

t8_projpl_1 (TMby-
Aczg2ULgMN5gYJrC46D4xRNSzT9WGca)

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Let $l1_incsp_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_incsp_1 : \iota \Rightarrow \iota$ be given. Let $u2_incsp_1 : \iota \Rightarrow \iota$ be given. Let $v6_incsp_1 : \iota \Rightarrow o$ be given. Let $v1_incproj : \iota \Rightarrow o$ be given. Let $v2_incproj : \iota \Rightarrow o$ be given. Let $v3_incproj : \iota \Rightarrow o$ be given. Let $v4_incproj : \iota \Rightarrow o$ be given. Let $r4_incsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_incsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u2_incsp_1 \\ & \quad X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_incsp_1 X0)) \Rightarrow (\forall X3. \\ & \quad (m1_subset_1 X3 (u1_incsp_1 X0)) \Rightarrow ((r4_incsp_1 X0 (k7_domain_1 \\ & \quad (u1_incsp_1 X0) X2 X3) X1) \Leftrightarrow ((r1_incsp_1 X0 X2 X1) \wedge (r1_incsp_1 X0 \\ & \quad X3 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow ((v3_incproj X0) \Leftrightarrow (\forall X1.(m1_subset_1 \\ & \quad X1 (u2_incsp_1 X0)) \Rightarrow (\exists X2.(m1_subset_1 X2 (u1_incsp_1 X0)) \wedge \\ & \quad (\exists X3.(m1_subset_1 X3 (u1_incsp_1 X0)) \wedge (\exists X4.(m1_subset_1 \\ & \quad X4 (u1_incsp_1 X0)) \wedge ((X2 \neq X3) \wedge ((X3 \neq X4) \wedge ((X4 \neq X2) \wedge ((r1_incsp_1 \\ & \quad X0 X2 X1) \wedge ((r1_incsp_1 X0 X3 X1) \wedge (r1_incsp_1 X0 X4 X1)))))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (r1_zfmisc_1 X0 X1 X2) \Leftrightarrow ((X0 \neq X1) \wedge ((X0 \neq X2) \wedge (X1 \neq X2))) \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_incsp_1 \\ & \quad X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u2_incsp_1 X0)) \Rightarrow (\neg((v6_incsp_1 \\ & \quad X0) \wedge ((v1_incproj X0) \wedge ((v2_incproj X0) \wedge ((v3_incproj X0) \wedge ((v4_incproj \\ & \quad X0) \wedge (l1_incsp_1 X0)))))) \wedge (\forall X3.(m1_subset_1 X3 (u1_incsp_1 \\ & \quad X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_incsp_1 X0)) \Rightarrow (\neg(r4_incsp_1 \\ & \quad X0 (k7_domain_1 (u1_incsp_1 X0) X3 X4) X2) \wedge (r1_zfmisc_1 X1 X3 X4)))))) \end{aligned}$$