t34_csspace (TMVNft5EdunabEu4g1PUGiewuYSss7QWD5u)

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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 $v2\_clvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_clvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_clvect\_1 : \iota \Rightarrow o$ be given. Let $v5\_clvect\_1 : \iota \Rightarrow o$ be given. Let $v2\_csspace : \iota \Rightarrow o$ be given. Let $l1\_csspace : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k17\_complex1 : \iota \Rightarrow \iota$ be given. Let $k12\_csspace : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_complex1 : \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_complex1 : \iota \Rightarrow \iota$ be given. Let $k7\_complex1 : \iota$ be given. Let $np\_\_0 : \iota$ be given. Let $k1\_xcmplx\_0 : \iota$ be given. Let $k16\_complex1 : \iota \Rightarrow \iota$ be given. Let $v3\_membered : \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k15\_complex1 : \iota \Rightarrow \iota$ be given. Let $k1\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_clvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k2\_xcmplx\_0\ X0\ k6\_numbers = X0) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k2\_xcmplx\_0\ (k3\_complex1\ X0)\ (k3\_xcmplx\_0\ (k4\_complex1\ X0)\ k7\_complex1) = X0) \tag{3}$$

Assume the following.

$$v1\_xboole\_0\ np\_\_0 \tag{4}$$

Assume the following.

$$k3\_xcmplx\_0\ np\_\_0\ k1\_xcmplx\_0 = np\_\_0 \tag{5}$$

Assume the following.

$$k7\_complex1 = k1\_xcmplx\_0 \tag{6}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{7}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k17\_complex1\ X0 = k16\_complex1\ X0) \tag{8}$$

Assume the following.

$$v3\_membered\ k1\_numbers \tag{9}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (m1\_subset\_1\ (k3\_complex1\ X0)\ k1\_numbers) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0) \wedge (l1\_csspace\ X0)) \wedge ((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \wedge (m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)))) \Rightarrow (v1\_xcmplx\_0\ (k12\_csspace\ X0\ X1\ X2)) \tag{11}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (((r1\_xxreal\_0\ k6\_numbers\ X0) \Rightarrow (k16\_complex1\ X0 = X0)) \wedge ((\neg r1\_xxreal\_0\ k6\_numbers\ X0) \Rightarrow (k16\_complex1\ X0 = k4\_xcmplx\_0\ X0))) \tag{12}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_csspace\ X0)) \Rightarrow ((v2\_csspace\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X4.(v1\_xcmplx\_0\ X4) \Rightarrow (((k12\_csspace\ X0\ X1\ X1 = k6\_numbers) \Rightarrow (X1 = k4\_struct\_0\ X0)) \wedge (((X1 = k4\_struct\_0\ X0) \Rightarrow (k12\_csspace\ X0\ X1\ X1 = k6\_numbers)) \wedge ((r1\_xxreal\_0\ k6\_numbers\ (k3\_complex1\ (k12\_csspace\ X0\ X1\ X1))) \wedge ((k6\_numbers = k4\_complex1\ (k12\_csspace\ X0\ X1\ X1)) \wedge ((k12\_csspace\ X0\ X1\ X2 = k15\_complex1\ (k12\_csspace\ X0\ X2\ X1)) \wedge ((k12\_csspace\ X0\ (k1\_algstr\_0\ X0\ X1\ X2)\ X3 = k2\_xcmplx\_0\ (k12\_csspace\ X0\ X1\ X3)\ (k12\_csspace\ X0\ X2\ X3)) \wedge (k12\_csspace\ X0\ (k1\_clvect\_1\ X0\ X1\ X4)\ X2 = k3\_xcmplx\_0\ X4\ (k12\_csspace\ X0\ X1\ X2)))))))))))) \tag{13}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (v1\_xcmplx\_0\ X0) \tag{14}$$

Assume the following.

$$\forall X0.(v3\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow (v1\_xreal\_0\ X1)) \tag{15}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v13\_algstr\_0\ X0)\wedge((v2\_rlvect\_1\ X0)\wedge((v3\_rlvect\_1\ X0)\wedge((v4\_rlvect\_1\ X0)\wedge((v2\_clvect\_1\ X0)\wedge ((v3\_clvect\_1\ X0)\wedge((v4\_clvect\_1\ X0)\wedge((v5\_clvect\_1\ X0)\wedge((v2\_csspace\ X0)\wedge(l1\_csspace\ X0))))))))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(k17\_complex1\ (k12\_csspace\ X0\ X1\ X1) = k3\_complex1\ (k12\_csspace\ X0\ X1\ X1)))$$