

t24\_comput\_1 (TMPLYDGDm-  
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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v2\_margrel1 : \iota \Rightarrow o$  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  $k3\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k19\_margrel1 : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k13\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k18\_margrel1 : \iota \Rightarrow \iota$  be given. Let  $v3\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $v4\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (2)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (3)$$

Assume the following.

$$\forall X0.k3\_finseq\_2 X0 = k13\_finseq\_1 X0 \quad (4)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v1\_finseq\_1 X0))) \Rightarrow (k3\_finseq\_1 X0 = k1\_card\_1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1) \wedge (v4\_relat\_1 X1 X0)) \Rightarrow (k1\_relset\_1 X0 X1 = k9\_xtuple\_0 X1) \quad (6)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge ((v1\_funct\_1 X0) \wedge (v2\_margrel1 X0))) \Rightarrow (k19\_margrel1 X0 = k18\_margrel1 X0) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_relat\_1 X0)) \Rightarrow (\neg v1\_xboole\_0 (k9\_xtuple\_0 X0)) \quad (8)$$

Assume the following.

$$\forall X0.v3\_finseq\_1 (k13\_finseq\_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.v4\_funct\_1 (k13\_finseq\_1 X0) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1) \wedge (v4\_relat\_1 X1 X0)) \Rightarrow (m1\_subset\_1 (k1\_relset\_1 X0 X1) (k1\_zfmisc\_1 X0)) \quad (11)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0) \wedge (v2\_margrel1 X0)) \Rightarrow (v7\_ordinal1 (k18\_margrel1 X0)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(v3\_card\_1 X1 X0) \Leftrightarrow (k1\_card\_1 X1 = X0) \quad (13)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge (v2\_margrel1 X0)) \Rightarrow (\forall X1. ( \\ v7\_ordinal1 X1) \Rightarrow (((\exists X2.((v1\_relat\_1 X2) \wedge ((v1\_funct\_1 \\ X2) \wedge (v1\_finseq\_1 X2)))) \wedge (X2 \in k9\_xtuple\_0 X0)) \Rightarrow ((X1 = k18\_margrel1 \\ X0) \Leftrightarrow (\forall X2.((v1\_relat\_1 X2) \wedge ((v1\_funct\_1 X2) \wedge (v1\_finseq\_1 \\ X2)))) \Rightarrow ((X2 \in k9\_xtuple\_0 X0) \Rightarrow (X1 = k3\_finseq\_1 X2)))))) \wedge ((\forall X2. \\ ((v1\_relat\_1 X2) \wedge ((v1\_funct\_1 X2) \wedge (v1\_finseq\_1 X2))) \Rightarrow (\neg X2 \in \\ k9\_xtuple\_0 X0)) \Rightarrow ((X1 = k18\_margrel1 X0) \Leftrightarrow (X1 = k6\_numbers)))))) \end{aligned} \quad (14)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Leftrightarrow (\forall X1.\neg X1 \in X0) \quad (15)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v4\_funct\_1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (v1\_relat\_1 X1) \wedge (v1\_funct\_1 X1)) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow ((v4\_relat\_1 X2 X0) \wedge (v5\_relat\_1 X2 X1)) \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow (v1\_relat\_1 X2) \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0) \wedge (v7\_ordinal1 X1)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k4\_finseq\_2 X1 X0)) \Rightarrow (v3\_card\_1 X2 X1)) \quad (20)$$

Assume the following.

$$\forall X0.(v3\_finseq\_1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (v1\_finseq\_1 X1)) \quad (21)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.((\neg v1\_xboole\_0 X1) \wedge \\ & ((v1\_funct\_1 X1) \wedge ((v2\_margrel1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 (k3\_finseq\_2 X0) X0)))))) \Rightarrow (\forall X2.(m1\_subset\_1 \\ & X2 k5\_numbers) \Rightarrow ((r1\_tarski (k1\_relset\_1 (k3\_finseq\_2 X0) X1) \\ & (k4\_finseq\_2 X2 X0)) \Rightarrow (k19\_margrel1 X1 = X2)))) \end{aligned}$$