

# t5\_cgames\_1 (TMLLW- gRLC9D8HfPnsw2pLpjh1yYTn18wdVv)

October 27, 2020

Let  $v2\_cgames\_1 : \iota \Rightarrow o$  be given. Let  $k6\_cgames\_1 : \iota \Rightarrow \iota$  be given. Let  $k7\_cgames\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_cgames\_1 : \iota \Rightarrow o$  be given. Let  $l1\_cgames\_1 : \iota \Rightarrow o$  be given. Let  $u2\_cgames\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_cgames\_1 : \iota \Rightarrow \iota$  be given. Let  $g1\_cgames\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v2\_cgames\_1 X0) \Rightarrow ((v1\_cgames\_1 X0) \wedge (l1\_cgames\_1 X0)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v2\_cgames\_1 X0) \Rightarrow (\forall X1.(X1 = k7\_cgames\_1 X0) \Leftrightarrow \\ & (\exists X2.(l1\_cgames\_1 X2) \wedge ((X0 = X2) \wedge (X1 = u2\_cgames\_1 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v2\_cgames\_1 X0) \Rightarrow (\forall X1.(X1 = k6\_cgames\_1 X0) \Leftrightarrow \\ & (\exists X2.(l1\_cgames\_1 X2) \wedge ((X0 = X2) \wedge (X1 = u1\_cgames\_1 X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(l1\_cgames\_1 X0) \Rightarrow ((v1\_cgames\_1 X0) \Rightarrow (X0 = g1\_cgames\_1 (u1\_cgames\_1 X0) (u2\_cgames\_1 X0))) \quad (4)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v2\_cgames\_1 X0) \Rightarrow (\forall X1.(v2\_cgames\_1 X1) \Rightarrow (( \\ & X0 = X1) \Leftrightarrow ((k6\_cgames\_1 X0 = k6\_cgames\_1 X1) \wedge (k7\_cgames\_1 X0 = k7\_cgames\_1 \\ & X1)))) \end{aligned}$$