

t48\_waybel11 (TMd-  
CWG4xMKXJfunivokWLrgqfPN7HXir3Br)

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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  $v3\_waybel\_3 : \iota \Rightarrow o$  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  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_tops\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_tarski : \iota \Rightarrow \iota$  be given. Let  $k2\_waybel\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_cantor\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_tops\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v2\_pre\_topc X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\ & X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge \\ & ((v3\_lattice3 X0) \wedge ((v3\_waybel\_3 X0) \wedge ((v4\_waybel11 X0) \wedge (l1\_waybel\_9 \\ & X0)))))))))) \Rightarrow ((v1\_cantor\_1 (ReplSep (toset (\lambda X1 : \iota. m1\_subset\_1 \\ & X1 (u1\_struct\_0 X0))) (\lambda X1 : \iota. True) (\lambda X1 : \iota. k2\_waybel\_3 \\ & X0 X1)) X0) \wedge ((v1\_tops\_2 (ReplSep (toset (\lambda X1 : \iota. m1\_subset\_1 \\ & X1 (u1\_struct\_0 X0))) (\lambda X1 : \iota. True) (\lambda X1 : \iota. k2\_waybel\_3 \\ & X0 X1)) X0) \wedge (m1\_subset\_1 (ReplSep (toset (\lambda X1 : \iota. m1\_subset\_1 \\ & X1 (u1\_struct\_0 X0))) (\lambda X1 : \iota. True) (\lambda X1 : \iota. k2\_waybel\_3 \\ & X0 X1)) (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\ & X0))) \Rightarrow (\forall X1.((v1\_cantor\_1 X1 X0) \wedge ((v1\_tops\_2 X1 X0) \wedge (m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (k1\_tops\_1 X0 \\ & X2 = k3\_tarski (ReplSep (toset (\lambda X3 : \iota. m1\_subset\_1 X3 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 X0)))) (\lambda X3 : \iota. (X3 \in X1) \wedge (r1\_tarski X3 X2)) ( \\ & \lambda X3 : \iota. X3)))))) \end{aligned} \quad (3)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(l1\_orders\_2 X0) \Rightarrow ((v1\_lattice3 X0) \Rightarrow (\neg v2\_struct\_0 X0)) \quad (7)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v2\_pre\_topc X0) \wedge ((v3\_orders\_2 X0) \wedge ((v4\_orders\_2 \\ & X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_lattice3 X0) \wedge ((v2\_lattice3 X0) \wedge \\ & ((v3\_lattice3 X0) \wedge ((v3\_waybel\_3 X0) \wedge ((v4\_waybel11 X0) \wedge (l1\_waybel\_9 \\ & X0)))))))))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & X0))) \Rightarrow (k1\_tops\_1 X0 X1 = k3\_tarski (ReplSep (toset (\lambda X2 : \iota. \\ & m1\_subset\_1 X2 (u1\_struct\_0 X0))) (\lambda X2 : \iota. r1\_tarski (k2\_waybel\_3 \\ & X0 X2) X1) (\lambda X2 : \iota. k2\_waybel\_3 X0 X2)))))) \end{aligned}$$