

# t35\_cfcont\_1 (TMPCQCujvLynpWx- aTN54UZBwawL8TRFx2kT)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_numbers : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_cfcont\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k31\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k25\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k10\_complex1 : \iota \Rightarrow \iota$  be given. Let  $k6\_complex1 : \iota$  be given. Let  $v1\_membered : \iota \Rightarrow o$  be given. Let  $k30\_valued\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k24\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 k2\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1 \\ X1 k2\_numbers) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 \\ (k1\_zfmisc\_1 (k2\_zfmisc\_1 k2\_numbers k2\_numbers)))) \Rightarrow ((r1\_cfcont\_1 \\ X2 X0) \Rightarrow (r1\_cfcont\_1 (k25\_valued\_1 k2\_numbers k2\_numbers X2 X1) \\ X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.((v1\_funct\_1 X1) \wedge ( \\ m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 k2\_numbers)))) \Rightarrow ( \\ r2\_relset\_1 X0 k2\_numbers (k31\_valued\_1 X0 k2\_numbers X1) (k25\_valued\_1 \\ X0 k2\_numbers X1 (k10\_complex1 k6\_complex1)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1 X2 \\ (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 \\ (k2\_zfmisc\_1 X0 X1)))) \Rightarrow ((r2\_relset\_1 X0 X1 X2 X3) \Leftrightarrow (X2 = X3)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((v1\_membered X1) \wedge ((v1\_funct\_1 \\ X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow (k31\_valued\_1 \\ X0 X1 X2 = k30\_valued\_1 X2)) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1\_membered\ X1)\wedge \\ & (((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1 \\ & X0\ X1))))\wedge(v1\_xcmplx\_0\ X3)))\Rightarrow(k25\_valued\_1\ X0\ X1\ X2\ X3 = k24\_valued\_1 \\ & X2\ X3) \end{aligned} \tag{5}$$

Assume the following.

$$\neg v1\_xboole\_0\ k2\_numbers \tag{6}$$

Assume the following.

$$v1\_membered\ k2\_numbers \tag{7}$$

Assume the following.

$$m1\_subset\_1\ k6\_complex1\ k2\_numbers \tag{8}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v1\_membered\ X1)\wedge((v1\_funct\_1 \\ & X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))\Rightarrow((v1\_funct\_1 \\ & (k31\_valued\_1\ X0\ X1\ X2))\wedge(m1\_subset\_1\ (k31\_valued\_1\ X0\ X1\ X2)\ ( \\ & k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k2\_numbers)))) \end{aligned} \tag{9}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1\_membered\ X1)\wedge \\ & (((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1 \\ & X0\ X1))))\wedge(v1\_xcmplx\_0\ X3)))\Rightarrow((v1\_funct\_1\ (k25\_valued\_1\ X0\ X1 \\ & X2\ X3))\wedge(m1\_subset\_1\ (k25\_valued\_1\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1 \\ & X0\ k2\_numbers)))) \end{aligned} \tag{10}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers)\Rightarrow(m1\_subset\_1\ (k10\_complex1\ X0)\ k2\_numbers) \tag{11}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow(v1\_xcmplx\_0\ X1)) \tag{12}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1\ X0\ k2\_numbers)\Rightarrow(\forall X1.((v1\_funct\_1 \\ & X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k2\_numbers\ k2\_numbers))))\Rightarrow \\ & ((r1\_cfcont\_1\ X1\ X0)\Rightarrow(r1\_cfcont\_1\ (k31\_valued\_1\ k2\_numbers\ k2\_numbers \\ & X1)\ X0))) \end{aligned}$$