

t22_coh_sp (TMHMVhiW-
PcE6Vj295RmbL3Qb4pchP1EzFWA)

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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 $k6_coh_sp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_coh_sp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k9_coh_sp : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. k2_xtuple_0 (k4_tarski X0 X1) = X1 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k1_xtuple_0 (k4_tarski X0 X1) = X0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((m1_subset_1 X1 (k5_coh_sp X0)) \wedge (m1_subset_1 X2 (k5_coh_sp X0))) \Rightarrow (m1_subset_1 (k9_coh_sp X0 X1 X2) (k5_coh_sp X0)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k5_coh_sp X0)) \Rightarrow (k7_coh_sp X0 X1 = k2_xtuple_0 (k1_xtuple_0 X1)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k5_coh_sp X0)) \Rightarrow (k6_coh_sp X0 X1 = k1_xtuple_0 (k1_xtuple_0 X1)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k5_coh_sp X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (k5_coh_sp X0)) \Rightarrow ((k7_coh_sp X0 X1 = k6_coh_sp X0 X2) \Rightarrow (k9_coh_sp X0 X1 X2 = k4_tarski (k4_tarski (k6_coh_sp X0 X1) (k7_coh_sp X0 X2)) (k3_relat_1 (k2_xtuple_0 X1) (k2_xtuple_0 X2)))))) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k5_coh_sp X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k5_coh_sp X0)) \Rightarrow ((k6_coh_sp X0 X1 = k7_coh_sp X0 \\ & X2) \Rightarrow ((k2_xtuple_0 (k9_coh_sp X0 X2 X1) = k3_relat_1 (k2_xtuple_0 \\ & X2) (k2_xtuple_0 X1)) \wedge ((k6_coh_sp X0 (k9_coh_sp X0 X2 X1) = k6_coh_sp \\ & X0 X2) \wedge (k7_coh_sp X0 (k9_coh_sp X0 X2 X1) = k7_coh_sp X0 X1)))))) \end{aligned}$$