

# t8\_waybel\_0 (TMYmVhHGRd- kYgN1pKPisqtrYCme8y7kouTA)

October 27, 2020

Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r2\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (r1\_tarski\ X0\ X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0\ X0) \wedge (l1\_struct\_0\ X0)) \Rightarrow (\forall X1. \\ & ((\neg v2\_struct\_0\ X1) \wedge (l1\_waybel\_0\ X1\ X0)) \Rightarrow (\forall X2. (r2\_waybel\_0 \\ & X0\ X1\ X2) \Leftrightarrow (\forall X3. (m1\_subset\_1\ X3\ (u1\_struct\_0\ X1)) \Rightarrow (\exists X4. \\ & (m1\_subset\_1\ X4\ (u1\_struct\_0\ X1)) \wedge ((r1\_orders\_2\ X1\ X3\ X4) \wedge (k2\_waybel\_0 \\ & X0\ X1\ X4 \in X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0\ X0) \wedge (l1\_struct\_0\ X0)) \Rightarrow (\forall X1. \\ & ((\neg v2\_struct\_0\ X1) \wedge (l1\_waybel\_0\ X1\ X0)) \Rightarrow (\forall X2. (r1\_waybel\_0 \\ & X0\ X1\ X2) \Leftrightarrow (\exists X3. (m1\_subset\_1\ X3\ (u1\_struct\_0\ X1)) \wedge (\forall X4. \\ & (m1\_subset\_1\ X4\ (u1\_struct\_0\ X1)) \Rightarrow ((r1\_orders\_2\ X1\ X3\ X4) \Rightarrow (k2\_waybel\_0 \\ & X0\ X1\ X4 \in X2)))))) \end{aligned} \quad (3)$$

## Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0\ X0) \wedge (l1\_struct\_0\ X0)) \Rightarrow (\forall X1. \\ & ((\neg v2\_struct\_0\ X1) \wedge (l1\_waybel\_0\ X1\ X0)) \Rightarrow (\forall X2. \forall X3. \\ & (r1\_tarski\ X2\ X3) \Rightarrow (((r1\_waybel\_0\ X0\ X1\ X2) \Rightarrow (r1\_waybel\_0\ X0\ X1\ X3)) \wedge \\ & ((r2\_waybel\_0\ X0\ X1\ X2) \Rightarrow (r2\_waybel\_0\ X0\ X1\ X3)))) \end{aligned}$$