

t3\_ospace  
(TMG2R4Ls93RXYBGZGyEK7KRmJf3cew6i4Y9)

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Let  $k2\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_ospace : \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. 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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k7\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $g6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $l6\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l2\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l5\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $l2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $k7\_int\_3 : \iota \Rightarrow \iota$  be given. Let  $k3\_gr\_cy\_1 : \iota \Rightarrow \iota$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v6\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v33\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v3\_group\_1 : \iota \Rightarrow o$  be given. Let  $v5\_group\_1 : \iota \Rightarrow o$  be given. Let  $v4\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $v5\_vectsp\_1 : \iota \Rightarrow o$  be given. Let  $v2\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $k1\_funct\_7 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v36\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k9\_int\_3 : \iota \Rightarrow \iota$  be given. Let  $u1\_algstr\_0 : \iota \Rightarrow \iota$  be given. Let  $u2\_algstr\_0 : \iota \Rightarrow \iota$  be given. Let  $u3\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u2\_struct\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$np\_2 = k2\_tarski\ k1\_xboole\_0\ np\_1 \tag{1}$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0\ np\_2) \wedge (m2\_subset\_1\ np\_2\ k1\_numbers\ k5\_numbers)) \wedge \\ & ((m1\_subset\_1\ np\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_2\ k1\_numbers)) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (k7\_card\_1\ X0 = k6\_card\_1\ X0) \tag{3}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{4}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. (((v1\_funct\_1 \\ & X1) \wedge ((v1\_funct\_2 X1 (k2\_zfmisc\_1 X0 X0) X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0) X0)))) \wedge (((v1\_funct\_1 X2) \wedge \\ & (v1\_funct\_2 X2 (k2\_zfmisc\_1 X0 X0) X0) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0) X0)))) \wedge ((m1\_subset\_1 X3 X0) \wedge \\ & (m1\_subset\_1 X4 X0)))) \Rightarrow (\forall X5. \forall X6. \forall X7. \forall X8. \\ & \forall X9. (g6\_algstr\_0 X0 X1 X2 X3 X4 = g6\_algstr\_0 X5 X6 X7 X8 X9) \Rightarrow \\ & ((X0 = X5) \wedge ((X1 = X6) \wedge ((X2 = X7) \wedge ((X3 = X8) \wedge (X4 = X9)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0. (l6\_algstr\_0 X0) \Rightarrow ((l2\_algstr\_0 X0) \wedge (l5\_algstr\_0 X0)) \quad (7)$$

Assume the following.

$$\forall X0. (l2\_struct\_0 X0) \Rightarrow (l1\_struct\_0 X0) \quad (8)$$

Assume the following.

$$\forall X0. (l2\_algstr\_0 X0) \Rightarrow ((l2\_struct\_0 X0) \wedge (l1\_algstr\_0 X0)) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v7\_ordinal1 X0) \Rightarrow ((v1\_funct\_1 (k7\_int\_3 X0)) \wedge ((v1\_funct\_2 \\ & (k7\_int\_3 X0) (k2\_zfmisc\_1 (k7\_card\_1 X0) (k7\_card\_1 X0)) (k7\_card\_1 \\ & X0)) \wedge (m1\_subset\_1 (k7\_int\_3 X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (k7\_card\_1 X0) (k7\_card\_1 X0)) (k7\_card\_1 X0)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v7\_ordinal1 X0) \Rightarrow ((v1\_funct\_1 (k3\_gr\_cy\_1 X0)) \wedge ( \\ & (v1\_funct\_2 (k3\_gr\_cy\_1 X0) (k2\_zfmisc\_1 (k7\_card\_1 X0) (k7\_card\_1 \\ & X0)) (k7\_card\_1 X0)) \wedge (m1\_subset\_1 (k3\_gr\_cy\_1 X0) (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 (k2\_zfmisc\_1 (k7\_card\_1 X0) (k7\_card\_1 X0)) (k7\_card\_1 \\ & X0)))))) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} & (\neg v2\_struct\_0 k2\_bspace) \wedge ((\neg v6\_struct\_0 k2\_bspace) \wedge ((v13\_algstr\_0 \\ & k2\_bspace) \wedge ((v33\_algstr\_0 k2\_bspace) \wedge ((v3\_group\_1 k2\_bspace) \wedge \\ & ((v5\_group\_1 k2\_bspace) \wedge ((v4\_vectsp\_1 k2\_bspace) \wedge ((v5\_vectsp\_1 \\ & k2\_bspace) \wedge ((v2\_rlvect\_1 k2\_bspace) \wedge ((v3\_rlvect\_1 k2\_bspace) \wedge \\ & ((v4\_rlvect\_1 k2\_bspace) \wedge (l6\_algstr\_0 k2\_bspace)))))))))) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.m1\_subset\_1 (k1\_funct\_7 X0 X1) X1 \quad (13)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(((v1\_funct\_1 \\ & X1)\wedge((v1\_funct\_2 X1 (k2\_zfmisc\_1 X0 X0) X0)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0) X0)))))\wedge(((v1\_funct\_1 X2)\wedge( \\ & (v1\_funct\_2 X2 (k2\_zfmisc\_1 X0 X0) X0)\wedge(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0) X0)))))\wedge((m1\_subset\_1 X3 X0)\wedge \\ & (m1\_subset\_1 X4 X0))))\Rightarrow((v36\_algstr\_0 (g6\_algstr\_0 X0 X1 X2 X3 \\ & X4))\wedge(l6\_algstr\_0 (g6\_algstr\_0 X0 X1 X2 X3 X4))) \end{aligned} \quad (14)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0)\Rightarrow(k6\_card\_1 X0 = X0) \quad (15)$$

Assume the following.

$$\forall X0.(l1\_struct\_0 X0)\Rightarrow(k2\_struct\_0 X0 = u1\_struct\_0 X0) \quad (16)$$

Assume the following.

$$k2\_bspace = k9\_int\_3 np\_2 \quad (17)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7\_ordinal1 X0)\Rightarrow(k9\_int\_3 X0 = g6\_algstr\_0 (k7\_card\_1 \\ & X0) (k3\_gr\_cy\_1 X0) (k7\_int\_3 X0) (k1\_funct\_7 np\_1 (k7\_card\_1 \\ & X0)) (k1\_funct\_7 k6\_numbers (k7\_card\_1 X0))) \end{aligned} \quad (18)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1)\Rightarrow(v7\_ordinal1 X0) \quad (19)$$

Assume the following.

$$\begin{aligned} & \forall X0.(l6\_algstr\_0 X0)\Rightarrow((v36\_algstr\_0 X0)\Rightarrow(X0 = g6\_algstr\_0 \\ & (u1\_struct\_0 X0) (u1\_algstr\_0 X0) (u2\_algstr\_0 X0) (u3\_struct\_0 \\ & X0) (u2\_struct\_0 X0))) \end{aligned} \quad (20)$$

**Theorem 1**  $k2\_struct\_0 k2\_bspace = k2\_tarski k1\_xboole\_0 np\_1$ .