t27_clvect_1 (TMKAipWHafcMDQDpmyFQdihvwSeg7kmj94J)

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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 $l1\_clvect\_1 : \iota \Rightarrow o$ be given. Let $m1\_clvect\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_struct\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $l2\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l1\_algstr\_0 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u1\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_realset1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_clvect\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_numbers : \iota$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v2\_rlvect\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge ((v2\_clvect\_1\ X0) \wedge ((v3\_clvect\_1\ X0) \wedge ((v4\_clvect\_1\ X0) \wedge ((v5\_clvect\_1\ X0) \wedge (l1\_clvect\_1\ X0))))))))) \Rightarrow (\forall X1.(m1\_clvect\_1\ X1\ X0) \Rightarrow ((\neg v2\_struct\_0\ X1) \wedge ((v13\_algstr\_0\ X1) \wedge ((v2\_rlvect\_1\ X1) \wedge ((v3\_rlvect\_1\ X1) \wedge ((v4\_rlvect\_1\ X1) \wedge ((v2\_clvect\_1\ X1) \wedge ((v3\_clvect\_1\ X1) \wedge ((v4\_clvect\_1\ X1) \wedge ((v5\_clvect\_1\ X1) \wedge (l1\_clvect\_1\ X1)))))))))) \tag{1}$$

Assume the following.

$$\forall X0.(l2\_struct\_0\ X0) \Rightarrow (l1\_struct\_0\ X0) \tag{2}$$

Assume the following.

$$\forall X0.(l2\_algstr\_0\ X0) \Rightarrow ((l2\_struct\_0\ X0) \wedge (l1\_algstr\_0\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_clvect\_1\ X0) \Rightarrow (l2\_algstr\_0\ X0) \tag{4}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v13\_algstr\_0\ X0)\wedge((v2\_rlvect\_1\ X0)\wedge((v3\_rlvect\_1\ X0)\wedge((v4\_rlvect\_1\ X0)\wedge((v2\_clvect\_1\ X0)\wedge((v3\_clvect\_1\ X0)\wedge((v4\_clvect\_1\ X0)\wedge((v5\_clvect\_1\ X0)\wedge(l1\_clvect\_1\ X0))))))))))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v13\_algstr\_0\ X1)\wedge((v2\_rlvect\_1\ X1)\wedge((v3\_rlvect\_1\ X1)\wedge((v4\_rlvect\_1\ X1)\wedge((v2\_clvect\_1\ X1)\wedge((v3\_clvect\_1\ X1)\wedge((v4\_clvect\_1\ X1)\wedge((v5\_clvect\_1\ X1)\wedge(l1\_clvect\_1\ X1))))))))))\Rightarrow((m1\_clvect\_1\ X1\ X0)\Leftrightarrow((r1\_tarski\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0))\wedge((k4\_struct\_0\ X1 = k4\_struct\_0\ X0)\wedge((u1\_algstr\_0\ X1 = k1\_realset1\ (u1\_algstr\_0\ X0)\ (u1\_struct\_0\ X1))\wedge(u1\_clvect\_1\ X1 = k2\_partfun1\ (k2\_zfmisc\_1\ k2\_numbers\ (u1\_struct\_0\ X0))\ (u1\_struct\_0\ X0)\ (u1\_clvect\_1\ X0)\ (k2\_zfmisc\_1\ k2\_numbers\ (u1\_struct\_0\ X1))))))))) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0)\Rightarrow(\forall X1.(r1\_struct\_0\ X0\ X1)\Leftrightarrow(X1 \in u1\_struct\_0\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow(X2 \in X1)) \tag{7}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v13\_algstr\_0\ X0)\wedge((v2\_rlvect\_1\ X0)\wedge((v3\_rlvect\_1\ X0)\wedge((v4\_rlvect\_1\ X0)\wedge((v2\_clvect\_1\ X0)\wedge((v3\_clvect\_1\ X0)\wedge((v4\_clvect\_1\ X0)\wedge((v5\_clvect\_1\ X0)\wedge(l1\_clvect\_1\ X0))))))))))\Rightarrow(\forall X1.(m1\_clvect\_1\ X1\ X0)\Rightarrow(\forall X2.(m1\_clvect\_1\ X2\ X0)\Rightarrow(\forall X3.((r1\_struct\_0\ X1\ X3)\wedge(m1\_clvect\_1\ X1\ X2))\Rightarrow(r1\_struct\_0\ X2\ X3))))$$