

t87_abc Miz_1

(TMJPUampxtMj62oxvBbsDk7zYFAnce5YaXM)

October 27, 2020

Let $v1_instalg1 : \iota \Rightarrow o$ be given. Let $v1_abc Miz_1 : \iota \Rightarrow o$ be given. Let $v3_abc Miz_1 : \iota \Rightarrow o$ be given. Let $l1_msualg_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_abc Miz_1 : \iota$ be given. Let $k46_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k35_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_abc Miz_1 : \iota \Rightarrow \iota$ be given. Let $k45_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_abc Miz_1 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_card_3 : \iota \Rightarrow \iota$ be given. Let $u3_msualg_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_msafree3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k28_abc Miz_1 : \iota \Rightarrow \iota$ be given. Let $k14_abc Miz_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_instalg1 X0) \wedge ((v1_abc Miz_1 X0) \wedge ((v3_abc Miz_1 \\ & X0) \wedge (l1_msualg_1 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 k2_abc Miz_1) \Rightarrow \\ & (k45_abc Miz_1 X0 (k35_abc Miz_1 X1 X0) = k6_domain_1 k2_abc Miz_1 \\ & X1)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k2_abc Miz_1) \Rightarrow (k1_abc Miz_1 (k6_domain_1 \\ & k2_abc Miz_1 X0) = k4_subset_1 k2_abc Miz_1 (k3_abc Miz_1 X0) (k6_domain_1 \\ & k2_abc Miz_1 X0)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1_subset_1 X1 (k1_zfmisc_1 \\ & X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 X0))) \Rightarrow (k4_subset_1 X0 X1 X2 = \\ & k2_xboole_0 X1 X2) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_instalg1\ X0) \wedge ((v1_abcmiz_1\ X0) \wedge \\ & ((v3_abcmiz_1\ X0) \wedge (l1_msualg_1\ X0)))) \wedge (m1_subset_1\ X1\ (u1_struct_0 \\ & X0))) \Rightarrow (\forall X2. (m1_abcmiz_1\ X2\ X0\ X1) \Rightarrow (m1_subset_1\ X2\ (k3_card_3 \\ & (u3_msualg_1\ X0\ (k1_msafree3\ X0\ (k28_abcmiz_1\ X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_instalg1\ X0) \wedge ((v1_abcmiz_1\ X0) \wedge \\ & ((v3_abcmiz_1\ X0) \wedge (l1_msualg_1\ X0)))) \wedge (m1_subset_1\ X1\ (k3_card_3 \\ & (u3_msualg_1\ X0\ (k1_msafree3\ X0\ (k28_abcmiz_1\ X0)))))) \Rightarrow (m1_subset_1 \\ & (k45_abcmiz_1\ X0\ X1)\ (k1_zfmisc_1\ k2_abcmiz_1)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. (m1_subset_1\ X0\ k2_abcmiz_1) \Rightarrow (m1_subset_1\ (k3_abcmiz_1\ X0)\ (k1_zfmisc_1\ k2_abcmiz_1)) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1\ X0\ k2_abcmiz_1) \wedge ((v1_instalg1 \\ & X1) \wedge ((v1_abcmiz_1\ X1) \wedge ((v3_abcmiz_1\ X1) \wedge (l1_msualg_1\ X1)))))) \Rightarrow \\ & (m1_abcmiz_1\ (k35_abcmiz_1\ X0\ X1)\ X1\ (k14_abcmiz_1\ X1)) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. ((v1_instalg1\ X0) \wedge ((v1_abcmiz_1\ X0) \wedge (l1_msualg_1\ X0))) \Rightarrow (m1_subset_1\ (k14_abcmiz_1\ X0)\ (u1_struct_0\ X0)) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_instalg1\ X0) \wedge ((v1_abcmiz_1\ X0) \wedge ((v3_abcmiz_1 \\ & X0) \wedge (l1_msualg_1\ X0)))) \Rightarrow (\forall X1. (m1_subset_1\ X1\ (k3_card_3 \\ & (u3_msualg_1\ X0\ (k1_msafree3\ X0\ (k28_abcmiz_1\ X0)))))) \Rightarrow (k46_abcmiz_1 \\ & X0\ X1 = k1_abcmiz_1\ (k45_abcmiz_1\ X0\ X1)) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole_0\ X0\ X1 = k2_xboole_0\ X1\ X0 \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_instalg1\ X0) \wedge ((v1_abcmiz_1\ X0) \wedge ((v3_abcmiz_1 \\ & X0) \wedge (l1_msualg_1\ X0)))) \Rightarrow (\forall X1. (m1_subset_1\ X1\ k2_abcmiz_1) \Rightarrow \\ & (k46_abcmiz_1\ X0\ (k35_abcmiz_1\ X1\ X0) = k4_subset_1\ k2_abcmiz_1 \\ & (k6_domain_1\ k2_abcmiz_1\ X1)\ (k3_abcmiz_1\ X1))) \end{aligned}$$