

t123_clvect_1
(TMXCzjjStEAARFSVxosdgibbuBALFuo4S6Z)

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Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_numbers : \iota$ 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 $v2_clvect_1 : \iota \Rightarrow o$ 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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $g1_clvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_clvect_1 : \iota \Rightarrow \iota$ be given. Let $k1_clvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v2_clvect_1 X0) \wedge \\
& ((v3_clvect_1 X0) \wedge ((v4_clvect_1 X0) \wedge ((v5_clvect_1 X0) \wedge (l1_clvect_1 \\
& X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\
& X0))) \Rightarrow (\forall X2.(\neg v1_xboole_0 X2) \Rightarrow (\forall X3.(m1_subset_1 \\
& X3 X2) \Rightarrow (\forall X4.((v1_funct_1 X4) \wedge ((v1_funct_2 X4 (k2_zfmisc_1 \\
& X2 X2) X2) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 \\
& X2 X2) X2)))))) \Rightarrow (\forall X5.((v1_funct_1 X5) \wedge ((v1_funct_2 X5 (\\
& k2_zfmisc_1 k2_numbers X2) X2) \wedge (m1_subset_1 X5 (k1_zfmisc_1 (\\
& k2_zfmisc_1 (k2_zfmisc_1 k2_numbers X2) X2)))))) \Rightarrow (\forall X6. \\
& (v1_xcmplx_0 X6) \Rightarrow (\forall X7.(m1_subset_1 X7 (u1_struct_0 (g1_clvect_1 \\
& X2 X3 X4 X5))) \Rightarrow (\forall X8.(m1_subset_1 X8 (u1_struct_0 X0) \Rightarrow (\\
& ((X1 = X2) \wedge ((X5 = k2_partfun1 (k2_zfmisc_1 k2_numbers (u1_struct_0 \\
& X0) (u1_struct_0 X0) (u1_clvect_1 X0) (k2_zfmisc_1 k2_numbers \\
& X1)) \wedge (X7 = X8))) \Rightarrow (k1_clvect_1 (g1_clvect_1 X2 X3 X4 X5) X7 X6 = k1_clvect_1 \\
& X0 X8 X6))))))))))
\end{aligned}$$

(1)

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\\ & \quad \forall X2.(m1_subset_1 X2 X1) \Rightarrow (\forall X3.((v1_funct_1 X3) \wedge \\ & ((v1_funct_2 X3 (k2_zfmisc_1 X1 X1) X1) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & \quad (k2_zfmisc_1 (k2_zfmisc_1 X1 X1) X1)))))) \Rightarrow (\forall X4.((v1_funct_1 \\ & X4) \wedge ((v1_funct_2 X4 (k2_zfmisc_1 k2_numbers X1) X1) \wedge (m1_subset_1 \\ & X4 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 k2_numbers X1) X1)))))) \Rightarrow \\ & \quad (\forall X5.((\neg v2_struct_0 X5) \wedge ((v13_algstr_0 X5) \wedge ((v2_rlvect_1 \\ & X5) \wedge ((v3_rlvect_1 X5) \wedge ((v4_rlvect_1 X5) \wedge ((v2_clvect_1 X5) \wedge \\ & ((v3_clvect_1 X5) \wedge ((v4_clvect_1 X5) \wedge ((v5_clvect_1 X5) \wedge (l1_clvect_1 \\ & X5)))))))))) \Rightarrow (\forall X6.(m1_subset_1 X6 (k1_zfmisc_1 (u1_struct_0 \\ & X5))) \Rightarrow (\forall X7.(m1_subset_1 X7 (u1_struct_0 X5))) \Rightarrow (\forall X8. \\ & (m1_subset_1 X8 (u1_struct_0 (g1_clvect_1 X1 X2 X3 X4))) \Rightarrow (((X6 = \\ & X1) \wedge ((X4 = k2_partfun1 (k2_zfmisc_1 k2_numbers (u1_struct_0 X5)) \\ & (u1_struct_0 X5) (u1_clvect_1 X5) (k2_zfmisc_1 k2_numbers X6)) \wedge \\ & (X8 = X7))) \Rightarrow (k1_clvect_1 (g1_clvect_1 X1 X2 X3 X4) X8 X0 = k1_clvect_1 \\ & X5 X7 X0))))))))) \end{aligned}$$