

t64\_jgraph\_6 (TMP-  
WGCzEMdx7DDhm7vU7TivXkQ6JshWrYj9)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $r1\_jordan6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_sppol\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_real\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k1\_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k19\_euclid : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k18\_euclid : \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k18\_pscomp\_1 : \iota \Rightarrow \iota$  be given. Let  $k22\_pscomp\_1 : \iota \Rightarrow \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\
 & (v1\_xxreal\_0 X2) \Rightarrow (\forall X3.(v1\_xxreal\_0 X3) \Rightarrow (\forall X4.(m1\_subset\_1 \\
 & X4 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow (\forall X5.(m1\_subset\_1 \\
 & X5 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow ((X4 \in k1\_rltopsp1 (k15\_euclid \\
 & np\_2) (k19\_euclid X0 X2) (k19\_euclid X0 X3)) \Rightarrow ((r1\_xxreal\_0 X1 \\
 & X0) \vee ((r1\_xxreal\_0 X3 X2) \vee ((r1\_jordan6 (k1\_sppol\_2 X0 X1 X2 X3) \\
 & X4 X5) \Leftrightarrow (\neg(\neg(X5 \in k1\_rltopsp1 (k15\_euclid np\_2) (k19\_euclid X0 \\
 & X2) (k19\_euclid X0 X3)) \wedge (r1\_xxreal\_0 (k18\_euclid X4) (k18\_euclid \\
 & X5))) \wedge ((\neg X5 \in k1\_rltopsp1 (k15\_euclid np\_2) (k19\_euclid X0 X3) \\
 & (k19\_euclid X1 X3)) \wedge ((\neg X5 \in k1\_rltopsp1 (k15\_euclid np\_2) (k19\_euclid \\
 & X1 X3) (k19\_euclid X1 X2)) \wedge (\neg(X5 \in k1\_rltopsp1 (k15\_euclid np\_2) \\
 & (k19\_euclid X1 X2) (k19\_euclid X0 X2)) \wedge (X5 \neq k18\_pscomp\_1 (k1\_sppol\_2 \\
 & X0 X1 X2 X3))))))))))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\
 & (v1\_xxreal\_0 X2) \Rightarrow (\forall X3.(v1\_xxreal\_0 X3) \Rightarrow (((r1\_xxreal\_0 \\
 & X0 X1) \wedge (r1\_xxreal\_0 X2 X3)) \Rightarrow ((k18\_pscomp\_1 (k1\_sppol\_2 X0 X1 X2 \\
 & X3) = k19\_euclid X0 X2) \wedge (k22\_pscomp\_1 (k1\_sppol\_2 X0 X1 X2 X3) = k19\_euclid \\
 & X1 X3))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 \text{ } np\_1) \wedge (m2\_subset\_1 \text{ } np\_1 \text{ } k1\_numbers \text{ } k5\_numbers)) \wedge \\ & ((m1\_subset\_1 \text{ } np\_1 \text{ } k5\_numbers) \wedge (m1\_subset\_1 \text{ } np\_1 \text{ } k1\_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$r1\_xxreal\_0 (k4\_xcmplx\_0 \text{ } np\_1) \text{ } np\_1 \quad (4)$$

Assume the following.

$$\neg r1\_xxreal\_0 \text{ } np\_1 (k4\_xcmplx\_0 \text{ } np\_1) \quad (5)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \text{ } X0 \text{ } k1\_numbers) \Rightarrow (k1\_real\_1 \text{ } X0 = k4\_xcmplx\_0 \text{ } X0) \quad (6)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \text{ } X0 \text{ } k1\_numbers) \Rightarrow (m1\_subset\_1 (k1\_real\_1 \text{ } X0) \text{ } k1\_numbers) \quad (7)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \text{ } X0 \text{ } k1\_numbers) \Rightarrow (v1\_xxreal\_0 \text{ } X0) \quad (8)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. (m1\_subset\_1 \text{ } X0 (u1\_struct\_0 (k15\_euclid \text{ } np\_2))) \Rightarrow \\ & (\forall X1. (m1\_subset\_1 \text{ } X1 (u1\_struct\_0 (k15\_euclid \text{ } np\_2))) \Rightarrow \\ & (\neg (r1\_jordan6 (k1\_sppol\_2 (k1\_real\_1 \text{ } np\_1) \text{ } np\_1 (k1\_real\_1 \\ & np\_1) \text{ } np\_1) \text{ } X0 \text{ } X1) \wedge ((X0 \in k1\_rltopsp1 (k15\_euclid \text{ } np\_2) (k19\_euclid \\ & (k1\_real\_1 \text{ } np\_1) (k1\_real\_1 \text{ } np\_1)) (k19\_euclid (k1\_real\_1 \text{ } np\_1) \\ & np\_1)) \wedge ((\neg (X1 \in k1\_rltopsp1 (k15\_euclid \text{ } np\_2) (k19\_euclid ( \\ & k1\_real\_1 \text{ } np\_1) (k1\_real\_1 \text{ } np\_1)) (k19\_euclid (k1\_real\_1 \text{ } np\_1) \\ & np\_1)) \wedge (r1\_xxreal\_0 (k18\_euclid \text{ } X0) (k18\_euclid \text{ } X1))) \wedge ((\neg X1 \in \\ & k1\_rltopsp1 (k15\_euclid \text{ } np\_2) (k19\_euclid (k1\_real\_1 \text{ } np\_1) \\ & np\_1) (k19\_euclid \text{ } np\_1 \text{ } np\_1)) \wedge ((\neg X1 \in k1\_rltopsp1 (k15\_euclid \\ & np\_2) (k19\_euclid \text{ } np\_1 \text{ } np\_1) (k19\_euclid \text{ } np\_1 (k1\_real\_1 \text{ } np\_1))) \wedge \\ & (\neg (X1 \in k1\_rltopsp1 (k15\_euclid \text{ } np\_2) (k19\_euclid \text{ } np\_1 (k1\_real\_1 \\ & np\_1)) (k19\_euclid (k1\_real\_1 \text{ } np\_1) (k1\_real\_1 \text{ } np\_1))) \wedge (X1 \neq \\ & k19\_euclid (k1\_real\_1 \text{ } np\_1) (k1\_real\_1 \text{ } np\_1)))))))))) \end{aligned}$$