t28_simplex0
(TMJ4p86GfA8t5ESFJBq2yuJ2Uinu1guveeM)

October 27, 2020

Let $m1\_simplex0 : \iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Let $m1\_subset\_1 : \iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Let $k1\_zfmisc\_1 : \iota{\Rightarrow}\iota$ be given. Let $u1\_struct\_0 : \iota{\Rightarrow}\iota$ be given. Let $v5\_finset\_1 : \iota{\Rightarrow}o$ be given. Let $r1\_tarski : \iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Let $k2\_simplex0 : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Let $u1\_pre\_topc : \iota{\Rightarrow}\iota$ be given. Let $v1\_pre\_topc : \iota{\Rightarrow}o$ be given. Let $k5\_simplex0 : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Let $m2\_simplex0 : \iota{\Rightarrow}\iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Let $k1\_simplex0 : \iota{\Rightarrow}\iota$ be given. Let $g1\_pre\_topc : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Let $v3\_matroid0 : \iota{\Rightarrow}o$ be given. Let $v1\_matroid0 : \iota{\Rightarrow}o$ be given. Let $v6\_simplex0 : \iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Let $l1\_pre\_topc : \iota{\Rightarrow}o$ be given. Let $l1\_struct\_0 : \iota{\Rightarrow}o$ be given. Let $v1\_classes1 : \iota{\Rightarrow}o$ be given. Let $k2\_struct\_0 : \iota{\Rightarrow}\iota$ be given. Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ X1)){\Leftrightarrow}(r1\_tarski \atop X0\ X1) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski\ X0\ X1){\wedge}(r1\_tarski \atop X1\ X2)){\Rightarrow}(r1\_tarski\ X0\ X2) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1 \atop X0))){\Rightarrow}(k2\_simplex0\ X0\ X1 = k1\_simplex0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1 \atop X0))){\Rightarrow}(\forall X2.\forall X3.(g1\_pre\_topc\ X0\ X1 = g1\_pre\_topc \atop X2\ X3){\Rightarrow}((X0 = X2){\wedge}(X1 = X3))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v5\_finset\_1\ X1){\wedge}(m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \atop (k1\_zfmisc\_1\ X0)))){\Rightarrow}((v1\_pre\_topc\ (k5\_simplex0\ X0\ X1)){\wedge}(v3\_matroid0 \atop (k5\_simplex0\ X0\ X1))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))\Rightarrow((v1\_pre\_topc\ (k5\_simplex0\ X0\ X1))\wedge((v1\_matroid0\ (k5\_simplex0\ X0\ X1))\wedge(v6\_simplex0\ (k5\_simplex0\ X0\ X1)\ X0)))$$

(6)

Assume the following.

$$\forall X0.\forall X1.(m1\_simplex0\ X1\ X0)\Rightarrow(l1\_pre\_topc\ X1)$$

(7)

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(l1\_struct\_0\ X0)$$

(8)

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))\Rightarrow((v1\_pre\_topc\ (k5\_simplex0\ X0\ X1))\wedge(m1\_simplex0\ (k5\_simplex0\ X0\ X1)\ X0))$$

(9)

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))\Rightarrow((v1\_classes1\ (k2\_simplex0\ X0\ X1))\wedge(m1\_subset\_1\ (k2\_simplex0\ X0\ X1)\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))))$$

(10)

Assume the following.

$$\forall X0.\forall X1.(l1\_pre\_topc\ X1)\Rightarrow((m1\_simplex0\ X1\ X0)\Leftrightarrow(r1\_tarski\ (k2\_struct\_0\ X1)\ X0))$$

(11)

Assume the following.

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

(12)

Assume the following.

$$\forall X0.\forall X1.(m1\_simplex0\ X1\ X0)\Rightarrow(\forall X2.((v1\_matroid0\ X2)\wedge((v3\_matroid0\ X2)\wedge(m1\_simplex0\ X2\ X0)))\Rightarrow((m2\_simplex0\ X2\ X0\ X1)\Leftrightarrow((r1\_tarski\ (k2\_struct\_0\ X2)\ (k2\_struct\_0\ X1))\wedge(r1\_tarski\ (u1\_pre\_topc\ X2)\ (u1\_pre\_topc\ X1)))))$$

(13)

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0)))\Rightarrow(k5\_simplex0\ X0\ X1 = g1\_pre\_topc\ X0\ (k2\_simplex0\ X0\ X1))$$

(14)

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow((v1\_pre\_topc\ X0)\Rightarrow(X0 = g1\_pre\_topc\ (u1\_struct\_0\ X0)\ (u1\_pre\_topc\ X0)))$$

(15)

Theorem 1

$$\forall X0. \forall X1. (m1\_simplex0\ X1\ X0) \Rightarrow (\forall X2. (m1\_subset\_1$$
$$X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1))) \Rightarrow (\forall X3. ((v5\_finset\_1$$
$$X3) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X2)))) \Rightarrow ((r1\_tarski$$
$$(k2\_simplex0\ X2\ X3)\ (u1\_pre\_topc\ X1)) \Rightarrow ((v1\_pre\_topc\ (k5\_simplex0$$
$$X2\ X3)) \wedge (m2\_simplex0\ (k5\_simplex0\ X2\ X3)\ X0\ X1)))))$$