

# t94\_cohsp\_1 (TMTsZCpHVtXM- peyEvmizUoW2MFHEaeYezYg)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_classes1 : \iota \Rightarrow o$  be given. Let  $v1\_coh\_sp : \iota \Rightarrow o$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k1\_coh\_sp : \iota \Rightarrow \iota$  be given. Let  $k16\_cohsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k14\_cohsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_tarski : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v3\_relat\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1\_xboole\_0 X0) \wedge ((v1\_classes1 X0) \wedge (v1\_coh\_sp \\ & X0))) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge ((v1\_classes1 X1) \wedge (v1\_coh\_sp \\ & X1))) \Rightarrow (\forall X2. \forall X3. (k14\_cohsp\_1 X2 X3 \in k16\_cohsp\_1 \\ & X0 X1) \Leftrightarrow (((X2 \in X0) \wedge (X3 = k1\_xboole\_0)) \vee ((X2 = k1\_xboole\_0) \wedge (X3 \in \\ & X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. k14\_cohsp\_1 X0 X1 = k2\_xboole\_0 (k2\_zfmisc\_1 X0 (k1\_tarski np\_1)) (k2\_zfmisc\_1 X1 (k1\_tarski np\_2)) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1\_xboole\_0 X0) \wedge ((v1\_classes1 X0) \wedge (v1\_coh\_sp \\ & X0))) \Rightarrow (\forall X1. ((v1\_partfun1 X1 (k3\_tarski X0)) \wedge ((v1\_relat\_2 \\ & X1) \wedge ((v3\_relat\_2 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (k3\_tarski X0) (k3\_tarski X0))))))) \Rightarrow ((r2\_relset\_1 (k3\_tarski \\ & X0) (k3\_tarski X0) X1 (k1\_coh\_sp X0)) \Leftrightarrow (\forall X2. \forall X3. ( \\ & k4\_tarski X2 X3 \in X1) \Leftrightarrow (k2\_tarski X2 X3 \in X0)))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. k2\_zfmisc\_1 (k1\_tarski X0) (k1\_tarski X1) = k1\_tarski (k4\_tarski X0 X1) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_xboole\_0\ (k1\_tarski\ X0)\ (k1\_tarski\ X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))\Rightarrow(r2\_relset\_1\ X0\ X1\ X2\ X2) \quad (6)$$

Assume the following.

$$\forall X0.\neg v1\_xboole\_0\ (k1\_tarski\ X0) \quad (7)$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v1\_xboole\_0\ X0)\wedge((v1\_classes1\ X0)\wedge(v1\_coh\_sp\ X0)))\wedge((\neg v1\_xboole\_0\ X1)\wedge((v1\_classes1\ X1)\wedge(v1\_coh\_sp\ X1))))\Rightarrow((\neg v1\_xboole\_0\ (k16\_cohsp\_1\ X0\ X1))\wedge((v1\_classes1\ (k16\_cohsp\_1\ X0\ X1))\wedge(v1\_coh\_sp\ (k16\_cohsp\_1\ X0\ X1)))) \quad (9)$$

Assume the following.

$$\forall X0.(((\neg v1\_xboole\_0\ X0)\wedge((v1\_classes1\ X0)\wedge(v1\_coh\_sp\ X0)))\Rightarrow((v1\_partfun1\ (k1\_coh\_sp\ X0)\ (k3\_tarski\ X0))\wedge((v1\_relat\_2\ (k1\_coh\_sp\ X0))\wedge(v3\_relat\_2\ (k1\_coh\_sp\ X0))\wedge(m1\_subset\_1\ (k1\_coh\_sp\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k3\_tarski\ X0)\ (k3\_tarski\ X0))))))) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_tarski\ X1\ X0 \quad (11)$$

**Theorem 1**

$$\forall X0.(((\neg v1\_xboole\_0\ X0)\wedge((v1\_classes1\ X0)\wedge(v1\_coh\_sp\ X0)))\Rightarrow(\forall X1.(((\neg v1\_xboole\_0\ X1)\wedge((v1\_classes1\ X1)\wedge(v1\_coh\_sp\ X1)))\Rightarrow(\forall X2.\forall X3.(\neg k4\_tarski\ (k4\_tarski\ X2\ np\_1)\ (k4\_tarski\ X3\ np\_2) \in k1\_coh\_sp\ (k16\_cohsp\_1\ X0\ X1))\wedge(\neg k4\_tarski\ (k4\_tarski\ X3\ np\_2)\ (k4\_tarski\ X2\ np\_1) \in k1\_coh\_sp\ (k16\_cohsp\_1\ X0\ X1))))))$$