

t29\_valued\_2  
(TMY5ti3na7B6oApetoebXb6gp73dX63QN2T)

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Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_valued\_0 : \iota \Rightarrow o$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k14\_valued\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k24\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k5\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v1\_funct\_1 X0)) \Rightarrow ((v1\_valued\_0 X0) \Leftrightarrow (\forall X1.v1\_xcmplx\_0 (k1\_funct\_1 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_valued\_0 X0))) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (\forall X2.k1\_funct\_1 (k24\_valued\_1 X0 X1) X2 = k3\_xcmplx\_0 X1 (k1\_funct\_1 X0 X2))) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k7\_xcmplx\_0 np\_1 X0 = k5\_xcmplx\_0 X0) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (v1\_xcmplx\_0 (k5\_xcmplx\_0 X0)) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k7\_xcmplx\_0 X0 X1 = k3\_xcmplx\_0 X0 (k5\_xcmplx\_0 X1))) \quad (5)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_valued\_0 X0))) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k14\_valued\_2 X0 X1 = k24\_valued\_1 X0 (k7\_xcmplx\_0 np\_1 X1))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 X0) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow (k3\_xcmplx\_0 X0 X1 = k3\_xcmplx\_0 X1 X0) \quad (7)$$

**Theorem 1**

$$\forall X0. \forall X1. (v1\_xcmplx\_0 X1) \Rightarrow (\forall X2. ((v1\_relat\_1 X2) \wedge ((v1\_funct\_1 X2) \wedge (v1\_valued\_0 X2)))) \Rightarrow (k1\_funct\_1 (k14\_valued\_2 X2 X1) X0 = k7\_xcmplx\_0 (k1\_funct\_1 X2 X0) X1))$$