

## t35\_valued\_2

(TMP8w1bx7KXC8DGUS7VFKGzpiJhQbxi7fGS)

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

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_valued\_0 X0))) \Rightarrow \\ & (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (\forall X2.(v1\_xcmplx\_0 X2) \Rightarrow ( \\ & k24\_valued\_1 X0 (k3\_xcmplx\_0 X1 X2) = k24\_valued\_1 (k24\_valued\_1 \\ & X0 X2) X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (\forall X2. \\ & ((v1\_relat\_1 X2) \wedge ((v1\_funct\_1 X2) \wedge (v1\_valued\_0 X2))) \Rightarrow (k24\_valued\_1 \\ & (k24\_valued\_1 X2 X0) X1 = k24\_valued\_1 X2 (k3\_xcmplx\_0 X0 X1)))) \end{aligned} \tag{2}$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_valued\_0 \\ & X0))) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow ((v1\_relat\_1 (k24\_valued\_1 X0 X1)) \wedge \\ & ((v1\_funct\_1 (k24\_valued\_1 X0 X1)) \wedge (v1\_valued\_0 (k24\_valued\_1 \\ & X0 X1)))) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (v1\_xcmplx\_0 (k5\_xcmplx\_0 X0)) \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_valued\_0 X0))) \Rightarrow \\ & (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k14\_valued\_2 X0 X1 = k24\_valued\_1 \\ & X0 (k7\_xcmplx\_0 np\_1 X1))) \end{aligned} \tag{6}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (\forall X2. \\ & ((v1\_relat\_1 X2) \wedge (v1\_funct\_1 X2) \wedge (v1\_valued\_0 X2))) \Rightarrow (k24\_valued\_1 \\ & (k14\_valued\_2 X2 X0) X1 = k14\_valued\_2 (k24\_valued\_1 X2 X1) X0))) \end{aligned}$$