

t12_robbins4 (TMNe- uPYrVVeVEeFhaxSFhLMKn5v48ot7hCB)

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Let $k3_lattice3 : \iota \Rightarrow \iota$ be given. Let $g3_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_robbins4 : \iota$ be given. Let $u2_lattices : \iota \Rightarrow \iota$ be given. Let $u1_lattices : \iota \Rightarrow \iota$ be given. Let $k1_robbins4 : \iota$ be given. Let $k4_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $np_2 : \iota$ be given. Let $k2_yellow_1 : \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $k1_yellow_1 : \iota \Rightarrow \iota$ be given. Let $v1_orders_2 : \iota \Rightarrow o$ be given. Let $v3_orders_2 : \iota \Rightarrow o$ be given. Let $v4_orders_2 : \iota \Rightarrow o$ be given. Let $v5_orders_2 : \iota \Rightarrow o$ be given. Let $v1_lattice3 : \iota \Rightarrow o$ be given. Let $v2_lattice3 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v4_robbins1 : \iota \Rightarrow o$ be given. Let $l4_robbins1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $k14_lattice3 : \iota \Rightarrow \iota$ be given. Let $v3_lattices : \iota \Rightarrow o$ be given. Let $v10_lattices : \iota \Rightarrow o$ be given. Let $l3_lattices : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_robbins1 : \iota \Rightarrow \iota$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$u1_struct_0 \ k2_robbins4 = k4_enumset1 \ k6_numbers \ np_1 \ (k6_subset_1 \ np_3 \ np_1) \ np_2 \ (k6_subset_1 \ np_3 \ np_2) \ np_3 \quad (1)$$

Assume the following.

$$\forall X0. (u1_struct_0 \ (k2_yellow_1 \ X0) = X0) \wedge (u1_orders_2 \ (k2_yellow_1 \ X0) = k1_yellow_1 \ X0) \quad (2)$$

Assume the following.

$$\forall X0. (v1_orders_2 \ (k2_yellow_1 \ X0)) \wedge ((v3_orders_2 \ (k2_yellow_1 \ X0)) \wedge ((v4_orders_2 \ (k2_yellow_1 \ X0)) \wedge (v5_orders_2 \ (k2_yellow_1 \ X0)))) \quad (3)$$

Assume the following.

$$(v1_lattice3 \ k1_robbins4) \wedge (v2_lattice3 \ k1_robbins4) \quad (4)$$

Assume the following.

$$\forall X0.(v1_orders_2 (k2_yellow_1 X0)) \wedge (l1_orders_2 (k2_yellow_1 X0)) \quad (5)$$

Assume the following.

$$(v4_robbins1 k2_robbins4) \wedge (l4_robbins1 k2_robbins4) \quad (6)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((\neg v2_struct_0 (k14_lattice3 X0)) \wedge ((v3_lattices (k14_lattice3 X0)) \wedge ((v10_lattices (k14_lattice3 X0)) \wedge (l3_lattices (k14_lattice3 X0))))) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0. & ((v4_robbins1 X0) \wedge (l4_robbins1 X0)) \Rightarrow ((X0 = k2_robbins4) \Leftrightarrow \\ & ((g3_lattices (u1_struct_0 X0) (u2_lattices X0) (u1_lattices \\ & X0) = k14_lattice3 k1_robbins4) \wedge (\forall X1.(m1_subset_1 X1 (\\ & u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_z_fmisc_1 np_3)) \Rightarrow \\ & ((X1 = X2) \Rightarrow (k1_funct_1 (u1_robbins1 X0) X1 = k3_subset_1 np_3 X2)))))) \end{aligned} \quad (8)$$

Assume the following.

$$k1_robbins4 = k2_yellow_1 (k4_enumset1 k6_numbers np_1 (k6_subset_1 np_3 np_1) np_2 (k6_subset_1 np_3 np_2) np_3) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0. & (l1_orders_2 X0) \Rightarrow (((v3_orders_2 X0) \wedge ((v4_orders_2 \\ & X0) \wedge ((v5_orders_2 X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge \\ & (l1_orders_2 X0)))))) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge ((v3_lattices \\ & X1) \wedge ((v10_lattices X1) \wedge (l3_lattices X1)))) \Rightarrow ((X1 = k14_lattice3 \\ & X0) \Leftrightarrow (g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = k3_lattice3 \\ & X1)))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v1_orders_2 X0) \Rightarrow (X0 = g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0))) \quad (11)$$

Theorem 1

$$k3_lattice3 (g3_lattices (u1_struct_0 k2_robbins4) (u2_lattices k2_robbins4) (u1_lattices k2_robbins4)) = k1_robbins4$$