

t56_topgen_5

(TMHW1m5FCW8sbGyGChdgLmMVJ1J8WVCFhLX)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_limfunc1 : \iota \Rightarrow \iota$ be given. Let $k2_topgen_3 : \iota$ 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 $l1_pre_topc : \iota \Rightarrow o$ 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 $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $k2_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $k10_prob_1 : \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ 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.

$$\begin{aligned} \forall X0.(v1_xxreal_0\ X0) \Rightarrow (\forall X1.(v1_xxreal_0\ X1) \Rightarrow (k6_subset_1 \\ (k4_xxreal_1\ X0\ k1_xxreal_0)\ (k2_xxreal_1\ X1\ k1_xxreal_0) = k4_xxreal_1 \\ X0\ X1)) \end{aligned} \tag{2}$$

Assume the following.

$$k1_numbers = k4_xxreal_1\ k2_xxreal_0\ k1_xxreal_0 \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xxreal_0\ X0) \Rightarrow ((v3_pre_topc\ (k2_limfunc1\ X0)\ k2_topgen_3) \wedge \\ (m1_subset_1\ (k2_limfunc1\ X0)\ (k1_zfmisc_1\ (u1_struct_0\ k2_topgen_3)))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xxreal_0\ X0) \Rightarrow ((v3_pre_topc\ (k10_prob_1\ X0)\ k2_topgen_3) \wedge \\ (m1_subset_1\ (k10_prob_1\ X0)\ (k1_zfmisc_1\ (u1_struct_0\ k2_topgen_3)))) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (6)$$

Assume the following.

$$u1_struct_0 k2_topgen_3 = k1_numbers \quad (7)$$

Assume the following.

$$v1_xxreal_0 k2_xxreal_0 \quad (8)$$

Assume the following.

$$(\neg v2_struct_0 k2_topgen_3) \wedge ((v1_pre_topc k2_topgen_3) \wedge ((v2_pre_topc k2_topgen_3) \wedge (l1_pre_topc k2_topgen_3))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (k3_subset_1 X0 X1 = k4_xboole_0 X0 X1) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k2_limfunc1 X0 = k2_xxreal_1 X0 k1_xxreal_0) \quad (11)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (k10_prob_1 X0 = k4_xxreal_1 k2_xxreal_0 X0) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (13)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((v4_pre_topc (k2_limfunc1 X0) k2_topgen_3) \wedge (m1_subset_1 (k2_limfunc1 X0) (k1_zfmisc_1 (u1_struct_0 k2_topgen_3))))$$