

# t34\_group\_1

## (TMF46Wz3p8zM8kEt4u23sjmudJkMiWV1ZpJ)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_int\_2 : \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v15\_algstr\_0 : \iota \Rightarrow o$  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  $r2\_group\_6 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_group\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_group\_6 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_group\_10 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_group\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_group\_10 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v7\_ordinal1 X0) \wedge (v1\_int\_2 X0)) \Rightarrow (\forall X1.((\neg \\ v2\_struct\_0 X1) \wedge ((v2\_group\_1 X1) \wedge ((v3\_group\_1 X1) \wedge (l3\_algstr\_0 \\ X1)))) \Rightarrow (\forall X2.((\neg v2\_struct\_0 X2) \wedge ((v2\_group\_1 X2) \wedge ((v3\_group\_1 \\ X2) \wedge (l3\_algstr\_0 X2)))) \Rightarrow (((r1\_group\_6 X1 X2) \wedge (v2\_group\_1 X1 \\ X0)) \Rightarrow (v2\_group\_1 X2 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v7\_ordinal1 X0) \wedge (v1\_int\_2 X0)) \Rightarrow (\forall X1.((\neg \\ v2\_struct\_0 X1) \wedge ((v15\_algstr\_0 X1) \wedge ((v2\_group\_1 X1) \wedge ((v3\_group\_1 \\ X1) \wedge (l3\_algstr\_0 X1)))) \Rightarrow (\forall X2.((\neg v2\_struct\_0 X2) \wedge (( \\ v15\_algstr\_0 X2) \wedge ((v2\_group\_1 X2) \wedge ((v3\_group\_1 X2) \wedge (l3\_algstr\_0 \\ X2)))) \Rightarrow (((r2\_group\_6 X1 X2) \wedge (v2\_group\_10 X1 X0)) \Rightarrow (v2\_group\_10 \\ X2 X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1.(((\neg v2\_struct\_0 X0) \wedge ((v15\_algstr\_0 X0) \wedge \\ ((v2\_group\_1 X0) \wedge ((v3\_group\_1 X0) \wedge (l3\_algstr\_0 X0)))) \wedge ((\neg \\ v2\_struct\_0 X1) \wedge ((v15\_algstr\_0 X1) \wedge ((v2\_group\_1 X1) \wedge ((v3\_group\_1 \\ X1) \wedge (l3\_algstr\_0 X1)))))) \Rightarrow ((r2\_group\_6 X0 X1) \Leftrightarrow (r1\_group\_6 X0 \\ X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(l3\_algstr\_0\ X1) \Rightarrow (( \\ (\neg v2\_struct\_0\ X1) \wedge ((v2\_group\_1\ X1) \wedge ((v3\_group\_1\ X1) \wedge ((v2\_group\_10 \\ X1\ X0) \wedge (v2\_grouppp\_1\ X1\ X0)))))) \Rightarrow ((\neg v2\_struct\_0\ X1) \wedge ((v2\_group\_1 \\ X1) \wedge ((v3\_group\_1\ X1) \wedge (v3\_grouppp\_1\ X1\ X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(l3\_algstr\_0\ X1) \Rightarrow (( \\ (\neg v2\_struct\_0\ X1) \wedge ((v2\_group\_1\ X1) \wedge ((v3\_group\_1\ X1) \wedge (v3\_grouppp\_1 \\ X1\ X0)))))) \Rightarrow ((\neg v2\_struct\_0\ X1) \wedge ((v2\_group\_1\ X1) \wedge ((v3\_group\_1 \\ X1) \wedge ((v2\_group\_10\ X1\ X0) \wedge (v2\_grouppp\_1\ X1\ X0)))))) \end{aligned} \quad (5)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v7\_ordinal1\ X0) \wedge (v1\_int\_2\ X0)) \Rightarrow (\forall X1.((\neg \\ v2\_struct\_0\ X1) \wedge ((v15\_algstr\_0\ X1) \wedge ((v2\_group\_1\ X1) \wedge ((v3\_group\_1 \\ X1) \wedge (l3\_algstr\_0\ X1)))))) \Rightarrow (\forall X2.((\neg v2\_struct\_0\ X2) \wedge (( \\ v15\_algstr\_0\ X2) \wedge ((v2\_group\_1\ X2) \wedge ((v3\_group\_1\ X2) \wedge (l3\_algstr\_0 \\ X2)))))) \Rightarrow (((r2\_group\_6\ X1\ X2) \wedge (v3\_grouppp\_1\ X1\ X0)) \Rightarrow (v3\_grouppp\_1 \\ X2\ X0)))) \end{aligned}$$