

t39_complfld
(TMG4WtqtmHJChPJ5BcoZAGzUFXLK5WPYDrM)

October 27, 2020

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 $k8_group_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v33_algstr_0 : \iota \Rightarrow o$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v5_group_1 : \iota \Rightarrow o$ be given. Let $v3_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $v6_vectsp_1 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 k1_complfld)) \Rightarrow ((X0 \neq k4_struct_0 \\ & k1_complfld) \Rightarrow (k3_vectsp_1 k1_complfld X1 (k11_algstr_0 k1_complfld \\ & X0) = k8_group_1 k1_complfld X1 X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 k1_complfld)) \Rightarrow (\neg(X0 \neq k4_struct_0 \\ & k1_complfld) \wedge ((X1 \neq k4_struct_0 k1_complfld) \wedge (k11_algstr_0 \\ & k1_complfld (k3_vectsp_1 k1_complfld X0 X1) \neq k3_vectsp_1 k1_complfld \\ & X1 X0)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\ & k1_complfld)) \Rightarrow (\neg(X0 \neq k4_struct_0 k1_complfld) \wedge ((X1 \neq k4_struct_0 \\ & k1_complfld) \wedge (k8_group_1 k1_complfld (k3_vectsp_1 k1_complfld \\ & X2 X0) (k3_vectsp_1 k1_complfld X3 X1) \neq k3_vectsp_1 k1_complfld \\ & (k8_group_1 k1_complfld X2 X3) (k8_group_1 k1_complfld X0 X1)))))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 k1_complfld)) \Rightarrow ((k3_vectsp_1 k1_complfld \\ & X1 X0 = k4_struct_0 k1_complfld) \Rightarrow ((X0 = k4_struct_0 k1_complfld) \vee \\ & (X1 = k4_struct_0 k1_complfld)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & (\neg v6_struct_0 k1_complfld) \wedge ((v13_algstr_0 k1_complfld) \wedge ((\\ & v33_algstr_0 k1_complfld) \wedge ((v36_algstr_0 k1_complfld) \wedge ((v3_group_1 \\ & k1_complfld) \wedge ((v5_group_1 k1_complfld) \wedge ((v3_vectsp_1 k1_complfld) \wedge \\ & ((v5_vectsp_1 k1_complfld) \wedge ((v6_vectsp_1 k1_complfld) \wedge ((v2_rlvect_1 \\ & k1_complfld) \wedge ((v3_rlvect_1 k1_complfld) \wedge (v4_rlvect_1 k1_complfld)))))))))) \end{aligned} \quad (5)$$

Assume the following.

$$(v36_algstr_0 k1_complfld) \wedge (v4_vectsp_1 k1_complfld) \quad (6)$$

Assume the following.

$$(\neg v2_struct_0 k1_complfld) \wedge (v36_algstr_0 k1_complfld) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0) \wedge ((v33_algstr_0 \\ & X0) \wedge ((v3_group_1 X0) \wedge ((v5_group_1 X0) \wedge ((v4_vectsp_1 X0) \wedge ((\\ & v5_vectsp_1 X0) \wedge (l6_algstr_0 X0)))))) \wedge ((m1_subset_1 X1 (u1_struct_0 \\ & X0)) \wedge (m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (m1_subset_1 (k3_vectsp_1 \\ & X0 X1 X2) (u1_struct_0 X0)) \end{aligned} \quad (8)$$

Assume the following.

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

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 k1_complfld)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\ & k1_complfld)) \Rightarrow (\neg (X0 \neq k4_struct_0 k1_complfld) \wedge ((X1 \neq k4_struct_0 \\ & k1_complfld) \wedge ((X2 \neq k4_struct_0 k1_complfld) \wedge (k3_vectsp_1 k1_complfld \\ & (k3_vectsp_1 k1_complfld X3 X0) (k3_vectsp_1 k1_complfld X1 X2) \neq \\ & k3_vectsp_1 k1_complfld (k8_group_1 k1_complfld X3 X2) (k8_group_1 \\ & k1_complfld X0 X1)))))))) \end{aligned}$$