t20_bspace (TMJrewQyWTmFXeeu-vaUTB2NqYMHHUtRbS8Q)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_bspace : \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_bspace : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_group\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v2\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ 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 $v5\_group\_1 : \iota \Rightarrow o$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ 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 $g6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l3\_struct\_0 : \iota \Rightarrow o$ be given. Let $u3\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $l2\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l5\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_struct\_0 : \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ be given. Let $k7\_int\_3 : \iota \Rightarrow \iota$ be given. Let $k3\_gr\_cy\_1 : \iota \Rightarrow \iota$ be given. Let $v6\_struct\_0 : \iota \Rightarrow o$ be given. Let $v33\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v3\_group\_1 : \iota \Rightarrow o$ be given. Let $v4\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v5\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $k1\_funct\_7 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v36\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k1\_subset\_1 : \iota \Rightarrow \iota$ be given. Let $k9\_int\_3 : \iota \Rightarrow \iota$ be given. Let $v1\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $u1\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $u2\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $u2\_struct\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{gathered}\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge ((v2\_vectsp\_1\ X0) \wedge (l6\_algstr\_0\ X0)))))) \Rightarrow \\ (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (k6\_algstr\_0\ X0\ (k4\_struct\_0\ X0)\ X1 = k4\_struct\_0\ X0))\end{gathered} \tag{1}$$

Assume the following.

$$k5\_struct\_0\ k2\_bspace = np\_\_1 \tag{2}$$

Assume the following.

$$k4\_struct\_0\ k2\_bspace = k1\_xboole\_0 \tag{3}$$

Assume the following.

$$np\_\_2 = k2\_tarski\ k1\_xboole\_0\ np\_\_1 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1)\Rightarrow((v1\_xboole\_0\ X1)\vee (X0 \in X1)) \tag{5}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2)\wedge(m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers))\wedge ((m1\_subset\_1\ np\_\_2\ k5\_numbers)\wedge(m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{6}$$

Assume the following.

$$\neg v1\_xboole\_0\ np\_\_2 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0)\wedge((v5\_group\_1\ X0)\wedge(l3\_algstr\_0\ X0)))\wedge((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))))\Rightarrow(k8\_group\_1\ X0\ X1\ X2 = k6\_algstr\_0\ X0\ X1\ X2) \tag{8}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(k7\_card\_1\ X0 = k6\_card\_1\ X0) \tag{9}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{10}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge(((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge((m1\_subset\_1\ X3\ X0)\wedge(m1\_subset\_1\ X4\ X0))))\Rightarrow(\forall X5.\forall X6.\forall X7.\forall X8.\forall X9.(g6\_algstr\_0\ X0\ X1\ X2\ X3\ X4 = g6\_algstr\_0\ X5\ X6\ X7\ X8\ X9)\Rightarrow((X0 = X5)\wedge((X1 = X6)\wedge((X2 = X7)\wedge((X3 = X8)\wedge(X4 = X9))))) \tag{12}$$

Assume the following.

$$\forall X0.(l3\_struct\_0\ X0)\Rightarrow(m1\_subset\_1\ (u3\_struct\_0\ X0)\ (u1\_struct\_0\ X0)) \tag{13}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((l2\_algstr\_0\ X0)\wedge(l5\_algstr\_0\ X0)) \tag{14}$$

Assume the following.

$$\forall X0.(l5\_algstr\_0\ X0)\Rightarrow((l4\_algstr\_0\ X0)\wedge(l4\_struct\_0\ X0)) \tag{15}$$

Assume the following.

$$\forall X0.(l4\_struct\_0\ X0)\Rightarrow((l2\_struct\_0\ X0)\wedge(l3\_struct\_0\ X0)) \tag{16}$$

Assume the following.

$$\forall X0.(l4\_algstr\_0\ X0)\Rightarrow((l3\_struct\_0\ X0)\wedge(l3\_algstr\_0\ X0)) \tag{17}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((v1\_funct\_1\ (k7\_int\_3\ X0))\wedge((v1\_funct\_2\ (k7\_int\_3\ X0)\ (k2\_zfmisc\_1\ (k7\_card\_1\ X0)\ (k7\_card\_1\ X0))\ (k7\_card\_1\ X0))\wedge(m1\_subset\_1\ (k7\_int\_3\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ (k7\_card\_1\ X0)\ (k7\_card\_1\ X0))\ (k7\_card\_1\ X0)))))) \tag{18}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_subset\_1\ X1\ (u1\_struct\_0\ k2\_bspace))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0)))\Rightarrow(m1\_subset\_1\ (k4\_bspace\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ X0)) \tag{19}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((v1\_funct\_1\ (k3\_gr\_cy\_1\ X0))\wedge((v1\_funct\_2\ (k3\_gr\_cy\_1\ X0)\ (k2\_zfmisc\_1\ (k7\_card\_1\ X0)\ (k7\_card\_1\ X0))\ (k7\_card\_1\ X0))\wedge(m1\_subset\_1\ (k3\_gr\_cy\_1\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ (k7\_card\_1\ X0)\ (k7\_card\_1\ X0))\ (k7\_card\_1\ X0)))))) \tag{20}$$

Assume the following.

$$(\neg v2\_struct\_0\ k2\_bspace)\wedge((\neg v6\_struct\_0\ k2\_bspace)\wedge((v13\_algstr\_0\ k2\_bspace)\wedge((v33\_algstr\_0\ k2\_bspace)\wedge((v3\_group\_1\ k2\_bspace)\wedge((v5\_group\_1\ k2\_bspace)\wedge((v4\_vectsp\_1\ k2\_bspace)\wedge((v5\_vectsp\_1\ k2\_bspace)\wedge((v2\_rlvect\_1\ k2\_bspace)\wedge((v3\_rlvect\_1\ k2\_bspace)\wedge((v4\_rlvect\_1\ k2\_bspace)\wedge(l6\_algstr\_0\ k2\_bspace))))))))))) \tag{21}$$

Assume the following.

$$\forall X0.\forall X1.m1\_subset\_1\ (k1\_funct\_7\ X0\ X1)\ X1 \tag{22}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge(((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge((m1\_subset\_1\ X3\ X0)\wedge(m1\_subset\_1\ X4\ X0))))\Rightarrow((v36\_algstr\_0\ (g6\_algstr\_0\ X0\ X1\ X2\ X3\ X4))\wedge(l6\_algstr\_0\ (g6\_algstr\_0\ X0\ X1\ X2\ X3\ X4))) \tag{23}$$

Assume the following.

$$\forall X0.(l3\_struct\_0\ X0)\Rightarrow(k5\_struct\_0\ X0 = u3\_struct\_0\ X0) \tag{24}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l4\_algstr\_0\ X0))\Rightarrow((v4\_vectsp\_1\ X0)\Leftrightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow((k6\_algstr\_0\ X0\ X1\ (k5\_struct\_0\ X0) = X1)\wedge(k6\_algstr\_0\ X0\ (k5\_struct\_0\ X0)\ X1 = X1)))) \tag{25}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(k6\_card\_1\ X0 = X0) \tag{26}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ k2\_bspace))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0))\Rightarrow(((X1 = k5\_struct\_0\ k2\_bspace)\Rightarrow(k4\_bspace\ X0\ X1\ X2 = X2))\wedge((X1 = k4\_struct\_0\ k2\_bspace)\Rightarrow(k4\_bspace\ X0\ X1\ X2 = k1\_subset\_1\ X0)))) \tag{27}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_tarski\ X0\ X1)\Leftrightarrow(\forall X3.(X3 \in X2)\Leftrightarrow((X3 = X0)\vee(X3 = X1))) \tag{28}$$

Assume the following.

$$k2\_bspace = k9\_int\_3\ np\_\_2 \tag{29}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(k9\_int\_3\ X0 = g6\_algstr\_0\ (k7\_card\_1\ X0)\ (k3\_gr\_cy\_1\ X0)\ (k7\_int\_3\ X0)\ (k1\_funct\_7\ np\_\_1\ (k7\_card\_1\ X0))\ (k1\_funct\_7\ k6\_numbers\ (k7\_card\_1\ X0))) \tag{30}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_tarski\ X1\ X0 \tag{31}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{32}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow(((\neg v2\_struct\_0\ X0)\wedge(v5\_vectsp\_1\ X0))\Rightarrow((\neg v2\_struct\_0\ X0)\wedge((v1\_vectsp\_1\ X0)\wedge(v2\_vectsp\_1\ X0)))) \tag{33}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((v36\_algstr\_0\ X0)\Rightarrow(X0 = g6\_algstr\_0\ (u1\_struct\_0\ X0)\ (u1\_algstr\_0\ X0)\ (u2\_algstr\_0\ X0)\ (u3\_struct\_0\ X0)\ (u2\_struct\_0\ X0))) \tag{34}$$

Theorem 1

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ k2\_bspace))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ k2\_bspace))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0))\Rightarrow(k4\_bspace\ X0\ X1\ (k4\_bspace\ X0\ X2\ X3) = k4\_bspace\ X0\ (k8\_group\_1\ k2\_bspace\ X1\ X2)\ X3)))$$