

## t48\_cfcont\_1

(TMG9fy1bzN8mSwqHKyBE4ShtpTAZdcJmBuH)

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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  $r2\_cfcont\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k2\_cfunct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k31\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k55\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (\neg v1\_xboole\_0 X1) \Rightarrow (\forall X2. ((v1\_funct\_1 \\ & X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X1 k2\_numbers)))) \Rightarrow \\ & ((r2\_relset\_1 X1 k2\_numbers (k2\_partfun1 X1 k2\_numbers (k31\_valued\_1 \\ & X1 k2\_numbers X2) X0) (k31\_valued\_1 X1 k2\_numbers (k2\_partfun1 \\ & X1 k2\_numbers X2 X0)))) \wedge ((r2\_relset\_1 X1 k2\_numbers (k2\_partfun1 \\ & X1 k2\_numbers (k2\_cfunct\_1 X1 X2) X0) (k2\_cfunct\_1 X1 (k2\_partfun1 \\ & X1 k2\_numbers (k55\_valued\_1 X1 k2\_numbers X2) X0) (k55\_valued\_1 \\ & X1 k2\_numbers (k2\_partfun1 X1 k2\_numbers X2 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k2\_numbers k2\_numbers)))) \Rightarrow (((r2\_cfcont\_1 X1 X0) \wedge \\ & (k8\_relset\_1 k2\_numbers k2\_numbers X1 (k1\_tarski k6\_numbers) = \\ & k1\_xboole\_0)) \Rightarrow (r2\_cfcont\_1 (k2\_cfunct\_1 k2\_numbers X1) X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k2\_numbers k2\_numbers)))) \Rightarrow ((r2\_cfcont\_1 X1 X0) \Leftrightarrow \\ & (r2\_cfcont\_1 (k5\_relset\_1 k2\_numbers k2\_numbers X1 X0) X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow ((r2\_relset\_1 X0 X1 X2 X3) \Leftrightarrow (X2 = X3)) \quad (4)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow (k5\_relset\_1 X0 X1 X2 X3 = k5\_relat\_1 X2 X3) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow (k2\_partfun1 X0 X1 X2 X3 = k5\_relat\_1 X2 X3) \quad (7)$$

Assume the following.

$$\neg v1\_xboole\_0 k2\_numbers \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow ((v1\_funct\_1 (k2\_partfun1 X0 X1 X2 X3)) \wedge (m1\_subset\_1 (k2\_partfun1 X0 X1 X2 X3) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0) \wedge ((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 k2\_numbers))))) \Rightarrow ((v1\_funct\_1 (k2\_cfunct\_1 X0 X1)) \wedge (m1\_subset\_1 (k2\_cfunct\_1 X0 X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 k2\_numbers)))) \quad (10)$$

### Theorem 1

$$\forall X0.\forall X1.((v1\_funct\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k2\_numbers k2\_numbers)))) \Rightarrow (((r2\_cfcont\_1 X1 X0) \wedge (k8\_relset\_1 k2\_numbers k2\_numbers (k5\_relset\_1 k2\_numbers k2\_numbers X1 X0) (k1\_tarSKI k6\_numbers) = k1\_xboole\_0)) \Rightarrow (r2\_cfcont\_1 (k2\_cfunct\_1 k2\_numbers X1) X0))$$