

t36\_waybel30  
(TMHh39jQfoHt6PCvNfvNNSk3yuzjHkoTyWG)

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Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v3\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v4\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v5\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v1\_lattice3 : \iota \Rightarrow o$  be given. Let  $v2\_lattice3 : \iota \Rightarrow o$  be given. Let  $v3\_lattice3 : \iota \Rightarrow o$  be given. Let  $v2\_waybel19 : \iota \Rightarrow o$  be given. Let  $v3\_waybel\_3 : \iota \Rightarrow o$  be given. Let  $l1\_waybel\_9 : \iota \Rightarrow o$  be given. Let  $v1\_compts\_1 : \iota \Rightarrow o$  be given. Let  $v8\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v2\_yellow13 : \iota \Rightarrow o$  be given. Let  $v3\_waybel30 : \iota \Rightarrow o$  be given. Let  $v2\_waybel\_2 : \iota \Rightarrow o$  be given. Let  $k2\_yellow\_1 : \iota \Rightarrow \iota$  be given. Let  $k5\_waybel11 : \iota \Rightarrow \iota$  be given. Let  $v1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v7\_pre\_topc : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((v2\_pre\_topc X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\ & X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge \\ & ((v3\_lattice3 X0) \wedge ((v2\_waybel19 X0) \wedge (l1\_waybel\_9 X0)))))))))) \Rightarrow \\ & ((v3\_waybel\_3 X0) \Leftrightarrow ((v2\_waybel\_2 X0) \wedge (v8\_pre\_topc X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v2\_pre\_topc X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\ & X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge \\ & ((v3\_lattice3 X0) \wedge ((v2\_waybel19 X0) \wedge ((v2\_waybel\_2 X0) \wedge (l1\_waybel\_9 \\ & X0)))))))))) \Rightarrow ((v3\_waybel\_3 (k2\_yellow\_1 (k5\_waybel11 X0))) \Rightarrow \\ & (v2\_yellow13 X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v2\_pre\_topc X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\ & X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge \\ & ((v3\_lattice3 X0) \wedge ((v2\_waybel19 X0) \wedge ((v3\_waybel\_3 X0) \wedge (l1\_waybel\_9 \\ & X0)))))))))) \Rightarrow ((v1\_orders\_2 (k2\_yellow\_1 (k5\_waybel11 X0))) \wedge \\ & (v3\_waybel\_3 (k2\_yellow\_1 (k5\_waybel11 X0)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(l1\_waybel\_9 X0) \Rightarrow (((v2\_pre\_topc X0) \wedge ((v3\_orders\_2 \\
& X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge \\
& ((v2\_lattice3 X0) \wedge ((v3\_lattice3 X0) \wedge (v2\_waybel19 X0)))))) \Rightarrow \\
& ((v2\_pre\_topc X0) \wedge ((v7\_pre\_topc X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\
& X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge \\
& ((v3\_lattice3 X0) \wedge (v1\_compts\_1 X0))))))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(l1\_waybel\_9 X0) \Rightarrow (((v2\_pre\_topc X0) \wedge ((v3\_orders\_2 \\
& X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge \\
& ((v2\_lattice3 X0) \wedge ((v3\_lattice3 X0) \wedge ((v2\_waybel19 X0) \wedge (v3\_waybel\_3 \\
& X0)))))) \Rightarrow ((v2\_pre\_topc X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\
& X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge \\
& ((v3\_lattice3 X0) \wedge ((v2\_waybel19 X0) \wedge (v3\_waybel30 X0))))))))))
\end{aligned} \tag{5}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.((v2\_pre\_topc X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\
& X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge \\
& ((v3\_lattice3 X0) \wedge ((v2\_waybel19 X0) \wedge ((v3\_waybel\_3 X0) \wedge (l1\_waybel\_9 \\
& X0)))))))) \Rightarrow ((v1\_compts\_1 X0) \wedge ((v8\_pre\_topc X0) \wedge ((v2\_yellow13 \\
& X0) \wedge (v3\_waybel30 X0))))
\end{aligned}$$