

t11\_group\_6 (TM-  
cJU8X5vSRPD2WThP9GMzSZTxUapAEP5kA)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v7\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_group\_1 : \iota \Rightarrow o$  be given. Let  $v3\_group\_1 : \iota \Rightarrow o$  be given. Let  $l3\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $k7\_group\_1 : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v8\_struct\_0 : \iota \Rightarrow o$  be given. Let  $k1\_card\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $k7\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(k1\_card\_1 X0 = np\_1) \Leftrightarrow (\exists X1.X0 = k1\_tarski X1) \quad (1)$$

Assume the following.

$$\forall X0.k1\_card\_1 (k1\_tarski X0) = np\_1 \quad (2)$$

Assume the following.

$$\forall X0.((v8\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (k7\_group\_1 X0 = k7\_struct\_0 X0) \quad (3)$$

Assume the following.

$$\forall X0.(l3\_algstr\_0 X0) \Rightarrow (l1\_struct\_0 X0) \quad (4)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow ((v7\_struct\_0 X0) \Leftrightarrow (\exists X1.u1\_struct\_0 X0 = k1\_tarski X1)) \quad (5)$$

Assume the following.

$$\forall X0.(l1\_struct\_0 X0) \Rightarrow (k7\_struct\_0 X0 = k1\_card\_1 (u1\_struct\_0 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(l1\_struct\_0 X0) \Rightarrow ((v7\_struct\_0 X0) \Rightarrow (v8\_struct\_0 X0)) \quad (7)$$

**Theorem 1**

$$\begin{aligned} & (\forall X0.((\neg v2\_struct\_0 X0) \wedge (v7\_struct\_0 X0) \wedge (v2\_group\_1 \\ & X0) \wedge (v3\_group\_1 X0) \wedge (l3\_algstr\_0 X0)))) \Rightarrow ((k7\_group\_1 X0 = \\ & np\_1) \wedge (v8\_struct\_0 X0)) \wedge (\forall X0.((\neg v2\_struct\_0 X0) \wedge ( \\ & v8\_struct\_0 X0) \wedge (v2\_group\_1 X0) \wedge (v3\_group\_1 X0) \wedge (l3\_algstr\_0 \\ & X0)))) \Rightarrow ((k7\_group\_1 X0 = np\_1) \Rightarrow (v7\_struct\_0 X0)) \end{aligned}$$