

t26_convex4

(TMMUj5ugBy6e3mMs7d7LatmPSC6pixRhNun)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_clvect_1 : \iota \Rightarrow o$ 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 $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $m1_convex4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_convex4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_convex4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $k2_convex4 : \iota \Rightarrow \iota$ be given. Let $r1_convex4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_complex1 : \iota$ be given. Let $k1_convex4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l2_algstr_0 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (m2_convex4 \\ & (k2_convex4 X0) X0 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_clvect_1 X0)) \Rightarrow (\forall X1. \\ & (m1_convex4 X1 X0) \Rightarrow (r1_convex4 X0 (k7_convex4 X0 k5_complex1 X1) \\ & (k2_convex4 X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_clvect_1 X0)) \Rightarrow (\forall X1. \\ & (v1_xcmplx_0 X1) \Rightarrow (\forall X2.(m1_convex4 X2 X0) \Rightarrow ((X1 \neq k5_complex1) \Rightarrow \\ & (k1_convex4 X0 (k7_convex4 X0 X1 X2) = k1_convex4 X0 X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge (l2_algstr_0 \\ & X0)) \wedge ((m1_convex4 X1 X0) \wedge (m1_convex4 X2 X0))) \Rightarrow ((r1_convex4 X0 \\ & X1 X2) \Leftrightarrow (X1 = X2)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(l1_clvect_1 X0) \Rightarrow (l2_algstr_0 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0)\wedge(l1_clvect_1 X0))\wedge((v1_xcmplx_0 X1)\wedge(m1_convex4 X2 X0)))\Rightarrow(m1_convex4 (k7_convex4 X0 X1 X2) X0) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l2_algstr_0 X0))\Rightarrow(m1_convex4 (k2_convex4 X0) X0) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l2_algstr_0 X0))\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))\Rightarrow(\forall X2.(m1_convex4 X2 X0)\Rightarrow((m2_convex4 X2 X0 X1)\Leftrightarrow(r1_tarSKI (k1_convex4 X0 X2) X1)))) \quad (8)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_clvect_1 X0))\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))\Rightarrow(\forall X2.(v1_xcmplx_0 X2)\Rightarrow(\forall X3.(m1_convex4 X3 X0)\Rightarrow((m2_convex4 X3 X0 X1)\Rightarrow(m2_convex4 (k7_convex4 X0 X2 X3) X0 X1))))))$$