

t8_waybel_4

(TMT3XqF8bzY3kHKTVXRAvCxt1Kg5WaqCa3)

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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 $v3_waybel_4 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $k1_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow (k9_subset_1 X0 X1 X2 = k3_xboole_0 X1 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow (m1_subset_1 (k9_subset_1 X0 X1 X2) (k1_zfmisc_1 X0)) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 \\ & X0)))) \Rightarrow ((v3_waybel_4 X1 X0) \Leftrightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. \\ & (m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow (((k1_domain_1 (u1_struct_0 \\ & X0) (u1_struct_0 X0) X2 X4 \in X1) \wedge (k1_domain_1 (u1_struct_0 X0) (\\ & u1_struct_0 X0) X3 X4 \in X1)) \Rightarrow (k1_domain_1 (u1_struct_0 X0) (u1_struct_0 \\ & X0) (k10_lattice3 X0 X2 X3) X4 \in X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k3_xboole_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (X3 \in X1))) \quad (4)$$

Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow ((v1_lattice3 X0) \Rightarrow (\neg v2_struct_0 X0)) \quad (5)$$

Theorem 1

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