

## t14\_cfcont\_1

(TMYKHiJzP5fbT6tTcEhfBLNkZjkLa6xopWg)

October 27, 2020

Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k2\_numbers : \iota$  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  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k46\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k19\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\
 & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \Rightarrow \\
 & (\forall X1.((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
 & k2\_numbers k2\_numbers)))))) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge (m1\_subset\_1 \\
 & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k2\_numbers k2\_numbers)))))) \Rightarrow ((r1\_tarski \\
 & (k2\_relset\_1 k2\_numbers X0) (k9\_subset\_1 k2\_numbers (k1\_relset\_1 \\
 & k2\_numbers X1) (k1\_relset\_1 k2\_numbers X2))) \Rightarrow ((r2\_relset\_1 k5\_numbers \\
 & k2\_numbers (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers X0 (k2\_valued\_1 \\
 & k2\_numbers k2\_numbers k2\_numbers X1 X2)) (k2\_valued\_1 k5\_numbers \\
 & k2\_numbers k2\_numbers (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers \\
 & X0 X1) (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers X0 X2))) \wedge ( \\
 & (r2\_relset\_1 k5\_numbers k2\_numbers (k8\_funct\_2 k5\_numbers k2\_numbers \\
 & k2\_numbers X0 (k46\_valued\_1 k2\_numbers k2\_numbers k2\_numbers \\
 & X1 X2)) (k46\_valued\_1 k5\_numbers k2\_numbers k2\_numbers (k8\_funct\_2 \\
 & k5\_numbers k2\_numbers k2\_numbers X0 X1) (k8\_funct\_2 k5\_numbers \\
 & k2\_numbers k2\_numbers X0 X2))) \wedge (r2\_relset\_1 k5\_numbers k2\_numbers \\
 & (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers X0 (k19\_valued\_1 \\
 & k2\_numbers k2\_numbers k2\_numbers X1 X2)) (k19\_valued\_1 k5\_numbers \\
 & k2\_numbers k2\_numbers (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers \\
 & X0 X1) (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers X0 X2))))))))) \\
 & \tag{1}
 \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X0 (k1\_zfmisc\_1 X1))\Leftrightarrow(r1\_tarski X0 X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 X0))\Rightarrow(k9\_subset\_1 X0 X1 X2 = k3\_xboole\_0 X1 X2) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.k3\_xboole\_0 X0 X0 = X0 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1)\wedge(v5\_relat\_1 X1 X0))\Rightarrow(m1\_subset\_1 (k2\_relset\_1 X0 X1) (k1\_zfmisc\_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1)\wedge(v4\_relat\_1 X1 X0))\Rightarrow(m1\_subset\_1 (k1\_relset\_1 X0 X1) (k1\_zfmisc\_1 X0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1)\wedge(v4\_relat\_1 X1 X0))\Rightarrow(v1\_partfun1 X1 X0)\Leftrightarrow(k1\_relset\_1 X0 X1 = X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow((v4\_relat\_1 X2 X0)\wedge(v5\_relat\_1 X2 X1)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))\Rightarrow(v1\_relat\_1 X2) \quad (9)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0) \wedge ((v1\_funct\_2 X0 k5\_numbers k2\_numbers) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers k2\_numbers)))))) \Rightarrow \\ & (\forall X1.((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k2\_numbers k2\_numbers)))))) \Rightarrow (\forall X2.((v1\_funct\_1 X2) \wedge (m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k2\_numbers k2\_numbers)))))) \Rightarrow (((v1\_partfun1 \\ & X1 k2\_numbers) \wedge (v1\_partfun1 X2 k2\_numbers)) \Rightarrow ((r2\_relset\_1 k5\_numbers \\ & k2\_numbers (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers X0 (k2\_valued\_1 \\ & k2\_numbers k2\_numbers k2\_numbers X1 X2)) (k2\_valued\_1 k5\_numbers \\ & k2\_numbers k2\_numbers (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers \\ & X0 X1) (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers X0 X2))) \wedge ( \\ & (r2\_relset\_1 k5\_numbers k2\_numbers (k8\_funct\_2 k5\_numbers k2\_numbers \\ & k2\_numbers X0 (k46\_valued\_1 k2\_numbers k2\_numbers k2\_numbers \\ & X1 X2)) (k46\_valued\_1 k5\_numbers k2\_numbers k2\_numbers (k8\_funct\_2 \\ & k5\_numbers k2\_numbers k2\_numbers X0 X1) (k8\_funct\_2 k5\_numbers \\ & k2\_numbers k2\_numbers X0 X2))) \wedge (r2\_relset\_1 k5\_numbers k2\_numbers \\ & (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers X0 (k19\_valued\_1 \\ & k2\_numbers k2\_numbers k2\_numbers X1 X2)) (k19\_valued\_1 k5\_numbers \\ & k2\_numbers k2\_numbers (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers \\ & X0 X1) (k8\_funct\_2 k5\_numbers k2\_numbers k2\_numbers X0 X2)))))) \end{aligned}$$