

t11_waybel28
(TMNWP8Rcz9dE3yvrraG5vyoSGJx9dpFzPf)

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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 $g1_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $u1_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_yellow_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_orders_2 : \iota \Rightarrow o$ be given. Let $v5_orders_2 : \iota \Rightarrow o$ be given. Let $v6_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge ((v4_orders_2 X1) \wedge ((v7_waybel_0 X1) \wedge (l1_waybel_0 \\ & X1 X0)))) \Rightarrow (m2_yellow_6 X1 X0 X1)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_struct_0 X0) \Rightarrow (\exists X1.(l1_waybel_0 X1 X0) \wedge \\ & ((\neg v2_struct_0 X1) \wedge ((v3_orders_2 X1) \wedge ((v4_orders_2 X1) \wedge ((v5_orders_2 \\ & X1) \wedge ((v6_waybel_0 X1 X0) \wedge (v7_waybel_0 X1))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge (l1_struct_0 X1)) \Rightarrow ((u1_struct_0 X0 = u1_struct_0 \\ & X1) \Rightarrow (\forall X2.((\neg v2_struct_0 X2) \wedge ((v4_orders_2 X2) \wedge ((v6_waybel_0 \\ & X2 X0) \wedge ((v7_waybel_0 X2) \wedge (l1_waybel_0 X2 X0)))))) \Rightarrow ((\neg v2_struct_0 \\ & X2) \wedge ((v4_orders_2 X2) \wedge ((v6_waybel_0 X2 X1) \wedge ((v7_waybel_0 X2) \wedge \\ & (l1_waybel_0 X2 X1))))))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((l1_struct_0 X0)\wedge \\ & ((m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 X1)))\wedge((v1_funct_1 \\ & X3)\wedge((v1_funct_2 X3 X1 (u1_struct_0 X0))\wedge(m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X1 (u1_struct_0 X0))))))))\Rightarrow(\forall X4.\forall X5. \\ & \forall X6.\forall X7.(g1_waybel_0 X0 X1 X2 X3 = g1_waybel_0 X4 X5 \\ & X6 X7)\Rightarrow((X0 = X4)\wedge((X1 = X5)\wedge((X2 = X6)\wedge(X3 = X7)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((l1_struct_0 X0)\wedge(l1_waybel_0 X1 X0))\Rightarrow \\ & ((v1_funct_1 (u1_waybel_0 X0 X1))\wedge((v1_funct_2 (u1_waybel_0 \\ & X0 X1) (u1_struct_0 X1) (u1_struct_0 X0))\wedge(m1_subset_1 (u1_waybel_0 \\ & X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X1) (u1_struct_0 \\ & X0)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0)\Rightarrow(m1_subset_1 (u1_orders_2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \quad (6)$$

Assume the following.

$$\forall X0.(l1_struct_0 X0)\Rightarrow(\forall X1.(l1_waybel_0 X1 X0)\Rightarrow(l1_orders_2 X1)) \quad (7)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0)\Rightarrow(l1_struct_0 X0) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((l1_struct_0 X0)\wedge(l1_waybel_0 X1 X0))\Rightarrow \\ & ((v6_waybel_0 X1 X0)\Rightarrow(X1 = g1_waybel_0 X0 (u1_struct_0 X1) (u1_orders_2 \\ & X1) (u1_waybel_0 X0 X1))) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow(\forall X1. \\ & ((\neg v2_struct_0 X1)\wedge((v4_orders_2 X1)\wedge((v7_waybel_0 X1)\wedge(l1_waybel_0 \\ & X1 X0))))\Rightarrow(\forall X2.((\neg v2_struct_0 X2)\wedge((v4_orders_2 X2)\wedge \\ & ((v7_waybel_0 X2)\wedge(l1_waybel_0 X2 X0))))\Rightarrow((g1_waybel_0 X0 (u1_struct_0 \\ & X1) (u1_orders_2 X1) (u1_waybel_0 X0 X1) = g1_waybel_0 X0 (u1_struct_0 \\ & X2) (u1_orders_2 X2) (u1_waybel_0 X0 X2))\Rightarrow(m2_yellow_6 X2 X0 X1)))) \end{aligned}$$