

l60_waybel11 (TMJVHMXK- BzZ7ExNST7X46sNS74dSfpx3ZTN)

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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 $g1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(l1_orders_2 X1) \Rightarrow ((\\
 & g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 \\
 & X1) (u1_orders_2 X1)) \Rightarrow (\forall X2.\forall X3.(m1_subset_1 X3 \\
 & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X1)) \Rightarrow \\
 & ((X3 = X4) \Rightarrow (((r2_lattice3 X0 X2 X3) \Rightarrow (r2_lattice3 X1 X2 X4)) \wedge ((r1_lattice3 \\
 & X0 X2 X3) \Rightarrow (r1_lattice3 X1 X2 X4)))))))))
 \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\
 & X0) \wedge ((v1_lattice3 X0) \wedge ((v2_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\
 & (\forall X1.((v3_orders_2 X1) \wedge ((v4_orders_2 X1) \wedge ((v5_orders_2 \\
 & X1) \wedge ((v1_lattice3 X1) \wedge ((v2_lattice3 X1) \wedge (l1_orders_2 X1)))))) \Rightarrow \\
 & (\forall X2.(g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 \\
 & (u1_struct_0 X1) (u1_orders_2 X1)) \Rightarrow (\forall X3.(m1_subset_1 \\
 & X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\
 & X1)) \Rightarrow (((X3 = X4) \wedge (r1_lattice3 X0 X2 X3)) \Rightarrow (r1_lattice3 X1 X2 X4))))))
 \end{aligned}$$