

t33_fintopo3

(TMJkAvF3Kk6dYw4LWqu77syPTeGJzaYmPAz)

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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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k7_fintopo3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k12_fin_topo : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $np_0 : \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k7_fintopo3 \\ & X0 X1 k6_numbers = X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 k5_numbers) \Rightarrow (k7_fintopo3 X0 X1 (k2_nat_1 X2 np_1) = \\ & k12_fin_topo X0 (k7_fintopo3 X0 X1 X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & (m2_subset_1 np_0 k1_numbers k5_numbers) \wedge ((m1_subset_1 np_0 \\ & k5_numbers) \wedge (m1_subset_1 np_0 k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$v1_xboole_0 \text{ } np_0 \tag{6}$$

Assume the following.

$$k2_xcmplx_0 \text{ } np_0 \text{ } np_1 = np_1 \tag{7}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{8}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{9}$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 \text{ } X0 \text{ } k5_numbers) \wedge (v7_ordinal1 \text{ } X1)) \Rightarrow (k2_nat_1 \text{ } X0 \text{ } X1 = k2_xcmplx_0 \text{ } X0 \text{ } X1) \tag{10}$$

Assume the following.

$$v1_xboole_0 \text{ } k1_xboole_0 \tag{11}$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski \text{ } X0 \text{ } X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \tag{12}$$

Assume the following.

$$k1_xboole_0 = the \text{ } (\lambda X0 : \iota. v1_xboole_0 \text{ } X0) \tag{13}$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1_tarski \text{ } X0 \text{ } X1) \wedge (r1_tarski \text{ } X1 \text{ } X0)) \tag{14}$$

Assume the following.

$$\forall X0. (m1_subset_1 \text{ } X0 \text{ } k4_ordinal1) \Rightarrow (v7_ordinal1 \text{ } X0) \tag{15}$$

Theorem 1

$$\forall X0. ((\neg v2_struct_0 \text{ } X0) \wedge (l1_orders_2 \text{ } X0)) \Rightarrow (\forall X1. (m1_subset_1 \text{ } X1 \text{ } (k1_zfmisc_1 \text{ } (u1_struct_0 \text{ } X0))) \Rightarrow (k7_fintopo3 \text{ } X0 \text{ } X1 \text{ } np_1 = k12_fin_topo \text{ } X0 \text{ } X1))$$