

t59_o_ring_1 (TM-
Sig3G7tBKJPazGkQGTGNiJXWTqbrdBtbQT)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v5_o_ring_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_o_ring_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v13_o_ring_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((v5_o_ring_1 X1 X0) \Rightarrow (v13_o_ring_1 \\ & \quad X1 X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((v3_o_ring_1 X1 X0) \Rightarrow (v13_o_ring_1 \\ & \quad X1 X0))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (((v13_o_ring_1 X1 X0) \wedge (v13_o_ring_1 X2 X0)) \Rightarrow \\ & \quad (v13_o_ring_1 (k6_algstr_0 X0 X1 X2) X0)))) \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l6_algstr_0 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (((v5_o_ring_1 X1 X0) \wedge (v3_o_ring_1 X2 X0)) \Rightarrow \\ & \quad (v13_o_ring_1 (k6_algstr_0 X0 X1 X2) X0)))) \end{aligned}$$