

t11\_glib\_000  
(TMWfHAgyRz5AvYSgkJB1F3LWr2SQ4HdQvEG)

October 27, 2020

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  $k6\_glib\_000 : \iota \Rightarrow \iota$  be given. Let  $k13\_glib\_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_glib\_000 : \iota$  be given. Let  $k7\_glib\_000 : \iota \Rightarrow \iota$  be given. Let  $k2\_glib\_000 : \iota$  be given. Let  $k8\_glib\_000 : \iota \Rightarrow \iota$  be given. Let  $k3\_glib\_000 : \iota$  be given. Let  $k9\_glib\_000 : \iota \Rightarrow \iota$  be given. Let  $k4\_glib\_000 : \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_4 : \iota$  be given. Let  $np\_3 : \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $np\_1 : \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ X0) \wedge (v1\_finset\_1 X0)))) \Rightarrow (\forall X1. \forall X2. (v7\_ordinal1 \\ X2) \Rightarrow (k1\_funct\_1 (k13\_glib\_000 X0 X2 X1) X2 = X1)) \end{aligned} \quad (1)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (2)$$

Assume the following.

$$m1\_subset\_1 k4\_glib\_000 k5\_numbers \quad (3)$$

Assume the following.

$$m1\_subset\_1 k3\_glib\_000 k5\_numbers \quad (4)$$

Assume the following.

$$m1\_subset\_1 k2\_glib\_000 k5\_numbers \quad (5)$$

Assume the following.

$$m1\_subset\_1 k1\_glib\_000 k5\_numbers \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1\_relat\_1 X0)\wedge((v4\_relat\_1 \\ & X0 k5\_numbers)\wedge((v1\_funct\_1 X0)\wedge(v1\_finset\_1 X0))))\wedge(v7\_ordinal1 \\ & X1))\Rightarrow((v1\_relat\_1 (k13\_glib\_000 X0 X1 X2))\wedge((v4\_relat\_1 (k13\_glib\_000 \\ & X0 X1 X2) k5\_numbers)\wedge((v1\_funct\_1 (k13\_glib\_000 X0 X1 X2))\wedge(v1\_finset\_1 \\ & (k13\_glib\_000 X0 X1 X2)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge((v4\_relat\_1 X0 k5\_numbers)\wedge((v1\_funct\_1 X0)\wedge(v1\_finset\_1 X0))))\Rightarrow(k9\_glib\_000 X0 = k1\_funct\_1 X0 k4\_glib\_000) \quad (8)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge((v4\_relat\_1 X0 k5\_numbers)\wedge((v1\_funct\_1 X0)\wedge(v1\_finset\_1 X0))))\Rightarrow(k8\_glib\_000 X0 = k1\_funct\_1 X0 k3\_glib\_000) \quad (9)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge((v4\_relat\_1 X0 k5\_numbers)\wedge((v1\_funct\_1 X0)\wedge(v1\_finset\_1 X0))))\Rightarrow(k7\_glib\_000 X0 = k1\_funct\_1 X0 k2\_glib\_000) \quad (10)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge((v4\_relat\_1 X0 k5\_numbers)\wedge((v1\_funct\_1 X0)\wedge(v1\_finset\_1 X0))))\Rightarrow(k6\_glib\_000 X0 = k1\_funct\_1 X0 k1\_glib\_000) \quad (11)$$

Assume the following.

$$k4\_glib\_000 = np\_4 \quad (12)$$

Assume the following.

$$k3\_glib\_000 = np\_3 \quad (13)$$

Assume the following.

$$k2\_glib\_000 = np\_2 \quad (14)$$

Assume the following.

$$k1\_glib\_000 = np\_1 \quad (15)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1)\Rightarrow(v7\_ordinal1 X0) \quad (16)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0)\wedge((v4\_relat\_1 X0 k5\_numbers)\wedge((v1\_funct\_1 \\ & X0)\wedge(v1\_finset\_1 X0))))\Rightarrow(\forall X1.(k6\_glib\_000 (k13\_glib\_000 \\ & X0 k1\_glib\_000 X1) = X1)\wedge((k7\_glib\_000 (k13\_glib\_000 X0 k2\_glib\_000 \\ & X1) = X1)\wedge((k8\_glib\_000 (k13\_glib\_000 X0 k3\_glib\_000 X1) = X1)\wedge \\ & (k9\_glib\_000 (k13\_glib\_000 X0 k4\_glib\_000 X1) = X1)))) \end{aligned}$$