

## t35\_complex2

(TMT3BsiKWN28VymApNBk5RiUbe7FZh2XuxV)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_numbers : \iota$  be given. Let  $k1\_complex2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k15\_complex1 : \iota \Rightarrow \iota$  be given. Let  $k14\_complex1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1\_xcmplx\_0 X0) \wedge ((v1\_xcmplx\_0 X1) \wedge (v1\_xcmplx\_0 X2))) \Rightarrow (k3\_xcmplx\_0 (k2\_xcmplx\_0 X0 X1) X2 = k2\_xcmplx\_0 (k3\_xcmplx\_0 X0 X2) (k3\_xcmplx\_0 X1 X2)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((m1\_subset\_1 X0 k2\_numbers) \wedge (m1\_subset\_1 X1 k2\_numbers)) \Rightarrow (k8\_complex1 X0 X1 = k2\_xcmplx\_0 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. (v1\_xcmplx\_0 X0) \Rightarrow (k15\_complex1 X0 = k14\_complex1 X0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xcmplx\_0 X0) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow (v1\_xcmplx\_0 (k2\_xcmplx\_0 X0 X1)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((v1\_xcmplx\_0 X0) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow (m1\_subset\_1 (k1\_complex2 X0 X1) k2\_numbers) \quad (5)$$

Assume the following.

$$\forall X0. (v1\_xcmplx\_0 X0) \Rightarrow (v1\_xcmplx\_0 (k14\_complex1 X0)) \quad (6)$$

Assume the following.

$$\forall X0. (v1\_xcmplx\_0 X0) \Rightarrow (\forall X1. (v1\_xcmplx\_0 X1) \Rightarrow (k1\_complex2 X0 X1 = k3\_xcmplx\_0 X0 (k15\_complex1 X1))) \quad (7)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k2\_numbers) \Rightarrow (v1\_xcmplx\_0 X0) \quad (8)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k2\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k2\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k2\_numbers) \Rightarrow (k1\_complex2 \\ & (k8\_complex1 X0 X1) X2 = k8\_complex1 (k1\_complex2 X0 X2) (k1\_complex2 \\ & X1 X2)))) \end{aligned}$$