

t17_yellow_6 (TM-
LodogdB6pHvC7xpdC GDGqRLXUh3VhD6rm)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v4_orders_2 : \iota \Rightarrow o$ be given. Let $v7_waybel_0 : \iota \Rightarrow o$ be given. Let $l1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (\neg(\neg r1_xboole_0 X0 X1) \wedge (\forall X2. \neg(X2 \in X0) \wedge (X2 \in X1))) \wedge (\neg(\exists X2. (X2 \in X0) \wedge (X2 \in X1)) \wedge (r1_xboole_0 X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. (l1_struct_0 X0) \Rightarrow (\forall X1. (l1_waybel_0 X1 X0) \Rightarrow (l1_orders_2 X1)) \quad (2)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow ((v7_waybel_0 X0) \Leftrightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\exists X3. (m1_subset_1 X3 (u1_struct_0 X0)) \wedge ((r1_orders_2 X0 X1 X3) \wedge (r1_orders_2 X0 X2 X3))))))) \quad (3)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge (l1_waybel_0 X1 X0)) \Rightarrow (\forall X2. (r1_waybel_0 X0 X1 X2) \Leftrightarrow (\exists X3. (m1_subset_1 X3 (u1_struct_0 X1)) \wedge (\forall X4. (m1_subset_1 X4 (u1_struct_0 X1)) \Rightarrow ((r1_orders_2 X1 X3 X4) \Rightarrow (k2_waybel_0 X0 X1 X4 \in X2))))))) \quad (4)$$

Theorem 1

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge (v4_orders_2 X1) \wedge ((v7_waybel_0 X1) \wedge (l1_waybel_0 X1 X0))) \Rightarrow (\forall X2. \forall X3. \neg(r1_waybel_0 X0 X1 X2) \wedge ((r1_waybel_0 X0 X1 X3) \wedge (r1_xboole_0 X2 X3))))$$