

t12_waybel23

(TMR5fZ9SccgVRzSXYqoi8k1rLzv1sA7Cduk)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $m1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge (m1_yellow_0 X1 X0)) \Rightarrow (\forall X2. (m1_subset_1 \\ & X2 (u1_struct_0 X1)) \Rightarrow (m1_subset_1 X2 (u1_struct_0 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k4_waybel_0 \\ & X0 X1 = ReplSep (toset (\lambda X2 : \iota. m1_subset_1 X2 (u1_struct_0 \\ & X0))) (\lambda X2 : \iota. \exists X3. (m1_subset_1 X3 (u1_struct_0 X0)) \wedge \\ & ((r1_orders_2 X0 X3 X2) \wedge (X3 \in X1)) (\lambda X2 : \iota. X2)))) \end{aligned} \quad (2)$$

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.

$$\begin{aligned} & \forall X0. (l1_orders_2 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_orders_2 \\ & X0 X1 X2) \Leftrightarrow (k4_tarski X1 X2 \in u1_orders_2 X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (5)$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(l1_orders_2 X1) \Rightarrow ((m1_yellow_0 X1 X0) \Leftrightarrow ((r1_tarski (u1_struct_0 X1) (u1_struct_0 X0)) \wedge (r1_tarski (u1_orders_2 X1) (u1_orders_2 X0)))))) \quad (6)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge (m1_yellow_0 X1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X1))) \Rightarrow ((X2 = X3) \Rightarrow (r1_tarski (k4_waybel_0 X1 X3) (k4_waybel_0 X0 X2)))))))$$