

t12_yellow_6
(TMHNB8MZXhpaEZvsBQb26jGQJtrrAptagiK)

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Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_yellow_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_yellow_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v4_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.((v4_yellow_0 X1 X0) \wedge \\ (m1_yellow_0 X1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. \\ (m1_subset_1 X4 (u1_struct_0 X1)) \Rightarrow (\forall X5.(m1_subset_1 X5 \\ (u1_struct_0 X1)) \Rightarrow (((X4 = X2) \wedge ((X5 = X3) \wedge ((r1_orders_2 X0 X2 X3) \wedge \\ (X4 \in u1_struct_0 X1)))) \Rightarrow (r1_orders_2 X1 X4 X5))))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(m1_yellow_0 X1 X0) \Rightarrow (l1_orders_2 X1)) \quad (3)$$

Assume the following.

$$\forall X0.(l1_struct_0 X0) \Rightarrow (\forall X1.(l1_waybel_0 X1 X0) \Rightarrow (l1_orders_2 X1)) \quad (4)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (l1_struct_0 X0) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_struct_0 X0) \Rightarrow (\forall X1.(l1_waybel_0 X1 X0) \Rightarrow \\ (\forall X2.(m1_yellow_6 X2 X0 X1) \Rightarrow ((v2_yellow_6 X2 X0 X1) \Leftrightarrow ((v4_yellow_0 \\ X2 X1) \wedge (m1_yellow_0 X2 X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0)\Rightarrow((m1_subset_1 X1 X0)\Leftrightarrow \\ & (X1 \in X0)))\wedge((v1_xboole_0 X0)\Rightarrow((m1_subset_1 X1 X0)\Leftrightarrow(v1_xboole_0 \\ & X1))) \end{aligned} \tag{7}$$

Theorem 1

$$\begin{aligned} & \forall X0.(l1_struct_0 X0)\Rightarrow(\forall X1.((\neg v2_struct_0 X1)\wedge \\ & (l1_waybel_0 X1 X0))\Rightarrow(\forall X2.((\neg v2_struct_0 X2)\wedge((v2_yellow_6 \\ & X2 X0 X1)\wedge(m1_yellow_6 X2 X0 X1)))\Rightarrow(\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X1))\Rightarrow(\forall X4.(m1_subset_1 X4 (u1_struct_0 X1))\Rightarrow \\ & (\forall X5.(m1_subset_1 X5 (u1_struct_0 X2))\Rightarrow(\forall X6.(m1_subset_1 \\ & X6 (u1_struct_0 X2))\Rightarrow(((X3 = X5)\wedge((X4 = X6)\wedge(r1_orders_2 X1 X3 X4))\Rightarrow \\ & (r1_orders_2 X2 X5 X6)))))))))) \end{aligned}$$