

# t46\_complfld

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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  $k8\_group\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_vectsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  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.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 k1\_complfld)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (u1\_struct\_0 k1\_complfld)) \Rightarrow (\forall X2.(m1\_subset\_1 \\ & X2 (u1\_struct\_0 k1\_complfld)) \Rightarrow (\neg(X0 \neq k4\_struct\_0 k1\_complfld) \wedge \\ & (((k8\_group\_1 k1\_complfld X1 X0 = X2) \vee (k8\_group\_1 k1\_complfld \\ & X0 X1 = X2)) \wedge (\neg(X1 = k8\_group\_1 k1\_complfld X2 (k11\_algstr\_0 k1\_complfld \\ & X0)) \wedge (X1 = k8\_group\_1 k1\_complfld (k11\_algstr\_0 k1\_complfld X0) \\ & X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & (\neg v6\_struct\_0 k1\_complfld) \wedge ((v13\_algstr\_0 k1\_complfld) \wedge (( \\ & v33\_algstr\_0 k1\_complfld) \wedge ((v36\_algstr\_0 k1\_complfld) \wedge ((v3\_group\_1 \\ & k1\_complfld) \wedge ((v5\_group\_1 k1\_complfld) \wedge ((v3\_vectsp\_1 k1\_complfld) \wedge \\ & ((v5\_vectsp\_1 k1\_complfld) \wedge ((v6\_vectsp\_1 k1\_complfld) \wedge ((v2\_rlvect\_1 \\ & k1\_complfld) \wedge ((v3\_rlvect\_1 k1\_complfld) \wedge (v4\_rlvect\_1 k1\_complfld)))))))))) \end{aligned} \tag{2}$$

Assume the following.

$$(v36\_algstr\_0 k1\_complfld) \wedge (v4\_vectsp\_1 k1\_complfld) \tag{3}$$

Assume the following.

$$(\neg v2\_struct\_0 k1\_complfld) \wedge (v36\_algstr\_0 k1\_complfld) \tag{4}$$

Assume the following.

$$(v36\_algstr\_0 \ k1\_complfld) \wedge (l6\_algstr\_0 \ k1\_complfld) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. (& \neg v2\_struct\_0 \ X0) \wedge ((v33\_algstr\_0 \ X0) \wedge ((v3\_group\_1 \\ X0) \wedge ((v5\_group\_1 \ X0) \wedge ((v4\_vectsp\_1 \ X0) \wedge ((v5\_vectsp\_1 \ X0) \wedge \\ l6\_algstr\_0 \ X0)))))) \Rightarrow (\forall X1. (m1\_subset\_1 \ X1 \ (u1\_struct\_0 \\ X0)) \Rightarrow (\forall X2. (m1\_subset\_1 \ X2 \ (u1\_struct\_0 \ X0)) \Rightarrow (k3\_vectsp\_1 \\ X0 \ X1 \ X2 = k8\_group\_1 \ X0 \ X1 \ (k11\_algstr\_0 \ X0 \ X2)))) \quad (6) \end{aligned}$$

**Theorem 1**

$$\begin{aligned} \forall X0. (m1\_subset\_1 \ X0 \ (u1\_struct\_0 \ k1\_complfld)) \Rightarrow (\forall X1. \\ (m1\_subset\_1 \ X1 \ (u1\_struct\_0 \ k1\_complfld)) \Rightarrow (\forall X2. (m1\_subset\_1 \\ X2 \ (u1\_struct\_0 \ k1\_complfld)) \Rightarrow (\neg (X0 \neq k4\_struct\_0 \ k1\_complfld) \wedge \\ ((k8\_group\_1 \ k1\_complfld \ X1 \ X0 = X2) \vee (k8\_group\_1 \ k1\_complfld \\ X0 \ X1 = X2)) \wedge (X1 \neq k3\_vectsp\_1 \ k1\_complfld \ X2 \ X0)))) \end{aligned}$$