

t24_kurato_2 (TMPCKVs- rupGLNNPBK3iCBWtHa3eSyErzb3y)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_kurato_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
 & X0))) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\
 & (k9_setfam_1 (u1_struct_0 X0))) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
 & (k2_zfmisc_1 k5_numbers (k9_setfam_1 (u1_struct_0 X0)))))) \Rightarrow \quad (1) \\
 & (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
 & ((\forall X3. (v7_ordinal1 X3) \Rightarrow (k1_funct_1 X1 X3 = X2)) \Rightarrow (k1_kurato_2 \\
 & X0 X1 = k2_pre_topc X0 X2))))))
 \end{aligned}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\
 & (u1_struct_0 X0))) \Rightarrow (((v4_pre_topc X1 X0) \Rightarrow (k2_pre_topc X0 X1 = \\
 & X1)) \wedge (((v2_pre_topc X0) \wedge (k2_pre_topc X0 X1 = X1)) \Rightarrow (v4_pre_topc \\
 & X1 X0)))) \quad (2)
 \end{aligned}$$

Theorem 1

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\
 & X0))) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\
 & (k9_setfam_1 (u1_struct_0 X0))) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\
 & (k2_zfmisc_1 k5_numbers (k9_setfam_1 (u1_struct_0 X0)))))) \Rightarrow \\
 & (\forall X2. ((v4_pre_topc X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 \\
 & (u1_struct_0 X0)))) \Rightarrow ((\forall X3. (v7_ordinal1 X3) \Rightarrow (k1_funct_1 \\
 & X1 X3 = X2)) \Rightarrow (k1_kurato_2 X0 X1 = X2))))
 \end{aligned}$$