t25_cohsp_1 (TMML4CURzLx6LqCrj99bcUBPAYJWXocFt92)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v6\_cohsp\_1 : \iota \Rightarrow o$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_cohsp\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.\forall X2.\ (k4\_tarski\ X1\ X2 \in k5\_cohsp\_1\ X0) \Leftrightarrow ((v1\_finset\_1\ X1) \wedge ((X1 \in k9\_xtuple\_0\ X0) \wedge (X2 \in k1\_funct\_1\ X0\ X1)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \tag{2}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow ((v6\_cohsp\_1\ X0) \Leftrightarrow (\forall X1.\forall X2.((X1 \in k9\_xtuple\_0\ X0) \wedge ((X2 \in k9\_xtuple\_0\ X0) \wedge (r1\_tarski\ X1\ X2))) \Rightarrow (r1\_tarski\ (k1\_funct\_1\ X0\ X1)\ (k1\_funct\_1\ X0\ X2)))) \tag{3}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v6\_cohsp\_1\ X0))) \Rightarrow (\forall X1.\forall X2.((X2 \in k9\_xtuple\_0\ X0) \wedge ((r1\_tarski\ X1\ X2) \wedge (v1\_finset\_1\ X2))) \Rightarrow (\forall X3.(k4\_tarski\ X1\ X3 \in k5\_cohsp\_1\ X0) \Rightarrow (k4\_tarski\ X2\ X3 \in k5\_cohsp\_1\ X0)))$$