

t22_waybel32

(TMaoNQofmmGXvjaqudj52inEq2MfoX997HX)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_waybel_9 : \iota \Rightarrow o$ 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 $k5_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v12_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v13_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ (u1_struct_0\ X0))) \Rightarrow ((v4_pre_topc\ X1\ X0) \Leftrightarrow (v3_pre_topc\ (k3_subset_1 \\ (u1_struct_0\ X0)\ X1)\ X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0) \wedge (l1_waybel_9\ X0)) \Rightarrow (\forall X1. \\ (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \Rightarrow (((\forall X2. \\ (m1_subset_1\ X2\ (u1_struct_0\ X0)) \Rightarrow (k5_waybel_0\ X0\ X2 = k2_pre_topc \\ X0\ (k6_domain_1\ (u1_struct_0\ X0)\ X2))) \wedge (v3_pre_topc\ X1\ X0)) \Rightarrow (\\ v13_waybel_0\ X1\ X0))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0)) \Rightarrow (k3_subset_1\ X0\ (k3_subset_1\ X0\ X1) = X1) \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((\neg v2_struct_0\ X0) \wedge (l1_orders_2\ X0)) \wedge \\ ((v13_waybel_0\ X1\ X0) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0 \\ X0)))))) \Rightarrow (v12_waybel_0\ (k3_subset_1\ (u1_struct_0\ X0)\ X1)\ X0) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.(l1_waybel_9\ X0) \Rightarrow ((l1_pre_topc\ X0) \wedge (l1_orders_2\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(m1_subset_1 (k3_subset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge(l1_waybel_9 X0))\Rightarrow(\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))\Rightarrow((\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow(k5_waybel_0 X0 X2 = k2_pre_topc \\ & X0 (k6_domain_1 (u1_struct_0 X0) X2)))\Rightarrow(\forall X2.(m1_subset_1 \\ & X2 (k1_zfmisc_1 (u1_struct_0 X0))\Rightarrow((v4_pre_topc X2 X0)\Rightarrow(v12_waybel_0 \\ & X2 X0)))))) \end{aligned}$$