

## t23\_kurato\_0

(TMZmGH2pM7V66vnJZWY4147y1Qx5rdZ8WWe)

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Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k9\_setfam\_1 : \iota \Rightarrow \iota$  be given. Let  $v3\_kurato\_0 : \iota \Rightarrow \iota \Rightarrow o$  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  $k4\_kurato\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_kurato\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 k5\_numbers \\ & (k9\_setfam\_1 X0)) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k5\_numbers (k9\_setfam\_1 X0)))))) \Rightarrow (\forall X2. (X2 \in k3\_kurato\_0 \\ & X0 X1) \Leftrightarrow (\exists X3. (m1\_subset\_1 X3 k5\_numbers) \wedge (\forall X4. ( \\ & m1\_subset\_1 X4 k5\_numbers) \Rightarrow (X2 \in k3\_funct\_2 k5\_numbers (k9\_setfam\_1 \\ & X0) X1 (k2\_nat\_1 X3 X4)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. k9\_setfam\_1 X0 = k1\_zfmisc\_1 X0 \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 k5\_numbers \\ & (k9\_setfam\_1 X0)) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & k5\_numbers (k9\_setfam\_1 X0)))))) \Rightarrow ((v3\_kurato\_0 X1 X0) \Leftrightarrow (k4\_kurato\_0 \\ & X0 X1 = k3\_kurato\_0 X0 X1)) \end{aligned} \tag{3}$$

### Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. ((v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 k5\_numbers \\ & (k9\_setfam\_1 X0)) \wedge ((v3\_kurato\_0 X1 X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k5\_numbers (k9\_setfam\_1 X0))))))) \Rightarrow (\forall X2. \\ & (X2 \in k4\_kurato\_0 X0 X1) \Leftrightarrow (\exists X3. (m1\_subset\_1 X3 k5\_numbers) \wedge \\ & (\forall X4. (m1\_subset\_1 X4 k5\_numbers) \Rightarrow (X2 \in k3\_funct\_2 k5\_numbers \\ & (k9\_setfam\_1 X0) X1 (k2\_nat\_1 X3 X4)))))) \end{aligned}$$