

t52_cohsp_1
(TMW7X8sLpzKSkWpysVxM19vzKzxeXe5ssBi)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_cohspace_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_cohspace_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. \forall X2. \\ & (k4_tarski X1 X2 \in k10_cohspace_1 X0) \Leftrightarrow (k4_tarski (k1_tarski X1) X2 \in \\ & \quad k7_cohspace_1 X0)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. \forall X2. \\ & (k4_tarski X1 X2 \in k7_cohspace_1 X0) \Leftrightarrow ((X1 \in k9_xtuple_0 X0) \wedge ((X2 \in k1_funct_1 \\ & \quad X0 X1) \wedge (\forall X3. ((X3 \in k9_xtuple_0 X0) \wedge ((r1_tarski X3 X1) \wedge \\ & \quad X2 \in k1_funct_1 X0 X3)))) \Rightarrow (X1 = X3)))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. \forall X2. \\ & (k4_tarski X1 X2 \in k10_cohspace_1 X0) \Rightarrow ((k1_tarski X1 \in k9_xtuple_0 \\ & \quad X0) \wedge (X2 \in k1_funct_1 X0 (k1_tarski X1)))) \end{aligned}$$