

t40\_coh\_sp  
(TMZtEMY15Amvop24H9KxsiJJzBaq7rki1mH)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k20\_coh\_sp : \iota \Rightarrow \iota$  be given. Let  $k19\_coh\_sp : \iota \Rightarrow \iota$  be given. Let  $k16\_coh\_sp : \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k17\_coh\_sp : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k18\_coh\_sp : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \neg v1\_xboole\_0 (k20\_coh\_sp X0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. k20\_coh\_sp X0 = & \text{ReplSep3 } (to\text{set } (\lambda X1 : \iota. m1\_subset\_1 \\ & X1 (k16\_coh\_sp X0))) (\lambda X1 : \iota. to\text{set } (\lambda X2 : \iota. m1\_subset\_1 \\ & X2 (k16\_coh\_sp X0))) (\lambda X1 : \iota. \lambda X2 : \iota. to\text{set } (\lambda X3 : \iota. \\ & m1\_subset\_1 X3 (k19\_coh\_sp X0))) (\lambda X1 : \iota. \lambda X2 : \iota. \lambda X3 : \\ \iota. & ((k17\_coh\_sp X0 X2 = k1\_xboole\_0) \Rightarrow (k17\_coh\_sp X0 X1 = k1\_xboole\_0)) \wedge \\ & (((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 (k17\_coh\_sp X0 X1) (k17\_coh\_sp \\ & X0 X2)) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k17\_coh\_sp \\ & X0 X1) (k17\_coh\_sp X0 X2)))))) \wedge (\forall X4. \forall X5. (k4\_tarski \\ X4 X5 \in & k18\_coh\_sp X0 X1) \Rightarrow (k4\_tarski (k1\_funct\_1 X3 X4) (k1\_funct\_1 \\ & X3 X5) \in k18\_coh\_sp X0 X2)))) (\lambda X1 : \iota. \lambda X2 : \iota. \lambda X3 : \iota. \\ & k4\_tarski (k4\_tarski X1 X2) X3) \end{aligned} \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k20\_coh\_sp X0)) \Rightarrow (\exists X2. \\ & (m1\_subset\_1 X2 (k19\_coh\_sp X0)) \wedge (\exists X3. (m1\_subset\_1 X3 \\ & (k16\_coh\_sp X0)) \wedge (\exists X4. (m1\_subset\_1 X4 (k16\_coh\_sp X0)) \wedge \\ & ((X1 = k4\_tarski (k4\_tarski X3 X4) X2) \wedge ((k17\_coh\_sp X0 X4 = k1\_xboole\_0) \Rightarrow \\ & (k17\_coh\_sp X0 X3 = k1\_xboole\_0)) \wedge (((v1\_funct\_1 X2) \wedge ((v1\_funct\_2 \\ & X2 (k17\_coh\_sp X0 X3) (k17\_coh\_sp X0 X4)) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 (k17\_coh\_sp X0 X3) (k17\_coh\_sp X0 X4)))))) \wedge (\forall X5. \\ & \forall X6. (k4\_tarski X5 X6 \in k18\_coh\_sp X0 X3) \Rightarrow (k4\_tarski (k1\_funct\_1 \\ & X2 X5) (k1\_funct\_1 X2 X6) \in k18\_coh\_sp X0 X4)))))) \end{aligned}$$