

t69\_tex\_3

(TMPF<sub>xwW7XFj8a3sf4euLSCHER7kqhdXTNVF</sub>)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v3\_tdlat\_3 : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v1\_borsuk\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_tex\_3 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v1\_tsep\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_tex\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_tex\_3 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r4\_tsep\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_tdlat\_3 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge ((\neg v1\_tdlat\_3 \\ & X0) \wedge (l1\_pre\_topc X0)))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v3\_tex\_3 \\ & X1 X0) \wedge (m1\_pre\_topc X1 X0))) \Rightarrow (\exists X2.((\neg v2\_struct\_0 X2) \wedge \\ & ((v1\_pre\_topc X2) \wedge ((v1\_tex\_2 X2 X0) \wedge ((v1\_tex\_3 X2 X0) \wedge (m1\_pre\_topc \\ & X2 X0)))))) \wedge (r4\_tsep\_2 X0 X1 X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\ & X0))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge (m1\_pre\_topc X1 X0)) \Rightarrow ( \\ & \forall X2.((\neg v2\_struct\_0 X2) \wedge (m1\_pre\_topc X2 X0)) \Rightarrow ((r4\_tsep\_2 \\ & X0 X1 X2) \Rightarrow ((v1\_borsuk\_1 X1 X0) \Leftrightarrow (v1\_tsep\_1 X2 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge ((v1\_tdlat\_3 \\ & X0) \wedge (l1\_pre\_topc X0)))) \Rightarrow (\forall X1.(m1\_pre\_topc X1 X0) \Rightarrow ((\neg \\ & v2\_struct\_0 X1) \Rightarrow ((\neg v2\_struct\_0 X1) \wedge (\neg v3\_tex\_3 X1 X0)))) \end{aligned} \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge ((\neg v3\_tdlat\_3 \\ & X0) \wedge (l1\_pre\_topc X0)))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v1\_borsuk\_1 \\ & X1 X0) \wedge ((v3\_tex\_3 X1 X0) \wedge (m1\_pre\_topc X1 X0)))) \Rightarrow (\exists X2.( \\ & (\neg v2\_struct\_0 X2) \wedge ((v1\_pre\_topc X2) \wedge ((v1\_tsep\_1 X2 X0) \wedge ((v1\_tex\_2 \\ & X2 X0) \wedge ((v1\_tex\_3 X2 X0) \wedge (m1\_pre\_topc X2 X0)))))) \wedge (r4\_tsep\_2 \\ & X0 X1 X2))) \end{aligned}$$