

t17_real_ns1 (TMSt- dQEED2hH1Q2TqqrhSbmsJyoDYM6JU5)

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Let $v7_ordinal1 : \iota \Rightarrow o$ 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 $k4_real_ns1 : \iota \Rightarrow \iota$ 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 $k7_real_ns1 : \iota \Rightarrow \iota$ be given. Let $r1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_rsspace3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_bhsp_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. 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 $v1_bhsp_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_normsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_normsp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_bhsp_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_bhsp_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\
 & X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\
 & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge ((v2_bhsp_1 \\
 & X0) \wedge (l1_bhsp_1 X0)))))) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge \\
 & ((v1_funct_2 X1 k5_numbers (u1_struct_0 X0)) \wedge (m1_subset_1 X1 \\
 & (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 X0)))))) \Rightarrow \\
 & ((v1_bhsp_2 X1 X0) \Rightarrow (v1_bhsp_3 X1 X0)))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge ((\\
& v1_funct_2 X1 k5_numbers (u1_struct_0 (k4_real_ns1 X0))) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 (k4_real_ns1 \\
& X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 X2 k5_numbers \\
& (u1_struct_0 (k7_real_ns1 X0))) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\
& (k2_zfmisc_1 k5_numbers (u1_struct_0 (k7_real_ns1 X0)))))) \Rightarrow \\
& ((r1_funct_2 k5_numbers (u1_struct_0 (k4_real_ns1 X0)) k5_numbers \\
& (u1_struct_0 (k7_real_ns1 X0)) X1 X2) \Rightarrow (((v3_normsp_1 X1 (k4_real_ns1 \\
& X0)) \Rightarrow ((v1_bhspl_2 X2 (k7_real_ns1 X0)) \wedge (k6_normsp_1 (k4_real_ns1 \\
& X0) X1 = k1_bhspl_2 (k7_real_ns1 X0) X2))) \wedge ((v1_bhspl_2 X2 (k7_real_ns1 \\
& X0)) \Rightarrow ((v3_normsp_1 X1 (k4_real_ns1 X0)) \wedge (k6_normsp_1 (k4_real_ns1 \\
& X0) X1 = k1_bhspl_2 (k7_real_ns1 X0) X2)))))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge ((\\
& v1_funct_2 X1 k5_numbers (u1_struct_0 (k4_real_ns1 X0))) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 (k4_real_ns1 \\
& X0)))))) \Rightarrow ((v1_rspace3 X1 (k4_real_ns1 X0)) \Rightarrow (v3_normsp_1 X1 \\
& (k4_real_ns1 X0))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(v7_ordinal1 X0) \Rightarrow ((\neg v2_struct_0 (k7_real_ns1 X0)) \wedge \\
& ((v13_algstr_0 (k7_real_ns1 X0)) \wedge ((v2_rlvect_1 (k7_real_ns1 \\
& X0)) \wedge ((v3_rlvect_1 (k7_real_ns1 X0)) \wedge ((v4_rlvect_1 (k7_real_ns1 \\
& X0)) \wedge ((v5_rlvect_1 (k7_real_ns1 X0)) \wedge ((v6_rlvect_1 (k7_real_ns1 \\
& X0)) \wedge ((v7_rlvect_1 (k7_real_ns1 X0)) \wedge ((v8_rlvect_1 (k7_real_ns1 \\
& X0)) \wedge ((v1_bhspl_1 (k7_real_ns1 X0)) \wedge (v2_bhspl_1 (k7_real_ns1 \\
& X0))))))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(v7_ordinal1 X0) \Rightarrow ((\neg v2_struct_0 (k7_real_ns1 X0)) \wedge \\
& ((v1_bhspl_1 (k7_real_ns1 X0)) \wedge (l1_bhspl_1 (k7_real_ns1 X0))))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge ((\\
& v1_funct_2 X1 k5_numbers (u1_struct_0 (k4_real_ns1 X0))) \wedge (m1_subset_1 \\
& X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 (k4_real_ns1 \\
& X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 X2 k5_numbers \\
& (u1_struct_0 (k7_real_ns1 X0))) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\
& (k2_zfmisc_1 k5_numbers (u1_struct_0 (k7_real_ns1 X0)))))) \Rightarrow \\
& (((r1_funct_2 k5_numbers (u1_struct_0 (k4_real_ns1 X0)) k5_numbers \\
& (u1_struct_0 (k7_real_ns1 X0)) X1 X2) \wedge (v1_rspace3 X1 (k4_real_ns1 \\
& X0)) \Rightarrow (v1_bhspl_3 X2 (k7_real_ns1 X0))))))
\end{aligned}$$