

l71_cc0sp2
(TMNSfw47boMZqr24tDbzCQFHhmgTN15ocmq)

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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 $v8_clvect_1 : \iota \Rightarrow o$ be given. Let $k9_cc0sp2 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k1_clvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k16_complex1 : \iota \Rightarrow \iota$ be given. Let $k17_complex1 : \iota \Rightarrow \iota$ be given. Let $v7_clvect_1 : \iota \Rightarrow o$ be given. Let $l2_clvect_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge \\ ((v2_pre_topc X1) \wedge (l1_pre_topc X1))) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (u1_struct_0 (k9_cc0sp2 X1))) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ (u1_struct_0 (k9_cc0sp2 X1))) \Rightarrow (((k1_normsp_0 (k9_cc0sp2 X1) \\ X2 = k6_numbers) \Rightarrow (X2 = k4_struct_0 (k9_cc0sp2 X1))) \wedge ((X2 = k4_struct_0 \\ (k9_cc0sp2 X1) \Rightarrow (k1_normsp_0 (k9_cc0sp2 X1) X2 = k6_numbers)) \wedge \\ ((k1_normsp_0 (k9_cc0sp2 X1) (k1_clvect_1 (k9_cc0sp2 X1) X2 X0) = \\ k8_real_1 (k18_complex1 X0) (k1_normsp_0 (k9_cc0sp2 X1) X2)) \wedge \\ (r1_xxreal_0 (k1_normsp_0 (k9_cc0sp2 X1) (k1_algstr_0 (k9_cc0sp2 \\ X1) X2 X3)) (k7_real_1 (k1_normsp_0 (k9_cc0sp2 X1) X2) (k1_normsp_0 \\ (k9_cc0sp2 X1) X3)))))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k18_complex1 X0 = k16_complex1 X0) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k17_complex1 X0 = k16_complex1 X0) \quad (3)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow ((\neg v2_struct_0 (k9_cc0sp2 X0)) \wedge (v7_clvect_1 (k9_cc0sp2 \\ X0))) \quad (4)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (l2_clvect_1 (k9_cc0sp2 X0)) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge (l2_clvect_1 X0)) \Rightarrow ((v8_clvect_1 X0) \Leftrightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(v1_xcmplx_0 X3) \Rightarrow \\ ((k1_normsp_0 X0 (k1_clvect_1 X0 X1 X3) = k8_real_1 (k17_complex1 X3) \\ (k1_normsp_0 X0 X1)) \wedge (r1_xxreal_0 (k1_normsp_0 X0 (k1_algstr_0 X0 X1 X2)) \\ (k7_real_1 (k1_normsp_0 X0 X1) (k1_normsp_0 X0 X2)))))))))) \end{aligned} \quad (6)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (v8_clvect_1 (k9_cc0sp2 X0))$$