

## t55\_valued\_2

(TMMPgqmm4VT1NJvXHRafUinG6FZ5C59ag8g)

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Let  $v1\_valued\_2 : \iota \Rightarrow o$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k47\_valued\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k41\_valued\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k24\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge (v4\_relat\_1 X1 X0)) \Rightarrow (k1\_relset\_1 X0 X1 = k9\_xtuple\_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1\_xcmplx\_0 X0) \Rightarrow (v1\_xcmplx\_0 (k5\_xcmplx\_0 X0)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1\_valued\_2 X0) \wedge ((v1\_relat\_1 X1) \wedge ((v5\_relat\_1 X1 X0) \wedge (v1\_funct\_1 X1))) \wedge (v1\_xcmplx\_0 X2)) \Rightarrow ((v1\_relat\_1 (k47\_valued\_2 X0 X1 X2)) \wedge (v1\_funct\_1 (k47\_valued\_2 X0 X1 X2))) \quad (3)$$

Assume the following.

$$\forall X0. (v1\_valued\_2 X0) \Rightarrow (\forall X1. ((v1\_relat\_1 X1) \wedge (v5\_relat\_1 X1 X0) \wedge (v1\_funct\_1 X1)) \Rightarrow (\forall X2. (v1\_xcmplx\_0 X2) \Rightarrow (k47\_valued\_2 X0 X1 X2 = k41\_valued\_2 X0 X1 (k5\_xcmplx\_0 X2)))) \quad (4)$$

Assume the following.

$$\forall X0. (v1\_valued\_2 X0) \Rightarrow (\forall X1. ((v1\_relat\_1 X1) \wedge (v5\_relat\_1 X1 X0) \wedge (v1\_funct\_1 X1)) \Rightarrow (\forall X2. (v1\_xcmplx\_0 X2) \Rightarrow (\forall X3. ((v1\_relat\_1 X3) \wedge (v1\_funct\_1 X3)) \Rightarrow ((X3 = k41\_valued\_2 X0 X1 X2) \Leftrightarrow ((k9\_xtuple\_0 X3 = k9\_xtuple\_0 X1) \wedge (\forall X4. (X4 \in k9\_xtuple\_0 X3) \Rightarrow (k1\_funct\_1 X3 X4 = k24\_valued\_1 (k1\_funct\_1 X1 X4) X2))))))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow((v4\_relat\_1 X2 X0)\wedge(v5\_relat\_1 X2 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_relat\_1 X2) \quad (7)$$

**Theorem 1**

$$\forall X0.\forall X1.(v1\_valued\_2 X1)\Rightarrow(\forall X2.(v1\_xcmplx\_0 X2)\Rightarrow(\forall X3.((v1\_funct\_1 X3)\wedge(m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))))\Rightarrow(k9\_xtuple\_0 (k47\_valued\_2 X1 X3 X2) = k1\_relset\_1 X0 X3)))$$