

t20_yellow_7 (TMYBCyaPacR- cUwQv9ntPZM51kN8tCQYqo77)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k7_lattice3 : \iota \Rightarrow \iota$ be given. Let $k5_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k3_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_orders_2 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ (u1_struct_0 (k7_lattice3 X0)))) \Rightarrow ((X1 = X2) \Rightarrow ((k3_waybel_0 X0 \\ X1 = k4_waybel_0 (k7_lattice3 X0) X2) \wedge (k4_waybel_0 X0 X1 = k3_waybel_0 \\ (k7_lattice3 X0) X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow ((\neg v2_struct_0 (k7_lattice3 X0)) \wedge (v1_orders_2 (k7_lattice3 X0))) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \tag{4}$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow (l1_struct_0 X0) \tag{5}$$

Assume the following.

$$\forall X0.(l1_orders_2 X0) \Rightarrow ((v1_orders_2 (k7_lattice3 X0)) \wedge (l1_orders_2 (k7_lattice3 X0))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (m1_subset_1 (k6_domain_1 X0 X1) (k1_zfmisc_1 X0)) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_orders_2 X0))\Rightarrow(\forall X1. (m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(k6_waybel_0 X0 X1 = k4_waybel_0 X0 (k6_domain_1 (u1_struct_0 X0) X1))) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_orders_2 X0))\Rightarrow(\forall X1. (m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(k5_waybel_0 X0 X1 = k3_waybel_0 X0 (k6_domain_1 (u1_struct_0 X0) X1))) \quad (9)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_orders_2 X0))\Rightarrow(\forall X1. (m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 (k7_lattice3 X0))\Rightarrow((X1 = X2)\Rightarrow((k5_waybel_0 X0 X1 = k6_waybel_0 (k7_lattice3 X0) X2)\wedge(k6_waybel_0 X0 X1 = k5_waybel_0 (k7_lattice3 X0) X2))))))$$