0 X1 X2) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0 X0)\wedge(v4\_lattices X0)\wedge(l2\_lattices X0)))\wedge((m1\_subset\_1 X1 (u1\_struct\_0 X0))\wedge(m1\_subset\_1 X2 (u1\_struct\_0 X0)))\Rightarrow(k3\_lattices X0 X1 X2 = k1\_lattices X0 X1 X2) \quad (4)$$

Assume the following.

$$\forall X0.(l4\_robbins1 X0)\Rightarrow((l2\_robbins1 X0)\wedge(l3\_lattices X0)) \quad (5)$$

Assume the following.

$$\forall X0.(l3\_lattices X0)\Rightarrow((l1\_lattices X0)\wedge(l2\_lattices X0)) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0)\wedge((v4\_lattices X0)\wedge((v5\_lattices X0)\wedge((v6\_robbins1 X0)\wedge((v7\_robbins1 X0)\wedge(l2\_robbins1 X0))))))\Rightarrow(m1\_subset\_1 (k7\_robbins1 X0) (u1\_struct\_0 X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0 X0)\wedge(v4\_lattices X0)\wedge(l2\_lattices X0)))\wedge((m1\_subset\_1 X1 (u1\_struct\_0 X0))\wedge(m1\_subset\_1 X2 (u1\_struct\_0 X0)))\Rightarrow(k3\_lattices X0 X1 X2 = k3\_lattices X0 X2 X1) \quad (8)$$

Assume the following.

$$\forall X0.(l2\_robbins1 X0)\Rightarrow(((\neg v2\_struct\_0 X0)\wedge(v4\_lattices X0)\wedge(v5\_lattices X0)\wedge(v6\_robbins1 X0)))\Rightarrow((\neg v2\_struct\_0 X0)\wedge(v7\_robbins1 X0)) \quad (9)$$

Assume the following.

$$\forall X0.(l3\_lattices X0)\Rightarrow(((\neg v2\_struct\_0 X0)\wedge(v10\_lattices X0))\Rightarrow((\neg v2\_struct\_0 X0)\wedge(v4\_lattices X0)\wedge(v5\_lattices X0)\wedge((v6\_lattices X0)\wedge((v7\_lattices X0)\wedge((v8\_lattices X0)\wedge(v9\_lattices X0)))))) \quad (10)$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0 X0)\wedge((v10\_lattices X0)\wedge((v6\_robbins1 X0)\wedge((v10\_robbins1 X0)\wedge(l4\_robbins1 X0))))))\Rightarrow(k7\_robbins1 X0 = k5\_lattices X0)$$