

## t18\_waybel19

(TMFYj8GYvNBXUg9ecKoejrk1vDw5QUfV31v)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v3\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v5\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v24\_waybel\_0 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $g1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u1\_orders\_2 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_waybel\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v2\_waybel\_3 : \iota \Rightarrow o$  be given. Let  $v3\_waybel\_3 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge ((v3\_orders\_2 X0) \wedge ((v5\_orders\_2 \\ &X0) \wedge ((v3\_waybel\_3 X0) \wedge (l1\_orders\_2 X0)))))) \Rightarrow (\forall X1. ((\neg \\ v2\_struct\_0 X1) \wedge ((v3\_orders\_2 X1) \wedge (l1\_orders\_2 X1)))) \Rightarrow ((g1\_orders\_2 \\ (u1\_struct\_0 X0) (u1\_orders\_2 X0) = g1\_orders\_2 (u1\_struct\_0 X1) \\ (u1\_orders\_2 X1)) \Rightarrow (v3\_waybel\_3 X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge ((v3\_orders\_2 X0) \wedge (l1\_orders\_2 \\ X0))) \Rightarrow ((v3\_waybel\_3 X0) \Leftrightarrow ((\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 \\ X0)) \Rightarrow ((\neg v1\_xboole\_0 (k1\_waybel\_3 X0 X1)) \wedge (v1\_waybel\_0 (k1\_waybel\_3 \\ X0 X1) X0)))) \wedge ((v24\_waybel\_0 X0) \wedge (v2\_waybel\_3 X0)))) \end{aligned} \tag{2}$$

### Theorem 1

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge ((v3\_orders\_2 X0) \wedge ((v5\_orders\_2 \\ X0) \wedge ((v24\_waybel\_0 X0) \wedge (l1\_orders\_2 X0)))))) \Rightarrow (\forall X1. (( \\ \neg v2\_struct\_0 X1) \wedge ((v3\_orders\_2 X1) \wedge ((v5\_orders\_2 X1) \wedge ((v24\_waybel\_0 \\ X1) \wedge (l1\_orders\_2 X1)))))) \Rightarrow (((g1\_orders\_2 (u1\_struct\_0 X0) (u1\_orders\_2 \\ X0) = g1\_orders\_2 (u1\_struct\_0 X1) (u1\_orders\_2 X1)) \wedge ((\forall X2. \\ (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow ((v1\_waybel\_0 (k1\_waybel\_3 \\ X0 X2) X0) \wedge (\neg v1\_xboole\_0 (k1\_waybel\_3 X0 X2)))) \wedge (v2\_waybel\_3 \\ X0))) \Rightarrow (v2\_waybel\_3 X1))) \end{aligned}$$