

t70\_cfunct\_1  
(TMYFrUt1VyJq67QywZy9ThBJwiBXJ18CAix)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  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  $k2\_numbers : \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_comseq\_2 : \iota \Rightarrow o$  be given. Let  $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v3\_valued\_0 : \iota \Rightarrow o$  be given. Let  $v1\_seq\_2 : \iota \Rightarrow o$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_seq\_2 : \iota \Rightarrow o$  be given. Let  $v1\_valued\_0 : \iota \Rightarrow o$  be given. Let  $k30\_valued\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_rfunct\_1 : \iota \Rightarrow \iota$  be given. Let  $k54\_valued\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_membered : \iota \Rightarrow o$  be given. Let  $k55\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1\_relat\_1 X2) \wedge ((v1\_funct\_1 \\ & X2) \wedge (v3\_valued\_0 X2))) \Rightarrow (((r1\_tarski X0 X1) \wedge (v1\_seq\_2 (k5\_relat\_1 \\ & X2 X1))) \Rightarrow (v1\_seq\_2 (k5\_relat\_1 X2 X0))) \wedge (((r1\_tarski X0 X1) \wedge \\ & (v2\_seq\_2 (k5\_relat\_1 X2 X1))) \Rightarrow (v2\_seq\_2 (k5\_relat\_1 X2 X0))) \wedge \\ & (((r1\_tarski X0 X1) \wedge (v1\_comseq\_2 (k5\_relat\_1 X2 X1))) \Rightarrow (v1\_comseq\_2 \\ & (k5\_relat\_1 X2 X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_relat\_1 X1) \wedge ((v1\_funct\_1 X1) \wedge (v1\_valued\_0 \\ & X1))) \Rightarrow ((k5\_relat\_1 (k30\_valued\_1 X1) X0 = k30\_valued\_1 (k5\_relat\_1 \\ & X1 X0)) \wedge ((k5\_relat\_1 (k4\_rfunct\_1 X1) X0 = k4\_rfunct\_1 (k5\_relat\_1 \\ & X1 X0)) \wedge (k5\_relat\_1 (k54\_valued\_1 X1) X0 = k54\_valued\_1 (k5\_relat\_1 \\ & X1 X0)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1\_membered X1) \wedge ((v1\_funct\_1 \\ & X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))))) \Rightarrow (k55\_valued\_1 \\ & X0 X1 X2 = k54\_valued\_1 X2) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1 X2)\wedge \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))))\Rightarrow(k2\_partfun1 \\ & X0 X1 X2 X3 = k5\_relat\_1 X2 X3) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow(\forall X1.((v1\_funct\_1 X1)\wedge( \\ & m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 k2\_numbers))))\Rightarrow( \\ & (v1\_comseq\_2 (k55\_valued\_1 X0 k2\_numbers X1))\Leftrightarrow(v1\_comseq\_2 X1))) \end{aligned} \quad (5)$$

Assume the following.

$$v1\_membered k2\_numbers \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0)\wedge((v1\_funct\_1 X0)\wedge(v1\_valued\_0 X0)))\Rightarrow \\ & ((v1\_relat\_1 (k54\_valued\_1 X0))\wedge((v1\_funct\_1 (k54\_valued\_1 \\ & X0))\wedge(v3\_valued\_0 (k54\_valued\_1 X0)))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1 X2)\wedge \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))))\Rightarrow((v1\_funct\_1 \\ & (k2\_partfun1 X0 X1 X2 X3))\wedge(m1\_subset\_1 (k2\_partfun1 X0 X1 X2 X3) \\ & (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_relat\_1 X2) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(v1\_membered X1)\Rightarrow(\forall X2.(m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_valued\_0 X2)) \end{aligned} \quad (10)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(\neg v1\_xboole\_0 X2)\Rightarrow(\forall X3. \\ & ((v1\_funct\_1 X3)\wedge(m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X2 \\ & k2\_numbers))))\Rightarrow(((r1\_tarski X0 X1)\wedge(v1\_comseq\_2 (k2\_partfun1 \\ & X2 k2\_numbers X3 X1)))\Rightarrow(v1\_comseq\_2 (k2\_partfun1 X2 k2\_numbers \\ & X3 X0)))) \end{aligned}$$