

t27\_graphsp (TMQ-  
DRbbg5uvrvY1bwXWxQMBv4KC4CBqiMZV)

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Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_graphsp : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k13\_graphsp : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k4\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $np\_1 : \iota$  be given. Let  $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_real\_1 : \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 \\ & X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$(\neg v1\_xboole\_0 k4\_ordinal1) \wedge (v3\_ordinal1 k4\_ordinal1) \quad (3)$$

Assume the following.

$$\neg v1\_xboole\_0 k1\_numbers \quad (4)$$

Assume the following.

$$m1\_subset\_1 k5\_numbers (k1\_zfmisc\_1 k1\_numbers) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m2\_finseq\_2 X0 k1\_numbers (k3\_finseq\_2 k1\_numbers)) \Rightarrow \\ & (\forall X1. (m2\_subset\_1 X1 k1\_numbers k5\_numbers) \Rightarrow (k13\_graphsp \\ X0 X1 = \text{ReplSep} (\text{toset} (\lambda X2 : \iota. m2\_subset\_1 X2 k1\_numbers k5\_numbers)) \\ & (\lambda X2 : \iota. (X2 \in k4\_finseq\_1 X0) \wedge ((r1\_xxreal\_0 np\_1 X2) \wedge (( \\ & r1\_xxreal\_0 X2 X1) \wedge (k1\_seq\_1 X0 X2 \neq k1\_real\_1 np\_1)))))) (\lambda X2 : \\ & \iota. X2))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(m2\_finseq\_2\ X0\ k1\_numbers\ (k3\_finseq\_2\ k1\_numbers))\Rightarrow \\ (\forall X1.(v7\_ordinal1\ X1)\Rightarrow(k7\_graphsp\ X0\ X1 = ReplSep\ (toset \\ (\lambda X2 : \iota.m2\_subset\_1\ X2\ k1\_numbers\ k5\_numbers))\ (\lambda X2 : \\ \iota.(X2 \in k4\_finseq\_1\ X0)\wedge((r1\_xxreal\_0\ np\_1\ X2)\wedge((r1\_xxreal\_0 \\ X2\ X1)\wedge((k1\_seq\_1\ X0\ X2\neq k1\_real\_1\ np\_1)\wedge(k1\_seq\_1\ X0\ (k1\_nat\_1 \\ X1\ X2)\neq k1\_real\_1\ np\_1))))))\ (\lambda X2 : \iota.X2)) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \quad (9)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(m2\_subset\_1\ X0\ k1\_numbers\ k5\_numbers)\Rightarrow(\forall X1. \\ (m2\_finseq\_2\ X1\ k1\_numbers\ (k3\_finseq\_2\ k1\_numbers))\Rightarrow(r1\_tarski \\ (k7\_graphsp\ X1\ X0)\ (k13\_graphsp\ X1\ X0))) \end{aligned}$$