

t7\_topgen\_4  
(TMb2yxT5EbRMZfdt3PjLTW3UWUVSJ48E3Fo)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v5\_waybel23 : \iota \Rightarrow o$  be given. Let  $v7\_topgen\_1 : \iota \Rightarrow o$  be given. Let  $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_topgen\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_waybel23 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_card\_1 : \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0))) \Rightarrow (r1\_ordinal1 (k4\_topgen\_1 X0) (k2\_waybel23 X0)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X2)) \Rightarrow (r1\_tarski X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v3\_ordinal1 X0) \wedge (v3\_ordinal1 X1)) \Rightarrow ((r1\_ordinal1 X0 X1) \Leftrightarrow (r1\_tarski X0 X1)) \quad (3)$$

Assume the following.

$$v1\_card\_1 k4\_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0. ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (v1\_card\_1 (k4\_topgen\_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0. (l1\_pre\_topc X0) \Rightarrow (v1\_card\_1 (k2\_waybel23 X0)) \quad (6)$$

Assume the following.

$$\forall X0. (l1\_pre\_topc X0) \Rightarrow ((v5\_waybel23 X0) \Leftrightarrow (r1\_ordinal1 (k2\_waybel23 X0) k4\_ordinal1)) \quad (7)$$

Assume the following.

$$\forall X0.((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0))\Rightarrow((v7\_topgen\_1\ X0)\Leftrightarrow(r1\_ordinal1\ (k4\_topgen\_1\ X0)\ k4\_ordinal1)) \quad (8)$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0)\Rightarrow(v3\_ordinal1\ X0) \quad (9)$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow((v5\_waybel23\ X0)\Rightarrow(v7\_topgen\_1\ X0))$$