

t10_waybel10 (TMTSbCSpqGo- QBa7oh5dKANiJb6CnYn9U6Ch)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_orders_2 : \iota \Rightarrow o$ 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 $k2_waybel10 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_waybel_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_yellow_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_orders_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_orders_2 : \iota \Rightarrow o$ be given. Let $v4_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_yellow_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge \\ & ((v3_orders_2 X1) \wedge (l1_orders_2 X1))) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 (k7_yellow_1 X0 X1))) \Leftrightarrow ((v1_funct_1 X2) \wedge (v1_funct_2 \\ & X2 (u1_struct_0 X0) (u1_struct_0 X1)) \wedge ((v5_orders_3 X2 X0 X1) \wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\ & X1)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge (m1_yellow_0 X1 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X1)) \Rightarrow (m1_subset_1 X2 (u1_struct_0 X0)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((l1_orders_2 X0) \wedge ((\neg v2_struct_0 X1) \wedge \\ & ((v3_orders_2 X1) \wedge (l1_orders_2 X1)))) \Rightarrow ((\neg v2_struct_0 (k7_yellow_1 \\ & X0 X1)) \wedge ((v1_orders_2 (k7_yellow_1 X0 X1)) \wedge (v4_yellow_0 (k7_yellow_1 \\ & X0 X1) (k6_yellow_1 (u1_struct_0 X0) X1)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(m1_yellow_0 X1 X0) \Rightarrow \\ & (l1_orders_2 X1)) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((l1_orders_2 X0)\wedge(l1_orders_2 X1))\Rightarrow(\\ (v1_orders_2 (k7_yellow_1 X0 X1))\wedge((v4_yellow_0 (k7_yellow_1 \\ X0 X1) (k6_yellow_1 (u1_struct_0 X0) X1))\wedge(m1_yellow_0 (k7_yellow_1 \\ X0 X1) (k6_yellow_1 (u1_struct_0 X0) X1)))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(l1_orders_2 X1)\Rightarrow((v1_orders_2 (k6_yellow_1 \\ X0 X1))\wedge(l1_orders_2 (k6_yellow_1 X0 X1))) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(l1_orders_2 \\ X0)))\Rightarrow((\neg v2_struct_0 (k2_waybel10 X0))\wedge((v1_orders_2 (k2_waybel10 \\ X0))\wedge((v4_yellow_0 (k2_waybel10 X0) (k7_yellow_1 X0 X0))\wedge(m1_yellow_0 \\ (k2_waybel10 X0) (k7_yellow_1 X0 X0)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(l1_orders_2 \\ X0)))\Rightarrow(\forall X1.((\neg v2_struct_0 X1)\wedge((v1_orders_2 X1)\wedge((v4_yellow_0 \\ X1 (k7_yellow_1 X0 X0))\wedge(m1_yellow_0 X1 (k7_yellow_1 X0 X0))))))\Rightarrow \\ ((X1 = k2_waybel10 X0)\Leftrightarrow(\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 \\ X2 (u1_struct_0 X0) (u1_struct_0 X0))\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0))))))\Rightarrow((m1_subset_1 \\ X2 (u1_struct_0 X1))\Leftrightarrow(v7_waybel_1 X2 X0)))))) \end{aligned} \quad (8)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(l1_orders_2 \\ X0)))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 (k2_waybel10 \\ X0)))\Leftrightarrow((v1_funct_1 X1)\wedge((v1_funct_2 X1 (u1_struct_0 X0) (u1_struct_0 \\ X0))\wedge((v7_waybel_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ (u1_struct_0 X0) (u1_struct_0 X0)))))))))) \end{aligned}$$