

t23_simplex1

(TMT5HwhuWKom6qbdox68hypgSPrS6Z3bXvg)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ 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 $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_pencil_1 : \iota \Rightarrow o$ be given. Let $v1_matroid0 : \iota \Rightarrow o$ be given. Let $v3_matroid0 : \iota \Rightarrow o$ be given. Let $m1_simplex0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m2_simplex0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_simplex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_simplex1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k11_simplex0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_rlaf_fin2 : \iota \Rightarrow \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_orders_1 : \iota \Rightarrow \iota$ 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. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (v7_ordinal1 X1) \Rightarrow (\forall X2. (m1_simplex0 \\ & X2 X0) \Rightarrow (\forall X3. (m2_simplex0 X3 X0 X2) \Rightarrow (\forall X4. ((v1_relat_1 \\ & X4) \wedge (v1_funct_1 X4)) \Rightarrow (m2_simplex0 (k11_simplex0 X0 X3 X4 X1) X0 \\ & (k11_simplex0 X0 X2 X4 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_simplex0 X1 X0) \Rightarrow (\forall X2. (m2_simplex0 \\ & X2 X0 X1) \Rightarrow ((v1_matroid0 X2) \wedge ((v3_matroid0 X2) \wedge (m1_simplex0 X2 \\ & X0)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ &X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\ &((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ &X0)))))))))) \Rightarrow ((v1_funct_1 (k2_rlaffin2 X0)) \wedge ((v1_funct_2 (\\ &k2_rlaffin2 X0) (k1_orders_1 (u1_struct_0 X0)) (u1_struct_0 X0)) \wedge \\ &(m1_subset_1 (k2_rlaffin2 X0) (k1_zfmisc_1 (k2_zfmisc_1 (k1_orders_1 \\ &(u1_struct_0 X0)) (u1_struct_0 X0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (&(\neg v2_struct_0 X1) \wedge \\ &((v13_algstr_0 X1) \wedge ((v2_rlvect_1 X1) \wedge ((v3_rlvect_1 X1) \wedge ((v4_rlvect_1 \\ &X1) \wedge ((v5_rlvect_1 X1) \wedge ((v6_rlvect_1 X1) \wedge ((v7_rlvect_1 X1) \wedge \\ &((v8_rlvect_1 X1) \wedge (l1_rlvect_1 X1)))))))))) \Rightarrow (\forall X2. ((\\ &\neg v3_pencil_1 X2) \wedge ((v1_matroid0 X2) \wedge ((v3_matroid0 X2) \wedge (m1_simplex0 \\ &X2 (u1_struct_0 X1)))))) \Rightarrow ((r1_tarski (k3_simplex1 X1 X2) (k2_struct_0 \\ &X2)) \Rightarrow (k5_simplex1 X0 X1 X2 = k11_simplex0 (u1_struct_0 X1) X2 (k2_rlaffin2 \\ &X1) X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (&(\neg v2_struct_0 X1) \wedge \\ &((v13_algstr_0 X1) \wedge ((v2_rlvect_1 X1) \wedge ((v3_rlvect_1 X1) \wedge ((v4_rlvect_1 \\ &X1) \wedge ((v5_rlvect_1 X1) \wedge ((v6_rlvect_1 X1) \wedge ((v7_rlvect_1 X1) \wedge \\ &((v8_rlvect_1 X1) \wedge (l1_rlvect_1 X1)))))))))) \Rightarrow (\forall X2. ((\\ &\neg v3_pencil_1 X2) \wedge ((v1_matroid0 X2) \wedge ((v3_matroid0 X2) \wedge (m1_simplex0 \\ &X2 (u1_struct_0 X1)))))) \Rightarrow (\forall X3. ((\neg v3_pencil_1 X3) \wedge (m2_simplex0 \\ &X3 (u1_struct_0 X1) X2)) \Rightarrow (((r1_tarski (k3_simplex1 X1 X2) (k2_struct_0 \\ &X2)) \wedge (r1_tarski (k3_simplex1 X1 X3) (k2_struct_0 X3))) \Rightarrow (m2_simplex0 \\ &(k5_simplex1 X0 X1 X3) (u1_struct_0 X1) (k5_simplex1 X0 X1 X2)))))) \end{aligned}$$