

t67\_glib\_000  
(TMJcwesPBXS7EcfbeaoHpfa5Qf8zALb25FF)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v1\_glib\_000 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_glib\_000 : \iota \Rightarrow \iota$  be given. Let  $k28\_glib\_000 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_glib\_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k29\_glib\_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ X0) \wedge ((v1\_finset\_1 X0) \wedge (v1\_glib\_000 X0)))))) \Rightarrow (\forall X1. \forall X2. \\ (m1\_subset\_1 X2 (k6\_glib\_000 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 \\ (k6\_glib\_000 X0)) \Rightarrow ((r1\_glib\_000 X0 X2 X3 X1) \Rightarrow ((k29\_glib\_000 X0 \\ X2 X1 = X3) \wedge (k29\_glib\_000 X0 X3 X1 = X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ X0) \wedge ((v1\_finset\_1 X0) \wedge (v1\_glib\_000 X0)))))) \Rightarrow (\forall X1. \forall X2. \\ (m1\_subset\_1 X2 (k6\_glib\_000 X0)) \Rightarrow ((X1 \in k28\_glib\_000 X0 X2) \Leftrightarrow ( \\ \exists X3. (m1\_subset\_1 X3 (k6\_glib\_000 X0)) \wedge (r1\_glib\_000 X0 \\ X2 X3 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ X0) \wedge ((v1\_finset\_1 X0) \wedge (v1\_glib\_000 X0)))))) \Rightarrow (\forall X1. \forall X2. \\ \forall X3. (m1\_subset\_1 X3 (k6\_glib\_000 X0)) \Rightarrow ((r1\_glib\_000 X0 \\ X3 X2 X1) \Rightarrow (X1 \in k28\_glib\_000 X0 X3))) \end{aligned} \quad (3)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ X0) \wedge ((v1\_finset\_1 X0) \wedge (v1\_glib\_000 X0)))))) \Rightarrow (\forall X1. \forall X2. \\ (m1\_subset\_1 X2 (k6\_glib\_000 X0)) \Rightarrow ((X1 \in k28\_glib\_000 X0 X2) \Leftrightarrow ( \\ r1\_glib\_000 X0 X2 (k29\_glib\_000 X0 X2 X1) X1))) \end{aligned}$$