

## t3\_cohsp\_1

(TMaAb9Re5xmnmuM8Q3t6kdz3HQxzakMaadU)

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Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v1\_classes1 : \iota \Rightarrow o$  be given. Let  $k2\_cohsp\_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. (\neg v1\_finset\_1 X0) \Rightarrow (\neg v1\_finset\_1 (k1\_zfmisc\_1 X0)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow ((X1 = k2\_cohsp\_1 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow ((X2 \in X0) \wedge (v1\_finset\_1 X2)))) \quad (5)$$

Assume the following.

$$\forall X0. (v1\_classes1 X0) \Leftrightarrow (\forall X1. \forall X2. ((X1 \in X0) \wedge (r1\_tarski X2 X1)) \Rightarrow (X2 \in X0)) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X0)) \quad (7)$$

Assume the following.

$$\forall X0. (v1\_finset\_1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (v1\_finset\_1 X1)) \quad (8)$$

**Theorem 1**  $\forall X0. ((v1\_finset\_1 X0) \wedge (v1\_classes1 X0)) \Rightarrow (k2\_cohsp\_1 X0 = X0).$