t4_jordan5a (TMNEXbYnewsapaL-HyBsc1ZjPJy3mQqDBDPF)

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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 $k15\_euclid : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $m1\_borsuk\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_compts\_1 : \iota \Rightarrow o$ be given. Let $m1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$ 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 $k5\_topmetr : \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_funct\_1 : \iota \Rightarrow o$ be given. Let $r1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_tops\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_pre\_topc : \iota \Rightarrow o$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $v5\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v8\_pre\_topc : \iota \Rightarrow o$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k17\_borsuk\_1 : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_pre\_topc : \iota \Rightarrow o$ be given. Let $v6\_membered : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ 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 $v5\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v6\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v7\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v8\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v5\_rltopsp1 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_borsuk\_2 : \iota \Rightarrow o$ be given. Let $v2\_tops\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1\_rlvect\_1 : \iota \Rightarrow o$ be given. Let

$v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0)) \Rightarrow (\forall X1. ((\neg v2\_struct\_0\ X1) \wedge ((v2\_pre\_topc\ X1) \wedge (l1\_pre\_topc\ X1))) \Rightarrow (\forall X2. ((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)))))) \Rightarrow (\forall X3.(m1\_pre\_topc\ X3\ X1) \Rightarrow ((v5\_pre\_topc\ X2\ X0\ X1) \Rightarrow (\forall X4.((v1\_funct\_1\ X4) \wedge ((v1\_funct\_2\ X4\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X3)) \wedge (m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X3)))))) \Rightarrow ((X4 = X2) \Rightarrow (v5\_pre\_topc\ X4\ X0\ X3))))))) \tag{1}$$

Assume the following.

$$\forall X0.((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0)) \Rightarrow (\forall X1. ((\neg v2\_struct\_0\ X1) \wedge ((v2\_pre\_topc\ X1) \wedge (l1\_pre\_topc\ X1))) \Rightarrow (\forall X2. ((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)))))) \Rightarrow (((v1\_compts\_1\ X0) \wedge ((v8\_pre\_topc\ X1) \wedge ((k1\_relset\_1\ (u1\_struct\_0\ X0)\ X2 = k2\_struct\_0\ X0) \wedge ((k2\_relset\_1\ (u1\_struct\_0\ X1)\ X2 = k2\_struct\_0\ X1) \wedge ((v2\_funct\_1\ X2) \wedge (v5\_pre\_topc\ X2\ X0\ X1))))) \Rightarrow (v3\_tops\_2\ X2\ X0\ X1)))) \tag{2}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2) \wedge (m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. ((\neg v1\_xboole\_0\ X1) \wedge ((\neg v1\_xboole\_0\ X3) \wedge (((v1\_funct\_1\ X4) \wedge ((v1\_funct\_2\ X4\ X0\ X1) \wedge (m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))) \wedge ((v1\_funct\_1\ X5) \wedge ((v1\_funct\_2\ X5\ X2\ X3) \wedge (m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X2\ X3)))))))) \Rightarrow ((r1\_funct\_2\ X0\ X1\ X2\ X3\ X4\ X5) \Leftrightarrow (X4 = X5)) \tag{4}$$

Assume the following.

$$k5\_topmetr = k17\_borsuk\_1 \tag{5}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1) \wedge (v5\_relat\_1\ X1\ X0)) \Rightarrow (k2\_relset\_1\ X0\ X1 = k10\_xtuple\_0\ X1) \tag{7}$$

Assume the following.

$$(\neg v2\_struct\_0\ k17\_borsuk\_1)\wedge((v1\_pre\_topc\ k17\_borsuk\_1)\wedge(v2\_pre\_topc\ k17\_borsuk\_1)) \tag{8}$$

Assume the following.

$$(v8\_pre\_topc\ k17\_borsuk\_1)\wedge(v1\_compts\_1\ k17\_borsuk\_1) \tag{9}$$

Assume the following.

$$v6\_membered\ k4\_ordinal1 \tag{10}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((v2\_pre\_topc\ (k15\_euclid\ X0))\wedge((v13\_algstr\_0\ (k15\_euclid\ X0))\wedge((v2\_rlvect\_1\ (k15\_euclid\ X0))\wedge((v3\_rlvect\_1\ (k15\_euclid\ X0))\wedge((v4\_rlvect\_1\ (k15\_euclid\ X0))\wedge((v5\_rlvect\_1\ (k15\_euclid\ X0))\wedge((v6\_rlvect\_1\ (k15\_euclid\ X0))\wedge((v7\_rlvect\_1\ (k15\_euclid\ X0))\wedge((v8\_rlvect\_1\ (k15\_euclid\ X0))\wedge(v5\_rltopsp1\ (k15\_euclid\ X0)))))))))))) \tag{11}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((v8\_pre\_topc\ (k15\_euclid\ X0))\wedge(v5\_rltopsp1\ (k15\_euclid\ X0))) \tag{12}$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \tag{13}$$

Assume the following.

$$\forall X0.((v2\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(v1\_xboole\_0\ (u1\_struct\_0\ X0)) \tag{14}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow((v5\_rltopsp1\ (k15\_euclid\ X0))\wedge(v1\_borsuk\_2\ (k15\_euclid\ X0))) \tag{15}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\neg v2\_tops\_1\ (k2\_struct\_0\ X0)\ X0) \tag{16}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(m1\_pre\_topc\ X1\ X0)\Rightarrow(l1\_pre\_topc\ X1)) \tag{17}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((l1\_pre\_topc\ X0)\wedge((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))))\Rightarrow(\forall X3.(m1\_borsuk\_2\ X3\ X0\ X1\ X2)\Rightarrow((v1\_funct\_1\ X3)\wedge((v1\_funct\_2\ X3\ (u1\_struct\_0\ k5\_topmetr)\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ k5\_topmetr)\ (u1\_struct\_0\ X0))))))) \tag{18}$$

Assume the following.

$$\forall X0.(l1\_rltopsp1\ X0)\Rightarrow((l1\_rlvect\_1\ X0)\wedge(l1\_pre\_topc\ X0)) \tag{19}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(l1\_struct\_0\ X0) \tag{20}$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0)\Rightarrow(m1\_subset\_1\ (k2\_struct\_0\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{21}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1)\wedge(v5\_relat\_1\ X1\ X0))\Rightarrow(m1\_subset\_1\ (k2\_relset\_1\ X0\ X1)\ (k1\_zfmisc\_1\ X0)) \tag{22}$$

Assume the following.

$$l1\_pre\_topc\ k17\_borsuk\_1 \tag{23}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((v5\_rltopsp1\ (k15\_euclid\ X0))\wedge(l1\_rltopsp1\ (k15\_euclid\ X0))) \tag{24}$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0)\Rightarrow(k2\_struct\_0\ X0 = u1\_struct\_0\ X0) \tag{25}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(((X1\neq k1\_xboole\_0)\Rightarrow((v1\_funct\_2\ X2\ X0\ X1)\Leftrightarrow(X0 = k1\_relset\_1\ X0\ X2)))\wedge((X1 = k1\_xboole\_0)\Rightarrow((v1\_funct\_2\ X2\ X0\ X1)\Leftrightarrow(X2 = k1\_xboole\_0)))) \tag{26}$$

Assume the following.

$$\forall X0.((v8\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0))\Rightarrow(\forall X1.(m1\_pre\_topc\ X1\ X0)\Rightarrow(v8\_pre\_topc\ X1)) \tag{27}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((v1\_xboole\_0\ X1)\Rightarrow(v2\_tops\_1\ X1\ X0))) \tag{28}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow((v4\_relat\_1\ X2\ X0)\wedge(v5\_relat\_1\ X2\ X1)) \tag{29}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(v1\_xboole\_0\ X1)) \tag{30}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{31}$$

Assume the following.

$$\forall X0.((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0))\Rightarrow(\forall X1.(m1\_pre\_topc\ X1\ X0)\Rightarrow(v2\_pre\_topc\ X1)) \tag{32}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((v1\_borsuk\_2\ X0)\wedge(l1\_pre\_topc\ X0))\wedge((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))))\Rightarrow(\forall X3.(m1\_borsuk\_2\ X3\ X0\ X1\ X2)\Rightarrow(v5\_pre\_topc\ X3\ k5\_topmetr\ X0)) \tag{33}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow(v7\_ordinal1\ X1)) \tag{34}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow(\forall X2.(m1\_borsuk\_2\ X2\ (k15\_euclid\ np\_\_2)\ X0\ X1)\Rightarrow(\forall X3.((\neg v2\_struct\_0\ X3)\wedge((v1\_compts\_1\ X3)\wedge(m1\_pre\_topc\ X3\ (k15\_euclid\ np\_\_2))))\Rightarrow(\forall X4.((v1\_funct\_1\ X4)\wedge((v1\_funct\_2\ X4\ (u1\_struct\_0\ k5\_topmetr)\ (u1\_struct\_0\ X3))\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ k5\_topmetr)\ (u1\_struct\_0\ X3))))))\Rightarrow(((v2\_funct\_1\ X2)\wedge((r1\_funct\_2\ (u1\_struct\_0\ k5\_topmetr)\ (u1\_struct\_0\ X3)\ (u1\_struct\_0\ k5\_topmetr)\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X4\ X2)\wedge(k2\_struct\_0\ X3 = k2\_relset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X2)))\Rightarrow(v3\_tops\_2\ X4\ k5\_topmetr\ X3))))))$$