

t16_convex4

(TMTpY5qC6PEWPNJRXXKoJN3Ssufyf19HgNwF)

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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 $l1_clvect_1 : \iota \Rightarrow o$ be given. Let $m1_convex4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_convex4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_convex4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_convex4 : \iota \Rightarrow \iota$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ X0) \wedge (&(v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge (l1_clvect_1 X0)))))) \Rightarrow \quad (1) \\ &(k4_convex4 X0 (k2_convex4 X0) = k4_struct_0 X0) \end{aligned}$$

Assume the following.

$$\forall X0. (l1_clvect_1 X0) \Rightarrow (l2_algstr_0 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge (l2_algstr_0 X0)) \Rightarrow (\forall X1. \\ (m1_convex4 X1 X0) \Rightarrow (&(X1 = k2_convex4 X0) \Leftrightarrow (k1_convex4 X0 X1 = k1_xboole_0))) \quad (3) \end{aligned}$$

Theorem 1

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ X0) \wedge (&(v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge (l1_clvect_1 X0)))))) \Rightarrow \\ (\forall X1. (m1_convex4 X1 X0) \Rightarrow (&(k1_convex4 X0 X1 = k1_xboole_0) \Rightarrow \\ &(k4_convex4 X0 X1 = k4_struct_0 X0))) \end{aligned}$$