

t20_bhsp_4

(TMPPrKi6qXYfzcK7njp98F1iabH8m4ZbkQje)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $v2_bhsp_1 : \iota \Rightarrow o$ be given. Let $l1_bhsp_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_normsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k5_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_bhsp_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge ((v13_algstr_0 X1) \wedge ((v2_rlvect_1 X1) \wedge ((\\ & v3_rlvect_1 X1) \wedge ((v4_rlvect_1 X1) \wedge ((v5_rlvect_1 X1) \wedge ((v6_rlvect_1 \\ & X1) \wedge ((v7_rlvect_1 X1) \wedge ((v8_rlvect_1 X1) \wedge ((v2_bhsp_1 X1) \wedge (l1_bhsp_1 \\ & X1)))))))))) \Rightarrow (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 \\ & k5_numbers (u1_struct_0 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (u1_struct_0 X1)))))) \Rightarrow (k1_normsp_1 X1 X2 (k2_nat_1 \\ & X0 np_1) = k5_algstr_0 X1 (k3_bhsp_4 X1 X2 (k2_nat_1 X0 np_1)) (\\ & k3_bhsp_4 X1 X2 X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$v1_xboole_0 \text{ } np_0 \quad (4)$$

Assume the following.

$$k2_xcmplx_0 \text{ } np_1 \text{ } np_0 = np_1 \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 \text{ } X0 \text{ } k5_numbers) \wedge (v7_ordinal1 \text{ } X1)) \Rightarrow (k2_nat_1 \text{ } X0 \text{ } X1 = k2_xcmplx_0 \text{ } X0 \text{ } X1) \quad (7)$$

Assume the following.

$$m2_subset_1 \text{ } k6_numbers \text{ } k1_numbers \text{ } k5_numbers \quad (8)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 \text{ } X0 \text{ } k5_numbers) \wedge (v7_ordinal1 \text{ } X1)) \Rightarrow (k2_nat_1 \text{ } X0 \text{ } X1 = k2_nat_1 \text{ } X1 \text{ } X0) \quad (9)$$

Assume the following.

$$\forall X0. (v1_xboole_0 \text{ } X0) \Rightarrow (v7_ordinal1 \text{ } X0) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 \text{ } X0) \wedge (v13_algstr_0 \text{ } X0) \wedge ((v2_rlvect_1 \\ & \text{ } X0) \wedge (v3_rlvect_1 \text{ } X0) \wedge (v4_rlvect_1 \text{ } X0) \wedge (v5_rlvect_1 \text{ } X0) \wedge \\ & ((v6_rlvect_1 \text{ } X0) \wedge (v7_rlvect_1 \text{ } X0) \wedge (v8_rlvect_1 \text{ } X0) \wedge ((v2_bhsp_1 \\ & \text{ } X0) \wedge (l1_bhsp_1 \text{ } X0)))))) \Rightarrow (\forall X1. ((v1_funct_1 \text{ } X1) \wedge \\ & ((v1_funct_2 \text{ } X1 \text{ } k5_numbers \text{ } (u1_struct_0 \text{ } X0)) \wedge (m1_subset_1 \text{ } X1 \\ & \text{ } (k1_zfmisc_1 \text{ } (k2_zfmisc_1 \text{ } k5_numbers \text{ } (u1_struct_0 \text{ } X0)))))) \Rightarrow \\ & (k1_normsp_1 \text{ } X0 \text{ } X1 \text{ } np_1 = k5_algstr_0 \text{ } X0 \text{ } (k3_bhsp_4 \text{ } X0 \text{ } X1 \text{ } np_1) \\ & \text{ } (k3_bhsp_4 \text{ } X0 \text{ } X1 \text{ } k6_numbers))) \end{aligned}$$