

t48_cgames_1
 (TMc2BEpPxMuvvzoQKcJgy8pZjF59QDbbkQ1)

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Let $v2_cgames_1 : \iota \Rightarrow o$ be given. Let $v9_cgames_1 : \iota \Rightarrow o$ be given. Let $k7_cgames_1 : \iota \Rightarrow \iota$ be given. Let $v8_cgames_1 : \iota \Rightarrow o$ be given. Let $k6_cgames_1 : \iota \Rightarrow \iota$ be given. Let $v5_cgames_1 : \iota \Rightarrow o$ be given. Let $v6_cgames_1 : \iota \Rightarrow o$ be given. Let $v10_cgames_1 : \iota \Rightarrow o$ be given. Let $v7_cgames_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v2_cgames_1 X0) \Rightarrow (((v5_cgames_1 X0) \Rightarrow (\forall X1. \\ & (v2_cgames_1 X1) \Rightarrow (\neg(X1 \in k7_cgames_1 X0) \wedge (\neg v8_cgames_1 X1) \wedge \\ & (\neg v9_cgames_1 X1)))))) \wedge (((\forall X1.(v2_cgames_1 X1) \Rightarrow (\neg(X1 \in \\ & k7_cgames_1 X0) \wedge (\neg v8_cgames_1 X1) \wedge (\neg v9_cgames_1 X1)))))) \Rightarrow (v5_cgames_1 \\ & X0) \wedge (((v6_cgames_1 X0) \Rightarrow (\forall X1.(v2_cgames_1 X1) \Rightarrow (\neg(X1 \in \\ & k6_cgames_1 X0) \wedge (\neg v8_cgames_1 X1) \wedge (\neg v10_cgames_1 X1)))))) \wedge \\ & ((\forall X1.(v2_cgames_1 X1) \Rightarrow (\neg(X1 \in k6_cgames_1 X0) \wedge (\neg v8_cgames_1 \\ & X1) \wedge (\neg v10_cgames_1 X1)))) \Rightarrow (v6_cgames_1 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v2_cgames_1 X0) \Rightarrow (\neg(\neg v7_cgames_1 X0) \wedge ((\neg v9_cgames_1 X0) \wedge (\neg v10_cgames_1 X0) \wedge (\neg v8_cgames_1 X0)))) \quad (2)$$

Assume the following.

$$\forall X0.((v2_cgames_1 X0) \wedge (v9_cgames_1 X0)) \Rightarrow ((v2_cgames_1 X0) \wedge ((v5_cgames_1 X0) \wedge (\neg v7_cgames_1 X0))) \quad (3)$$

Assume the following.

$$\forall X0.((v2_cgames_1 X0) \wedge (v10_cgames_1 X0)) \Rightarrow ((v2_cgames_1 X0) \wedge ((v6_cgames_1 X0) \wedge (\neg v7_cgames_1 X0))) \quad (4)$$

Assume the following.

$$\forall X0.((v2_cgames_1 X0) \wedge ((v5_cgames_1 X0) \wedge (v6_cgames_1 X0))) \Rightarrow ((v2_cgames_1 X0) \wedge (v7_cgames_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.((v2_cgames_1 X0) \wedge (v7_cgames_1 X0)) \Rightarrow ((v2_cgames_1 X0) \wedge ((v5_cgames_1 X0) \wedge (v6_cgames_1 X0))) \quad (6)$$

Assume the following.

$$\forall X0.((v2_cgames_1 X0) \wedge (v8_cgames_1 X0)) \Rightarrow ((v2_cgames_1 X0) \wedge ((\neg v5_cgames_1 X0) \wedge (\neg v6_cgames_1 X0))) \quad (7)$$

Theorem 1

$$\forall X0.(v2_cgames_1 X0) \Rightarrow ((v9_cgames_1 X0) \Leftrightarrow ((\forall X1.(v2_cgames_1 X1) \Rightarrow (\neg(X1 \in k7_cgames_1 X0) \wedge ((\neg v8_cgames_1 X1) \wedge (\neg v9_cgames_1 X1)))) \wedge (\exists X1.(v2_cgames_1 X1) \wedge ((X1 \in k6_cgames_1 X0) \wedge (v5_cgames_1 X1)))))$$