

t31_cohsp_1 (TM- RVCsR4jR72ENqhkLGpvaYApDAEhjqDGb5)

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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 $k7_cohsp_1 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (k4_tarski X0 X1 = k4_tarski X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. (X1 = \\ k7_cohsp_1 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. \exists X4. (\\ X2 = k4_tarski X3 X4) \wedge ((X3 \in k9_xtuple_0 X0) \wedge ((X4 \in k1_funct_1 X0 \\ X3) \wedge (\forall X5. ((X5 \in k9_xtuple_0 X0) \wedge ((r1_tarski X5 X3) \wedge (X4 \in \\ k1_funct_1 X0 X5)))) \Rightarrow (X3 = X5)))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. \forall X2. \\ (k4_tarski X1 X2 \in k7_cohsp_1 X0) \Leftrightarrow ((X1 \in k9_xtuple_0 X0) \wedge ((X2 \in k1_funct_1 \\ X0 X1) \wedge (\forall X3. ((X3 \in k9_xtuple_0 X0) \wedge ((r1_tarski X3 X1) \wedge (\\ X2 \in k1_funct_1 X0 X3)))) \Rightarrow (X1 = X3)))) \end{aligned}$$