

t4_convex4 (TMUE- jBCp3naPbMKseyqRVwQNuCyBbeLpCqf)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ 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 $m2_convex4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_convex4 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_convex4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_convex4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. r1_tarski\ k1_xboole_0\ X0 \tag{1}$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0\ X0) \wedge (l2_algstr_0\ X0)) \Rightarrow (m1_convex4\ (k2_convex4\ X0)\ X0) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0\ X0) \wedge (l2_algstr_0\ X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \Rightarrow (\forall X2. \\ & (m1_convex4\ X2\ X0) \Rightarrow ((m2_convex4\ X2\ X0\ X1) \Leftrightarrow (r1_tarski\ (k1_convex4\ X0\ X2)\ X1)))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0\ X0) \wedge (l2_algstr_0\ X0)) \Rightarrow (\forall X1. (m1_convex4\ X1\ X0) \Rightarrow ((X1 = k2_convex4\ X0) \Leftrightarrow (k1_convex4\ X0\ X1 = k1_xboole_0))) \tag{4}$$

Assume the following.

$$k1_xboole_0 = the\ (\lambda X0 : \iota. v1_xboole_0\ X0) \tag{5}$$

Theorem 1

$$\forall X0. ((\neg v2_struct_0\ X0) \wedge (l2_algstr_0\ X0)) \Rightarrow (\forall X1. (m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ X0))) \Rightarrow (m2_convex4\ (k2_convex4\ X0)\ X0\ X1))$$