

t66\_cohsp\_1 (TM-  
WoTrVQowYwA8jNThLoTcnZVUt81T67LYL)

October 27, 2020

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  $k3\_tarski : \iota \Rightarrow \iota$  be given. Let  $k13\_cohsp\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v1\_xboole\_0 X0) \wedge ((v1\_classes1 X0) \wedge (v1\_coh\_sp \\ X0))) \Rightarrow (\forall X1.(X1 \in k13\_cohsp\_1 X0) \Leftrightarrow ((r1\_tarski X1 (k3\_tarski \\ X0)) \wedge (\forall X2.(m1\_subset\_1 X2 X0) \Rightarrow (\exists X3.r1\_tarski ( \\ k3\_xboole\_0 X1 X2) (k1\_tarski X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski (k1\_tarski X0) X1) \Leftrightarrow (X0 \in X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski (k3\_xboole\_0 X0 X1) X0 \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k3\_tarski X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.(X2 \in X3) \wedge (X3 \in X0))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X0)) \quad (6)$$

**Theorem 1**

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge ((v1\_classes1 X0) \wedge (v1\_coh\_sp \\ X0))) \Rightarrow (k3\_tarski (k13\_cohsp\_1 X0) = k3\_tarski X0)$$