

t22_waybel_2
(TMVZDPH16uov6zUKzYUtPpGNTRTohsqji3N)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $l1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_waybel_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v6_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ X0 X0))) \Rightarrow (\forall X2. \forall X3. (g1_orders_2 X0 X1 = g1_orders_2 \\ X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow (m1_subset_1 (u1_orders_2 X0) (k1_zfmisc_1 \\ (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \quad (2)$$

Assume the following.

$$\forall X0. (l1_struct_0 X0) \Rightarrow (\forall X1. (l1_waybel_0 X1 X0) \Rightarrow \\ (l1_orders_2 X1)) \quad (3)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge (l1_orders_2 \\ X0)) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge ((\neg v2_struct_0 X2) \wedge \\ (l1_waybel_0 X2 X0)))) \Rightarrow ((v6_waybel_0 (k3_waybel_2 X0 X1 X2) X0) \wedge \\ (l1_waybel_0 (k3_waybel_2 X0 X1 X2) X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.((\neg v2_struct_0 \\
& X2) \wedge (l1_waybel_0 X2 X0)) \Rightarrow (\forall X3.((v6_waybel_0 X3 X0) \wedge (l1_waybel_0 \\
& X3 X0)) \Rightarrow ((X3 = k3_waybel_2 X0 X1 X2) \Leftrightarrow ((g1_orders_2 (u1_struct_0 \\
& X3) (u1_orders_2 X3) = g1_orders_2 (u1_struct_0 X2) (u1_orders_2 \\
& X2)) \wedge (\forall X4.(m1_subset_1 X4 (u1_struct_0 X3)) \Rightarrow (\exists X5. \\
& (m1_subset_1 X5 (u1_struct_0 X0)) \wedge ((X5 = k1_funct_1 (u1_waybel_0 \\
& X0 X2) X4) \wedge (k1_funct_1 (u1_waybel_0 X0 X3) X4 = k11_lattice3 X0 X1 \\
& X5))))))))))
\end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\
& ((\neg v2_struct_0 X1) \wedge (l1_waybel_0 X1 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\
& X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
& X1)) \Leftrightarrow (m1_subset_1 X3 (u1_struct_0 (k3_waybel_2 X0 X2 X1))))))
\end{aligned}$$