

t75_tex_4 (TMNKDpfyWRpN- QhiqX1CBjdd7Nt4vwEpoSHX)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_tex_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $k2_tex_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow ((r1_subset_1 (k2_tex_4 X0 X1) (k2_tex_4 X0 \\ & X2)) \vee (k2_tex_4 X0 X1 = k2_tex_4 X0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((l1_pre_topc X0) \wedge (m1_subset_1 X1 (u1_struct_0 \\ & X0))) \Rightarrow ((v1_pre_topc (k5_tex_4 X0 X1)) \wedge (m1_pre_topc (k5_tex_4 \\ & X0 X1) X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2. ((v1_pre_topc X2) \wedge (m1_pre_topc X2 X0)) \Rightarrow ((X2 = \\ & k5_tex_4 X0 X1) \Leftrightarrow (u1_struct_0 X2 = k2_tex_4 X0 X1)))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow ((r1_subset_1 (u1_struct_0 (k5_tex_4 X0 X1)) \\ & (u1_struct_0 (k5_tex_4 X0 X2))) \vee (g1_pre_topc (u1_struct_0 (k5_tex_4 \\ & X0 X1)) (u1_pre_topc (k5_tex_4 X0 X1)) = g1_pre_topc (u1_struct_0 \\ & (k5_tex_4 X0 X2)) (u1_pre_topc (k5_tex_4 X0 X2)))))) \end{aligned}$$