

## t27\_comput\_1

(TMc8yM3JqUJnofkk9GX2jM2XYaSAebZK6cb)

October 27, 2020

Let  $k1\_xboole\_0 : \iota$  be given. Let  $k2\_comput\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  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  $k4\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_rfunct\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_rfunct\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_rfunct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $k13\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v2\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_margrel1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1\_funct\_1 X2) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)))) \Rightarrow (X2 \in k4\_partfun1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0 X2) \wedge (m1\_rfunct\_3 X2 X0 X1)) \Rightarrow (\forall X3.(m2\_rfunct\_3 X3 X0 X1 X2) \Leftrightarrow (m1\_subset\_1 X3 X2)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.k3\_rfunct\_3 X0 X1 = k4\_partfun1 X0 X1 \quad (5)$$

Assume the following.

$$\forall X0.k3\_finseq\_2 X0 = k13\_finseq\_1 X0 \quad (6)$$

Assume the following.

$$\forall X0.\exists X1.(v1\_relat\_1 X1)\wedge((v2\_relat\_1 X1)\wedge((v4\_relat\_1 X1 X0)\wedge(v1\_funct\_1 X1))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\exists X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k3\_finseq\_2 X0) X1)))\wedge((v1\_relat\_1 X2)\wedge((v4\_relat\_1 X2 (k3\_finseq\_2 X0))\wedge((v5\_relat\_1 X2 X1)\wedge((v1\_funct\_1 X2)\wedge(v2\_margrel1 X2)))))) \quad (8)$$

Assume the following.

$$\forall X0.\exists X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))\wedge(v1\_xboole\_0 X1) \quad (9)$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.\neg v1\_xboole\_0 (k4\_partfun1 X0 X1) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.m1\_rfunct\_3 (k3\_rfunct\_3 X0 X1) X0 X1 \quad (12)$$

Assume the following.

$$\forall X0.k2\_comput\_1 X0 = ReplSep (toset (\lambda X1 : \iota.m2\_rfunct\_3 X1 (k3\_finseq\_2 X0) X0 (k3\_rfunct\_3 (k3\_finseq\_2 X0) X0))) (\lambda X1 : \iota.v2\_margrel1 X1) (\lambda X1 : \iota.X1) \quad (13)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0)\Rightarrow(\forall X1.((v1\_relat\_1 X1)\wedge(v5\_relat\_1 X1 X0))\Rightarrow((v1\_xboole\_0 X1)\wedge((v1\_relat\_1 X1)\wedge(v5\_relat\_1 X1 X0)))) \quad (14)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0)\Rightarrow(\forall X1.((v1\_relat\_1 X1)\wedge(v4\_relat\_1 X1 X0))\Rightarrow((v1\_xboole\_0 X1)\wedge((v1\_relat\_1 X1)\wedge(v4\_relat\_1 X1 X0)))) \quad (15)$$

**Theorem 1**  $\forall X0.k1\_xboole\_0 \in k2\_comput\_1 X0.$