

t58_rlvect_2 (TMbcdJf-
Pzj39wVmvSgMyDM67YLEK4ZaYJv9)

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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 $v5_rlvect.1 : \iota \Rightarrow o$ be given. Let $v6_rlvect.1 : \iota \Rightarrow o$ be given. Let $v7_rlvect.1 : \iota \Rightarrow o$ be given. Let $v8_rlvect.1 : \iota \Rightarrow o$ be given. Let $l1_rlvect.1 : \iota \Rightarrow o$ be given. Let $u1_struct.0 : \iota \Rightarrow \iota$ be given. Let $k16_rlvect.2 : \iota \Rightarrow \iota$ be given. Let $k11_rlvect.2 : \iota \Rightarrow \iota$ 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 $k1_numbers : \iota$ be given. Let $g1_rlvect.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_rlvect.1 : \iota \Rightarrow o$ be given. Let $l2_algstr.0 : \iota \Rightarrow o$ be given. Let $m1_rlvect.2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_rlvect.2 : \iota \Rightarrow \iota$ be given. Let $k15_rlvect.2 : \iota \Rightarrow \iota$ be given. Let $k14_rlvect.2 : \iota \Rightarrow \iota$ be given. Let $k13_rlvect.2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2_struct.0 : \iota \Rightarrow \iota$ be given. Let $u1_algstr.0 : \iota \Rightarrow \iota$ be given. Let $u1_rlvect.1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((m1_subset.1 X1 \\ & X0) \wedge (((v1_funct.1 X2) \wedge (v1_funct.2 X2 (k2_zfmisc.1 X0 X0) X0) \wedge \\ & (m1_subset.1 X2 (k1_zfmisc.1 (k2_zfmisc.1 (k2_zfmisc.1 X0 X0) \\ & X0)))) \wedge ((v1_funct.1 X3) \wedge (v1_funct.2 X3 (k2_zfmisc.1 k1_numbers \\ & X0) X0) \wedge (m1_subset.1 X3 (k1_zfmisc.1 (k2_zfmisc.1 (k2_zfmisc.1 \\ & k1_numbers X0) X0)))))) \Rightarrow (\forall X4. \forall X5. \forall X6. \forall X7. \\ & (g1_rlvect.1 X0 X1 X2 X3 = g1_rlvect.1 X4 X5 X6 X7) \Rightarrow ((X0 = X4) \wedge ((X1 = \\ & X5) \wedge ((X2 = X6) \wedge (X3 = X7)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct.0 X0) \wedge ((v13_algstr.0 X0) \wedge ((v2_rlvect.1 \\ & X0) \wedge ((v3_rlvect.1 X0) \wedge ((v4_rlvect.1 X0) \wedge ((v5_rlvect.1 X0) \wedge \\ & ((v6_rlvect.1 X0) \wedge ((v7_rlvect.1 X0) \wedge ((v8_rlvect.1 X0) \wedge (l1_rlvect.1 \\ & X0)))))))))) \Rightarrow ((\neg v2_struct.0 (k16_rlvect.2 X0)) \wedge (v1_rlvect.1 \\ & (k16_rlvect.2 X0))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. (l1_rlvect.1 X0) \Rightarrow (l2_algstr.0 X0) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l2_algstr_0 X0)) \Rightarrow (m1_rlvect_2 (k4_rlvect_2 X0) X0) \quad (4)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow (l1_rlvect_1 (k16_rlvect_2 X0)) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow ((v1_funct_1 (k15_rlvect_2 X0)) \wedge ((v1_funct_2 (k15_rlvect_2 X0) (k2_zfmisc_1 k1_numbers (k11_rlvect_2 X0)) (k11_rlvect_2 X0)) \wedge (m1_subset_1 (k15_rlvect_2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 k1_numbers (k11_rlvect_2 X0)) (k11_rlvect_2 X0)))))) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow ((v1_funct_1 (k14_rlvect_2 X0)) \wedge ((v1_funct_2 (k14_rlvect_2 X0) (k2_zfmisc_1 (k11_rlvect_2 X0) (k11_rlvect_2 X0)) (k11_rlvect_2 X0)) \wedge (m1_subset_1 (k14_rlvect_2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 (k11_rlvect_2 X0) (k11_rlvect_2 X0)) (k11_rlvect_2 X0)))))) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \wedge (m1_rlvect_2 X1 X0)) \Rightarrow (m1_subset_1 (k13_rlvect_2 X0 X1) (k11_rlvect_2 X0)) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow (k16_rlvect_2 X0 = g1_rlvect_1 (k11_rlvect_2 X0) (k13_rlvect_2 X0 (k4_rlvect_2 X0)) (k14_rlvect_2 X0) (k15_rlvect_2 X0)) \quad (9)$$

Assume the following.

$$\forall X0. (l1_rlvect_1 X0) \Rightarrow ((v1_rlvect_1 X0) \Rightarrow (X0 = g1_rlvect_1 (u1_struct_0 X0) (u2_struct_0 X0) (u1_algstr_0 X0) (u1_rlvect_1 X0))) \quad (10)$$

Theorem 1

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow (u1_struct_0 (k16_rlvect_2 X0) = k11_rlvect_2 X0)$$