

t25_complfld
(TMa3WGu2LYyaQN1yFdPxTJt7xiw54GwHTjC)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_complfld : \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_vectsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_complex1 : \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v33_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v5_group_1 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $k8_group_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_vectsp_1 : \iota \Rightarrow o$ be given. Let $v6_vectsp_1 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l5_algstr_0 : \iota \Rightarrow o$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_algstr_0 : \iota \Rightarrow o$ be given. Let $k11_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$k4_struct_0 \ k1_complfld = k5_complex1 \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 \ X0) \wedge ((v13_algstr_0 \ X0) \wedge ((v33_algstr_0 \\ & \ X0) \wedge ((v3_rlvect_1 \ X0) \wedge ((v4_rlvect_1 \ X0) \wedge ((v3_group_1 \ X0) \wedge \\ & (v5_group_1 \ X0) \wedge ((v4_vectsp_1 \ X0) \wedge ((v5_vectsp_1 \ X0) \wedge (l6_algstr_0 \\ & \ X0)))))))))) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ (u1_struct_0 \ X0)) \Rightarrow \\ & (\forall X2. (m1_subset_1 \ X2 \ (u1_struct_0 \ X0)) \Rightarrow ((k8_group_1 \ X0 \\ & \ X1 \ X2 = k4_struct_0 \ X0) \Leftrightarrow ((X1 = k4_struct_0 \ X0) \vee (X2 = k4_struct_0 \\ & \ X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & (\neg v6_struct_0 \ k1_complfld) \wedge ((v13_algstr_0 \ k1_complfld) \wedge ((\\ & \ v33_algstr_0 \ k1_complfld) \wedge ((v36_algstr_0 \ k1_complfld) \wedge ((v3_group_1 \\ & \ k1_complfld) \wedge ((v5_group_1 \ k1_complfld) \wedge ((v3_vectsp_1 \ k1_complfld) \wedge \\ & ((v5_vectsp_1 \ k1_complfld) \wedge ((v6_vectsp_1 \ k1_complfld) \wedge ((v2_rlvect_1 \\ & \ k1_complfld) \wedge ((v3_rlvect_1 \ k1_complfld) \wedge (v4_rlvect_1 \ k1_complfld)))))))))) \end{aligned} \tag{3}$$

Assume the following.

$$(v36_algstr_0 \ k1_complfld) \wedge (v4_vectsp_1 \ k1_complfld) \quad (4)$$

Assume the following.

$$(\neg v2_struct_0 \ k1_complfld) \wedge (v36_algstr_0 \ k1_complfld) \quad (5)$$

Assume the following.

$$\forall X0. (l6_algstr_0 \ X0) \Rightarrow ((l2_algstr_0 \ X0) \wedge (l5_algstr_0 \ X0)) \quad (6)$$

Assume the following.

$$\forall X0. (l2_algstr_0 \ X0) \Rightarrow ((l2_struct_0 \ X0) \wedge (l1_algstr_0 \ X0)) \quad (7)$$

Assume the following.

$$\forall X0. (l2_struct_0 \ X0) \Rightarrow (m1_subset_1 \ (k4_struct_0 \ X0) \ (u1_struct_0 \ X0)) \quad (8)$$

Assume the following.

$$(v36_algstr_0 \ k1_complfld) \wedge (l6_algstr_0 \ k1_complfld) \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. ((l5_algstr_0 \ X0) \wedge (m1_subset_1 \ X1 \ (u1_struct_0 \ X0))) \Rightarrow (m1_subset_1 \ (k11_algstr_0 \ X0 \ X1) \ (u1_struct_0 \ X0)) \quad (10)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 \ X0) \wedge ((v33_algstr_0 \ X0) \wedge ((v3_group_1 \ X0) \wedge ((v5_group_1 \ X0) \wedge ((v4_vectsp_1 \ X0) \wedge ((v5_vectsp_1 \ X0) \wedge (l6_algstr_0 \ X0))))))) \Rightarrow (\forall X1. (m1_subset_1 \ X1 \ (u1_struct_0 \ X0)) \Rightarrow (\forall X2. (m1_subset_1 \ X2 \ (u1_struct_0 \ X0)) \Rightarrow (k3_vectsp_1 \ X0 \ X1 \ X2 = k8_group_1 \ X0 \ X1 \ (k11_algstr_0 \ X0 \ X2)))) \quad (11)$$

Theorem 1

$$\forall X0. (m1_subset_1 \ X0 \ (u1_struct_0 \ k1_complfld)) \Rightarrow ((X0 \neq k4_struct_0 \ k1_complfld) \Rightarrow (k3_vectsp_1 \ k1_complfld \ (k4_struct_0 \ k1_complfld) \ X0 = k4_struct_0 \ k1_complfld))$$