

t10_waybel_4

(TMV2XvBueQf6K9vTXRyfUm9bedm6VjDrMXp)

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Let $v3_orders_2 : \iota \Rightarrow o$ be given. Let $v4_orders_2 : \iota \Rightarrow o$ be given. Let $v5_orders_2 : \iota \Rightarrow o$ be given. Let $v1_yellow_0 : \iota \Rightarrow o$ be given. Let $v1_lattice3 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v5_waybel_4 : \iota \Rightarrow \iota \Rightarrow o$ 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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_waybel_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_waybel_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_waybel_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_waybel_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\
 & X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\
 & (\forall X1. ((v4_waybel_4 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
 & (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow (\forall X2. \\
 & ((v4_waybel_4 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow ((v4_waybel_4 (k9_subset_1 \\
 & (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) X1 X2) X0) \wedge (m1_subset_1 \\
 & (k9_subset_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) \\
 & X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
 & X0))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\
 & X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\
 & (\forall X1. ((v3_waybel_4 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
 & (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow (\forall X2. \\
 & ((v3_waybel_4 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow ((v3_waybel_4 (k9_subset_1 \\
 & (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) X1 X2) X0) \wedge (m1_subset_1 \\
 & (k9_subset_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) \\
 & X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
 & X0))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\
& X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\
& (\forall X1.((v2_waybel_4 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow (\forall X2. \\
& ((v2_waybel_4 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow ((v2_waybel_4 (k9_subset_1 \\
& (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) X1 X2) X0) \wedge (m1_subset_1 \\
& (k9_subset_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) \\
& X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\
& X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\
& (\forall X1.((v1_waybel_4 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
& (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow (\forall X2. \\
& ((v1_waybel_4 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
& (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow ((v1_waybel_4 (k9_subset_1 \\
& (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) X1 X2) X0) \wedge (m1_subset_1 \\
& (k9_subset_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) \\
& X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow (m1_subset_1 (k9_subset_1 X0 X1 X2) (k1_zfmisc_1 X0)) \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0)))) \Rightarrow (((v1_waybel_4 X1 X0) \wedge ((v2_waybel_4 X1 X0) \wedge ((v3_waybel_4 \\
& X1 X0) \wedge (v4_waybel_4 X1 X0)))) \Rightarrow (v5_waybel_4 X1 X0))
\end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\
& X0)))) \Rightarrow ((v5_waybel_4 X1 X0) \Rightarrow ((v1_waybel_4 X1 X0) \wedge ((v2_waybel_4 \\
& X1 X0) \wedge ((v3_waybel_4 X1 X0) \wedge (v4_waybel_4 X1 X0))))))
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow ((v1_lattice3 X0) \Rightarrow (\neg v2_struct_0 X0)) \tag{8}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v3_orders_2 X0) \wedge ((v4_orders_2 X0) \wedge ((v5_orders_2 \\ & X0) \wedge ((v1_yellow_0 X0) \wedge ((v1_lattice3 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\ & (\forall X1.((v5_waybel_4 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow (\forall X2. \\ & ((v5_waybel_4 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow ((v5_waybel_4 (k9_subset_1 \\ & (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) X1 X2) X0) \wedge (m1_subset_1 \\ & (k9_subset_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) \\ & X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\ & X0)))))) \end{aligned}$$