

t35_c0sp2

(TMTsvBYEtgq9vuK8QAjQ7bBwhvFV7EpAopF)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v2_normsp_1 : \iota \Rightarrow o$ be given. Let $k9_c0sp2 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_normsp_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_complex1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1_normsp_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.((\neg v2_struct_0 \\ & X1) \wedge ((v2_pre_topc X1) \wedge (l1_pre_topc X1))) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 (k9_c0sp2 X1))) \Rightarrow (\forall X3.(m1_subset_1 X3 (\\ & u1_struct_0 (k9_c0sp2 X1))) \Rightarrow (((k1_normsp_0 (k9_c0sp2 X1) X2 = \\ & k6_numbers) \Rightarrow (X2 = k4_struct_0 (k9_c0sp2 X1))) \wedge ((X2 = k4_struct_0 \\ & (k9_c0sp2 X1)) \Rightarrow (k1_normsp_0 (k9_c0sp2 X1) X2 = k6_numbers)) \wedge (\\ & (k1_normsp_0 (k9_c0sp2 X1) (k1_rlvect_1 (k9_c0sp2 X1) X2 X0) = k8_real_1 \\ & (k18_complex1 X0) (k1_normsp_0 (k9_c0sp2 X1) X2)) \wedge (r1_xxreal_0 \\ & (k1_normsp_0 (k9_c0sp2 X1) (k1_algstr_0 (k9_c0sp2 X1) X2 X3)) (\\ & k7_real_1 (k1_normsp_0 (k9_c0sp2 X1) X2) (k1_normsp_0 (k9_c0sp2 \\ & X1) X3)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \exists X1. m1_subset_1 X1 X0 \tag{2}$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow ((\neg v2_struct_0 (k9_c0sp2 X0)) \wedge (l1_normsp_1 (k9_c0sp2 X0))) \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_normsp_1 X0)) \Rightarrow ((v2_normsp_1 \\
& \quad X0) \Leftrightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& \quad (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 \\
& \quad k1_numbers) \Rightarrow ((k1_normsp_0 X0 (k1_rlvect_1 X0 X1 X3) = k8_real_1 \\
& \quad (k18_complex1 X3) (k1_normsp_0 X0 X1)) \wedge (r1_xxreal_0 (k1_normsp_0 \\
& \quad X0 (k1_algstr_0 X0 X1 X2)) (k7_real_1 (k1_normsp_0 X0 X1) (k1_normsp_0 \\
& \quad X0 X2))))))))))
\end{aligned}
\tag{4}$$

Theorem 1

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (v2_normsp_1 (k9_c0sp2 X0))$$