

t18_coh_sp
(TMVA3kCvV2zVfCFzAbQGmdpHvdfzJr3ssTR)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_coh_sp : \iota \Rightarrow \iota$ be given. Let $k4_coh_sp : \iota \Rightarrow \iota$ be given. Let $k3_coh_sp : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k5_coh_sp X0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. k5_coh_sp X0 = \text{ReplSep3 } (& \text{toset } (\lambda X1 : \iota. m1_subset_1 \\ & X1 (k3_coh_sp X0))) (\lambda X1 : \iota. \text{toset } (\lambda X2 : \iota. m1_subset_1 \\ & X2 (k3_coh_sp X0))) (\lambda X1 : \iota. \lambda X2 : \iota. \text{toset } (\lambda X3 : \iota. \\ & m1_subset_1 X3 (k4_coh_sp X0))) (\lambda X1 : \iota. \lambda X2 : \iota. \lambda X3 : \\ & \iota. ((k3_tarski X2 = k1_xboole_0) \Rightarrow (k3_tarski X1 = k1_xboole_0)) \wedge \\ & (((v1_funct_1 X3) \wedge ((v1_funct_2 X3 (k3_tarski X1) (k3_tarski X2)) \wedge \\ & (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 (k3_tarski X1) (k3_tarski \\ & X2)))))) \wedge (\forall X4. \forall X5. (k2_tarski X4 X5 \in X1) \Rightarrow (k2_tarski \\ & (k1_funct_1 X3 X4) (k1_funct_1 X3 X5) \in X2)))) (\lambda X1 : \iota. \lambda X2 : \\ & \iota. \lambda X3 : \iota. k4_tarski (k4_tarski X1 X2) X3) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k5_coh_sp X0)) \Rightarrow (\exists X2. \\ & (m1_subset_1 X2 (k4_coh_sp X0)) \wedge (\exists X3. (m1_subset_1 X3 (\\ & k3_coh_sp X0)) \wedge (\exists X4. (m1_subset_1 X4 (k3_coh_sp X0)) \wedge (\\ & (X1 = k4_tarski (k4_tarski X3 X4) X2) \wedge (((k3_tarski X4 = k1_xboole_0) \Rightarrow \\ & (k3_tarski X3 = k1_xboole_0)) \wedge ((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 (k3_tarski X3) (k3_tarski X4)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k3_tarski X3) (k3_tarski X4)))))) \wedge (\forall X5. \\ & \forall X6. (k2_tarski X5 X6 \in X3) \Rightarrow (k2_tarski (k1_funct_1 X2 X5) \\ & (k1_funct_1 X2 X6) \in X4))))))))) \end{aligned}$$