

t18\_glib\_001

(TMKo75WmbUZgt3gNe3KjFvQeK156sYX5RtW)

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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  $m3\_glib\_001 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_glib\_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_glib\_000 : \iota \Rightarrow \iota$  be given. Let  $k4\_glib\_001 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_glib\_001 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge \\ & ((v1\_funct\_1 X0) \wedge ((v1\_finset\_1 X0) \wedge (v1\_glib\_000 X0)))))) \wedge (m3\_glib\_001 \\ & X1 X0)) \Rightarrow (m1\_subset\_1 (k4\_glib\_001 X0 X1) (k6\_glib\_000 X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge \\ & ((v1\_funct\_1 X0) \wedge ((v1\_finset\_1 X0) \wedge (v1\_glib\_000 X0)))))) \wedge (m3\_glib\_001 \\ & X1 X0)) \Rightarrow (m1\_subset\_1 (k3\_glib\_001 X0 X1) (k6\_glib\_000 X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ & X0) \wedge ((v1\_finset\_1 X0) \wedge (v1\_glib\_000 X0)))))) \Rightarrow (\forall X1. \forall X2. \\ & \forall X3. (m3\_glib\_001 X3 X0) \Rightarrow ((r1\_glib\_001 X0 X1 X2 X3) \Leftrightarrow ((k3\_glib\_001 \\ & X0 X3 = X1) \wedge (k4\_glib\_001 X0 X3 = X2)))) \end{aligned} \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ & X0) \wedge ((v1\_finset\_1 X0) \wedge (v1\_glib\_000 X0)))))) \Rightarrow (\forall X1. (m3\_glib\_001 \\ & X1 X0) \Rightarrow (\forall X2. \forall X3. (r1\_glib\_001 X0 X2 X3 X1) \Rightarrow ((m1\_subset\_1 \\ & X2 (k6\_glib\_000 X0) \wedge (m1\_subset\_1 X3 (k6\_glib\_000 X0)))))) \end{aligned}$$