

t2_jordan14

(TMdev1YsMb2A1EaV5T6GCEA2LzZWWFBxJTB)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_6 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_topreal1 : \iota \Rightarrow o$ be given. Let $v2_topreal1 : \iota \Rightarrow o$ be given. Let $v1_goboard5 : \iota \Rightarrow o$ be given. Let $v2_goboard5 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_goboard9 : \iota \Rightarrow \iota$ be given. Let $k2_goboard9 : \iota \Rightarrow \iota$ be given. Let $v1_sprect_2 : \iota \Rightarrow o$ be given. Let $k1_goboard9 : \iota \Rightarrow \iota$ be given. Let $k4_finseq_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_5 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v3_funct_1 X0) \wedge ((\neg v1_xboole_0 X0) \wedge ((v1_finseq_6 \\ &X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 \\ &X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 \\ &(k15_euclid np_2)))))))))) \Rightarrow ((v1_sprect_2 X0) \vee (v1_sprect_2 \\ &(k1_goboard9 X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v3_funct_1 X0) \wedge ((\neg v1_xboole_0 X0) \wedge ((v1_finseq_6 \\ &X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 \\ &X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge ((v1_sprect_2 X0) \wedge \\ &(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow (\\ &k2_jordan2c np_2 (k3_topreal1 np_2 X0) = k2_goboard9 X0) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v1_xboole_0 X0) \wedge ((\neg v3_funct_1 X0) \wedge ((v1_finseq_6 \\ &X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 \\ &X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 \\ &(k15_euclid np_2)))))))))) \Rightarrow (k3_goboard9 X0 = k2_goboard9 (k1_goboard9 \\ &X0)) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (k3_topreal1 np_2 X0 = k3_topreal1 np_2 (k4_finseq_5 (u1_struct_0 (k15_euclid np_2)) X0)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow (k4_finseq_5 X0 X1 = k3_finseq_5 X1) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_finseq_6 X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge (m1_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow (k1_goboard9 X0 = k3_finseq_5 X0) \quad (7)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((\neg v3_funct_1 X0) \wedge (v1_finseq_1 X0)))) \Rightarrow ((v1_relat_1 (k3_finseq_5 X0)) \wedge ((v1_funct_1 (k3_finseq_5 X0)) \wedge ((\neg v3_funct_1 (k3_finseq_5 X0)) \wedge (v1_finseq_1 (k3_finseq_5 X0))))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \quad (9)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge ((v1_finseq_6 X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge (m1_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow ((\neg v1_xboole_0 (k1_goboard9 X0)) \wedge ((v1_finseq_6 (k1_goboard9 X0) (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 (k1_goboard9 X0)) \wedge ((v2_topreal1 (k1_goboard9 X0)) \wedge ((v1_goboard5 (k1_goboard9 X0)) \wedge ((v2_goboard5 (k1_goboard9 X0)) \wedge (m2_finseq_1 (k1_goboard9 X0) (u1_struct_0 (k15_euclid np_2)))))))))) \quad (10)$$

Theorem 1

$$\begin{aligned} \forall X0. (&(\neg v1_xboole_0 X0) \wedge (\neg v3_funct_1 X0) \wedge (v1_finseq_6 \\ &X0 (u1_struct_0 (k15_euclid np_2))) \wedge (v1_topreal1 X0) \wedge (v2_topreal1 \\ &X0) \wedge (v1_goboard5 X0) \wedge (v2_goboard5 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 \\ &(k15_euclid np_2)))))) \Rightarrow ((k2_jordan2c np_2 (k3_topreal1 \\ &np_2 X0) = k3_goboard9 X0) \vee (k2_jordan2c np_2 (k3_topreal1 np_2 \\ &X0) = k2_goboard9 X0)) \end{aligned}$$