

t11_clvect_3

(TMbw9UtveC3ZHv29oVAJ7xGGTamar5QXy6c)

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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 $v1_funct.1 : \iota \Rightarrow o$ be given. Let $v1_funct.2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $u1_struct.0 : \iota \Rightarrow \iota$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_clvect.3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_clvect.2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_bhsp.4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_clvect.2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_clvect.1 : \iota \Rightarrow o$ be given. Let $l2_algstr.0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct.0 X0) \wedge ((v13_algstr.0 X0) \wedge ((v2_rlvect.1 \\ & X0) \wedge ((v3_rlvect.1 X0) \wedge ((v4_rlvect.1 X0) \wedge ((v2_clvect.1 X0) \wedge \\ & ((v3_clvect.1 X0) \wedge ((v4_clvect.1 X0) \wedge ((v5_clvect.1 X0) \wedge ((v2_csspace \\ & X0) \wedge (l1_csspace X0)))))))))) \Rightarrow (\forall X1.((v1_funct.1 X1) \wedge \\ & ((v1_funct.2 X1 k5_numbers (u1_struct.0 X0)) \wedge (m1_subset.1 X1 \\ & (k1_zfmisc.1 (k2_zfmisc.1 k5_numbers (u1_struct.0 X0)))))) \Rightarrow \\ & ((v1_clvect.2 X1 X0) \Rightarrow (v3_clvect.2 X1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(l1_csspace X0) \Rightarrow (l1_clvect.1 X0) \quad (2)$$

Assume the following.

$$\forall X0.(l1_clvect.1 X0) \Rightarrow (l2_algstr.0 X0) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(((\neg v2_struct.0 X0) \wedge (l2_algstr.0 X0)) \wedge \\ & ((v1_funct.1 X1) \wedge ((v1_funct.2 X1 k5_numbers (u1_struct.0 X0)) \wedge \\ & (m1_subset.1 X1 (k1_zfmisc.1 (k2_zfmisc.1 k5_numbers (u1_struct.0 \\ & X0)))))) \Rightarrow ((v1_funct.1 (k1_bhsp.4 X0 X1)) \wedge ((v1_funct.2 (k1_bhsp.4 \\ & X0 X1) k5_numbers (u1_struct.0 X0)) \wedge (m1_subset.1 (k1_bhsp.4 X0 \\ & X1) (k1_zfmisc.1 (k2_zfmisc.1 k5_numbers (u1_struct.0 X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v2_clvect_1 X0) \wedge \\
& ((v3_clvect_1 X0) \wedge ((v4_clvect_1 X0) \wedge ((v5_clvect_1 X0) \wedge ((v2_csspace \\
& X0) \wedge (l1_csspace X0)))))))))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& ((v1_funct_2 X1 k5_numbers (u1_struct_0 X0)) \wedge (m1_subset_1 X1 \\
& (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 X0)))))) \Rightarrow \\
& ((v1_clvect_3 X1 X0) \Leftrightarrow (v1_clvect_2 (k1_bhsp_4 X0 X1) X0)))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
& X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v2_clvect_1 X0) \wedge \\
& ((v3_clvect_1 X0) \wedge ((v4_clvect_1 X0) \wedge ((v5_clvect_1 X0) \wedge ((v2_csspace \\
& X0) \wedge (l1_csspace X0)))))))))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge \\
& ((v1_funct_2 X1 k5_numbers (u1_struct_0 X0)) \wedge (m1_subset_1 X1 \\
& (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (u1_struct_0 X0)))))) \Rightarrow \\
& ((v1_clvect_3 X1 X0) \Rightarrow (v3_clvect_2 (k1_bhsp_4 X0 X1) X0)))
\end{aligned}$$