

## t11\_waybel1

(TMZrGFx4boKrmBk6aGdWD8F23A3qJfic3Kp)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  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  $v24\_waybel\_0 : \iota \Rightarrow o$  be given. Let  $v4\_waybel11 : \iota \Rightarrow o$  be given. Let  $l1\_waybel\_9 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_waybel11 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v12\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0) \wedge (v3\_orders\_2 X0) \wedge (v4\_orders\_2 \\ X0) \wedge (v5\_orders\_2 X0) \wedge (v24\_waybel\_0 X0) \wedge (l1\_waybel\_9 X0))) \Rightarrow \\ (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (v2\_waybel11 ( \\ k5\_waybel\_0 X0 X1) X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0) \wedge (v3\_orders\_2 X0) \wedge (v4\_orders\_2 \\ X0) \wedge (v24\_waybel\_0 X0) \wedge (v4\_waybel11 X0) \wedge (l1\_waybel\_9 X0))) \Rightarrow \\ (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)) \Rightarrow \\ ((v4\_pre\_topc X1 X0) \Leftrightarrow ((v2\_waybel11 X1 X0) \wedge (v12\_waybel\_0 X1 X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (((\neg v2\_struct\_0 X0) \wedge (v4\_orders\_2 X0) \wedge \\ (l1\_orders\_2 X0))) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (v12\_waybel\_0 \\ (k5\_waybel\_0 X0 X1) X0) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(l1\_waybel\_9 X0) \Rightarrow ((l1\_pre\_topc X0) \wedge (l1\_orders\_2 X0)) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (((\neg v2\_struct\_0 X0) \wedge (l1\_orders\_2 X0)) \wedge \\ (m1\_subset\_1 X1 (u1\_struct\_0 X0))) \Rightarrow (m1\_subset\_1 (k5\_waybel\_0 \\ X0 X1) (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \end{aligned} \quad (5)$$

**Theorem 1**

$$\begin{aligned} \forall X0. ((\neg v2\_struct\_0 X0) \wedge (v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\ X0) \wedge ((v5\_orders\_2 X0) \wedge ((v24\_waybel\_0 X0) \wedge ((v4\_waybel11 X0) \wedge \\ (l1\_waybel\_9 X0)))))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 \\ X0)) \Rightarrow (v4\_pre\_topc (k5\_waybel\_0 X0 X1) X0)) \end{aligned}$$